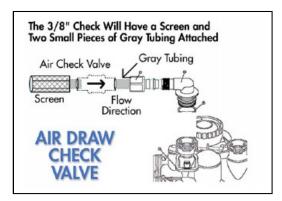
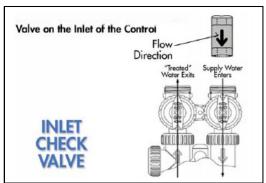
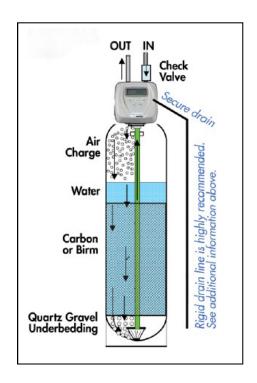
Details of Hydrogen Sulphide or Iron Systems with Aearation







Operation of System

General Operation:

The idea of the system is to oxidize the income water for sulphur removal, 5 ppm max (carbon) or iron (Birm or Aquaandix with pH and sediment media if needed). This is accomplished by creating a head of air in a tank which the water passes through which oxidizes the contaminate.

As the water flows into the tank (*through a top basket*) it will pass through a "boundary layer" of water, down through the "media" to the outlet.

Regeneration Sequence:

Regeneration of unit is every 2 or 3 days. As the sulphur or iron is oxidized, reduction of the air head occurs. The more frequent regeneration keeps our "air" head in the tank. If the pH is not high enough to oxidise the iron and manganese a media to increase it can be added.

Position 1: Backwash

Backwash flow control sized as a normal filter 8-10 GPM/Sq. Ft. Area. Backwash 8-12 Minutes

Position 2: "Brine Draw" as we normally know it. This will now be "Air Draw". Allow unit to enter brine draw position. This will evacuate the tank of water.

Return to service.

Note: Upon returning to service, the inlet water will enter the tank and compress the air within it. The water entering the tank compresses the air and will stop flowing into the unit once the pressure equalizes. Once the pressure equalizes, usually the water level in the tank is around 14" from the top of the tank, creating a 14" dome of air.

Assembly Info:

An inlet check valve is required to hold the air in the tank not allowing it to escape out the inlet.

A screen (to keep bugs out) the injector clean and check valve is required on the "brine" connection so as the controller passes by the brine refill port on the way to service we do not "shoot" water out the air screen assembly.

Assembly note: Because of the "air head" and boundary layer of water, we use less media to give extra freeboard in the tank.

Installation Note: Drain must be secure, when unit first goes into backwash air is discharged down the drain. This can cause drain line to "jump around" if not secure.

Upon initial start up of equipment, it is best to soak the media in water (for 24 hrs.) before applying a full backwash to unit.