

I-75 Roadway Improvements

Tampa, Florida January - December 2012

The I-75 roadway improvement project in west central Florida saw above average rainfall amounts over several months causing the contractor to increase dewatering and turbidity reduction output. R.H. Moore of Tampa recommended **InterfaceH₂O™** and it's **Floc Hog™** inline polymer introduction systems to keep up with the demand.

Floc Hogs are used with existing pumps and are placed as a part of the discharge hose. Inside of each Floc Hog is space for 40 lbs of water clarifying anionic polymer and a specialized framework that creates agitation and mixing for the polymers to start the flocculation process. As the treated water flows through the hose the flocculant continues to bind to dirt particles thereby cleaning the water.

Based on the volume and turbidity levels required, multiple **Floc Hogs** were used in the same discharge line with the resulting treated water being either being directly released or processed through a settling tank or dispersion field.

Floc Hogs are easily transportable and include standard camlock fittings to make the connections to the hose. Based on needs, **Floc Hogs** can be used at each coupling or connected to each other (back to back) to create the required results. **Floc Hogs** are adaptable, scalable and easy to use with no other special equipment required.

One person can handle each unit and its setup as well as monitor the discharge for compliance. The best part of the system is how easy it is to adjust to get the best performance. Not enough floc at the discharge? Add more hose to the end. Water is not discharging clean enough? Add another Floc Hog inline or setup a dispersion field.

Floc Hog Inline at retention pond



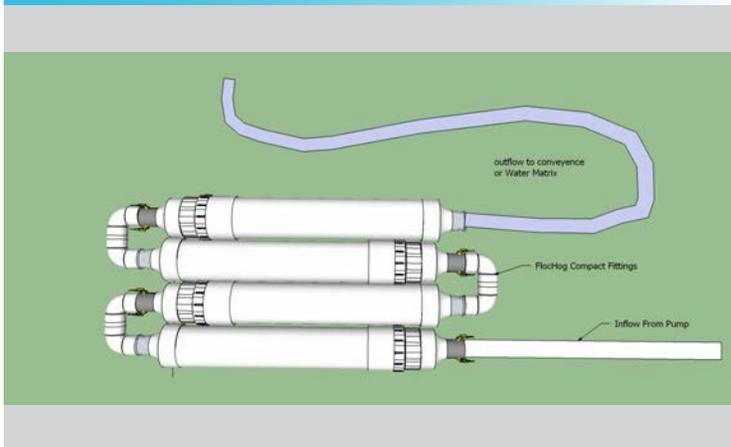
Floc Hog connected to 4" lay flat hose



If space is a concern, the Floc Hogs can be stacked horizontally or vertically and take up no more room than the hose itself.

Prince construction treated over 100,000 gallons and was able to continue work on this important roadway project.

Example of high dose - compact setup



Applied Polymer Systems, Inc. 703d#3 Floc Logs® provided the water treatment chemical combination best suited for the unusual site conditions:

1. Bench testing to determine the most effective polymer was not possible due to the soils which were to be treated were not available until construction operations were underway.
2. Therefore, only a polymer with known ecological toxicity safety would be used in the event that unused polymer might be discharged to the river if a less-than-efficient match existed between the flocculent and targeted contaminants (soil particles).
3. Changing soil types would be encountered and 703#3 Floc Logs had developed a long-history of effective and efficient performance with Florida's soil lithologies.
4. A wide range of flow rates within the system would occur, again mandating use of an environmentally safe polymer.

Floc Hog ready to go out to site.



Clarified water from inlet NTUs ranging from 80 to 1850



Water quality improvement measurements were taken periodically during the project using EPA approved NTU meters.

Inlet NTU range: 80 to 1850

Outlet NTU range: 20 to 85

For more information regarding **WaterMatrix** and **Floc Hog** systems, contact **InterfaceH₂O, LLC**.

Interface2o and WaterMatrix are trademarks of InterfaceH₂O, LLC.

WaterMatrix equipment is patent pending

Floc Log is a registered trademark of Applied Polymer Systems, Inc.