



# FURRH EQUIPMENT COMPANY

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## History and Development

Boat bottom washing is the removal of sea growth below the waterline that affects the performance and maneuvering of boats. The periodical removing of this material is needed. Unfortunately the removal of the growth also removes some of the bottom paint and other metal contaminants from anodes and power drive components.

This material has been washed off for many years without concern of toxins that run off into our waterways and contribute to environmental contamination that affects sea life as well as our ground water.

In September 1992 EPA began regulations to manage industrial activities, developing pollution prevention plans and best management practices. Today we are faced with the fact that we can have zero discharge of pollutants to surface waters and waterways.

At this time the marine industry is challenged with complying with these mandated issues. There are many methods being developed to remedy the problem, there is no one choice or method. Every marina has a different challenge.

You really need to review what is better for your operation. You will be facing a substantial cost.

Things to review in your planning.

1. Pad for wash area (size and weight capacity)
2. Collection (trap and sump)
3. Transfer method
4. Storm Water discharge (to prevent pooling and icing)
5. Permits (Building, Coastal Zone Management, and State Environmental)
6. Filtration equipment
7. Test sample of water and collected material
8. Disposal of material. (hazardous and non hazardous)
9. How many boats are to be washed (day/week/month/year)
10. Fees for disposal (sewerage or transportation)

We have worked with these issues for the marine industry for about 20 years. Being very knowledgeable of this industry and with the federal and state agencies, we decided to evaluate a filtration unit to manage bottom wash materials and prevent the run off and/or discharge of the contaminants.

After several months of operating our unit and sampling water collection and filter media we feel we have a unit that addresses the need.

The unit is simple to operate and maintain. It is available on an open or closed trailer or mounted on a polypro skid. This unit is also expandable to accommodate specialty needs.

We have chosen to go with S/S Filter Chamber with cartridge filters. (Not bag filters.) The choice of filter media was based on that cartridge filters are more effective than bag filters and there is a much wider range of media from micro size to material availability. A much wider range of contaminants can be filtered out.

The one most important method of control to reduce media change out is the use of a trap. The trap will reduce the amounts of solids that would have to be filtered out. The trap can be easily cleaned out with a removable liner.

The first filter chamber removes the heavy particles. Then water transfers to the holding tank that has an automatic fresh water fill to replace water that is lost from evaporation during power washing.

The second pump transfers water from the holding tank to the second filter chamber and continually filters the holding tank water.

The holding tank feeds water directly to the power washer. (The cycle begins again.)

The unit is completely assembled. It is complete with sump pump, transfer hose (50') from sump pump to filter unit, fresh water hose connection, mounted GFI splash covered outlet connected with a 50' HD 12 gage power cable 110V.

Additional options are available.