Irrigation & Swimming Pool Installations

There are several ways the Public Water System can be contaminated from cross-connections within that system. There are various inspections required when installing equipment that uses potable water for its operation or when something has a direct connection to a potable water system such as an irrigation system, spa or swimming pool.

Due to the circumstances listed above, potable water lines must be protected from possible contamination from irrigation systems and pool fill lines. Backflow may occur in the event of either Backsiphonage or Backpressure. Backsiphonage can happen when the pressure in the distribution system drops, drawing water from the consumer's plumbing back into the system. Pressure drops might occur in the event of a main line break, or high water demand such as fighting a fire nearby. Backpressure can cause Backflow when a potable water system is connected to another system that operates at a higher pressure…such as an irrigation system or a pool fill line.

The installation of irrigation systems and swimming pools are required by the State of Texas to be inspected upon installation and sometimes annually depending on the application to ensure that the proper backflow prevention assembly is being used to protect the Public Water Supply. Residential applications are not excluded from this because the property is directly connected to the Public Water System and Backpressure and Backsiphonage may occur.

The Inspection Criteria is as follows:

1) Resident should submit set of design drawings or plans along with a check in the amount of $150 made payable to either Harris County Municipal Utility District No. 364 or to Harris County Municipal Utility District No. 365, depending on which District you live in, for the plan review. These documents are sent to the Municipal Utility District Engineer for approval prior to commencement of construction.

   a. For Harris County MUD No. 364
   Van De Wiele & Vogler, Inc.
   2925 Briarpark, Suite 275
   Houston, Texas 77042-3720
   Fax (713) 782-5337- Office (713) 782-0042

   b. For Harris County MUD No. 365
   Sander Engineering Corporation
   10555 Richmond Ave. Suite #100
   Houston, Texas 77042
   Fax (713) 784-4052 – Office (713) 784-4830

2) The Engineer will review the plans and upon approval will forward to the inspections department of the district operator, Municipal Operations & Consulting, Inc.

3) Customer and/or Contractor performing installation of the swimming pool or irrigation system shall notify **Municipal Operations & Consulting, Inc. (281/367-5511)** to schedule times for the inspection of their pool installation or irrigation system. Fees for the inspections will be debited to the customer's water bill per the district's current Rate Order.

4) Failure to notify Municipal Operations & Consulting, Inc. for the inspection will result in a scheduled inspection 30 days from the date on the engineer's approval letter. Each trip to the residence for an inspection will result in a debit to the customer's water bill for the fees associated with the inspection per the District's current Rate Order.

Most common reasons for failing inspection:

1) Water line used to fill pool does not have approved backflow prevention device such as a hose bibb vacuum breaker permanently installed
2) Swimming pool has a direct connection fill line without proper backflow prevention
3) Backwash line for swimming pool does not have the appropriate air gap at the sanitary sewer connection
4) Backflow prevention device on swimming pool fill line does not pass the required Backflow test
5) Backflow preventor on Irrigation system is not installed properly due to location or height

Backflow prevention devices protect us all from the possibility of containments entering our drinking water system. If you have not had yours inspected for proper operation, you may wish to call a licensed irrigator, swimming pool contractor or MUD operator, Municipal Operations & Consulting, Inc., to confirm that it is working properly. Safety in our drinking water system is an important responsibility that we all share.