

## **Important Message from Faulkey Gully MUD Regarding Surface Water**

Shortly after December 1, Faulkey Gully Municipal Utility District will convert from a 100% groundwater system to a predominately surface water system. This conversion is a regulatory requirement. You may notice a change in the odor, taste and/or color of your water. The District's groundwater is essentially odorless and colorless with a taste that you probably identify as "tasteless." The current surface water will have a different taste, may have some odor and may have some color, but it is safe to drink and meets all of the federal and state drinking water requirements.

**Why is the District switching to surface water? *Surface water conversion is a governmental mandate.*** In 1975, the Texas Legislature created the Harris-Galveston Coastal Subsidence District (now the Harris-Galveston Subsidence District or "the Subsidence District") to reduce subsidence in the Houston and Galveston areas. Subsidence happens when groundwater is removed from the aquifer faster than it is replaced by nature. The aquifer and the overlying ground gradually sinks (subsides) as it is no longer supported by the water in the aquifer. Ground subsidence over a broad area can increase flooding. The Subsidence District has mandated that the area where we live be converted to 30% surface water by 2010, 70% surface water by 2020 and 80% surface water by 2030. More information about the Subsidence District can be found at [www.hgsubsidence.org](http://www.hgsubsidence.org).

In 2000, the North Harris County Regional Water Authority (NHCRWA) was created by the Texas Legislature and was confirmed by a vote of the residents in the area. The NHCRWA was created to locate a source of surface water and to provide a way to deliver it to the water systems in the north Harris County area. More information about the NHCRWA can be found at [www.nhcrwa.com](http://www.nhcrwa.com).

**Where does the surface water come from and how is it different from groundwater?** The surface water being provided to us comes from the Northeast Water Purification Plant owned by the City of Houston that uses water from Lake Houston. The water meets all federal and state guidelines for safety and is safe to drink and use for all household purposes. The groundwater that has been provided to us has come from underground aquifers and was disinfected with chlorine prior to being distributed to the customers of the District. The surface water we will receive is extensively treated to remove any impurities and is disinfected with chloramines prior to being sent to us for distribution to the customers of the District. Surface water may have a different taste and odor than groundwater. It will be clear, but may have a slight color due to minor amounts of harmless, naturally occurring, dissolved iron-rich minerals. Some discoloration may come from deposits in the pipes in your house or the pipes in the Faulkey Gully MUD system.

**Why is the District changing from chlorine to chloramines?** Shortly after November 1, the District's disinfection system will be converted from chlorine to chloramines as preparation to receive surface water. Prior to treatment, surface water contains organic matter. When chlorine contacts organic matter, it creates some chemicals that are referred to as disinfection byproducts. Some of these disinfection byproducts are listed as potential carcinogens by the United States Environmental Protection Agency. To limit, or even prevent, the formation of these disinfection byproducts, a small amount of ammonia is added to the water. This ammonia attaches to the chlorine that is used as a disinfectant and creates chloramines. Chloramines have disinfectant properties similar to free chlorine, but do not react with the organic matter in the surface water. You should have received notices that the District recently sent to its customers about the effect chloramines have on dialysis patients and fish aquariums. The concern for dialysis patients has to do with the equipment used during dialysis. Chloramines could cause this equipment to not be as efficient and requires the installation of an additional filter in the treatment unit. Aquariums could be affected as chloramines are more stable than the chlorine that was used to disinfect the groundwater. Although chlorine also requires treatment to neutralize it prior to using the water in aquariums, chloramines will need a stronger or increased amount of chemical to neutralize them prior to the water being used.

**What actions can you take if you have discolored water?** The conversion to surface water may cause more iron oxides in the water. The District's Operator flushes the main water lines from time to time using the fire hydrants for maximum velocity, greatly reducing the amount of buildup within these lines. Most homes have not had comparable high-velocity flushings. You will need to determine whether the discoloration is coming from the main water lines or from lines within your home. This is rather easily done by flushing the water from the outside faucet (hose bib connection) that is closest to your water meter and then checking the water from that faucet to see if it is clear. If it shows more than a hint of color (red/yellow/orange/brown caused by varying concentrations of iron oxides, or "rust", in the water), please call the District's Operator listed below so they can consider spot-flushing the mains in your area. If the water at the outside faucet is clear, the discoloration is coming from the pipes within your residence. You may wish to flush your pipes as follows:

1. Start by flushing the cold water lines in your home. Two-story homes should be flushed starting with the upstairs faucets first. Single-story homes should be flushed starting with the faucet located farthest from the street. Opening one faucet at a time, turn on the cold water and allow your faucets to run until the water quality improves (no more than 10 minutes each).
2. Once the water quality in your cold water system has improved, repeat step 1) above, but use only the hot water faucet to flush the hot water lines in your home. Please note that you may need to let your hot water run longer to be sure your water heater is flushed.
3. You should also remove and clean the aerator screens on all of your sink faucets after you flush your water system to remove any deposits/sediment that may have accumulated.
4. Remember to also flush your refrigerator's waterline and all outside hose bibs.
5. We recommend that you flush those seldom-used parts of your home water system, such as a guest bathroom, on a regular basis or at least monthly.

**The discolored water is not a health threat.** Iron is a dietary requirement and is present in very low levels in our drinking water, but even low levels may cause discoloration. Since iron can stain clothing, it is best to wait for the water to clear before doing any laundry. Also, try not to use any hot water as you may draw the discolored water into your hot water tank, and it may have to be flushed out later. If you were doing laundry when the water became discolored, rewash the laundry when the water clears. Use a rust stain remover or regular detergent. **DO NOT USE CHLORINE BEACH.** Chlorine reacts with iron and can form a permanent stain.

Materials commonly used for water pipes in homes and businesses are copper, galvanized steel and PVC. Copper pipes usually last longer and generally do not significantly affect water quality as they age. Galvanized steel pipes will usually last about 20 years before showing signs of corrosion (rusting). Well-made galvanized steel pipe can last up to 40 years, while poorly made pipe can show signs of corroding in just a few years. New segments of copper pipes should not be connected to segments of old galvanized steel pipes because additional problems may occur. If old, rusty pipes are discoloring your water, you should consult an experienced seller of plumbing materials or an experienced plumber. Water that is being discolored by rusty pipes is not a health hazard; however, it is an indication that pipes are corroding and they can eventually begin leaking.

**If you have additional questions, please feel free to contact the District's Operator,  
Eagle Water Management, Inc., at 281-374-8989.**