How Does The PROVECTR System Work?

Raw water is pumped through your system by a submersible pump. Because sufficient flow and pressure are needed for the system to operate effectively, a submersible pump is strongly recommended as a prerequisite to installing the PROVECTR system. A pressure gauge in the line after the pump will let you know if proper pressure is being maintained.

The Venturi/Nozzle, placed in the line between the pressure gauge and the pressure tank, is where the process of removing unwanted elements begins. As the water is forced through the Venturi/Nozzle under pressure, a vacuum is created that draws air into the water line. This air and water are mixed, thus starting the oxidation process that converts "dissolved solids" into "suspended solids" that can be filtered out of the water.

After leaving the Venturi/Nozzle, the water and air mixture may enter the pressure tank to be stored until it is needed.

The next step takes place in the Aerator/Precipitator Tank. Here, more air is forced into the water by means of full line pressure. A float inside the aerator/precipitator monitors the water level in the tank. At the bottom of the tank are many plastic aeration orbs. These balls build up a coating of contaminants that have been separated from the water through the oxidation process.

The water passes out through the bottom of the aerator/precipitator tank and on to the Filter Tank. Several important things take place in this tank. The primary purpose of this step is to trap the physical particles that have been produced by the oxidation process. The mineral bed of the PROVECTR Filter Tank consists of a Multi-Blend media that filters contaminants and harmful elements out and raises the pH level of the filtered water. Backwashing every now and then (automatically) washes accumulated impurities from the media and out through the drain, making the filter tank ready to clean more water.

The water leaving the filter tank after oxidation and filtration is now fresh and ready for use.