

INFRAMARK

CUSTOMER FIRST NEWSLETTER

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REUSING A PRECIOUS RESOURCE - WATER

THOSE PURPLE PIPES

We often get questions from people curious as to why some pipes are purple and the others are white. They wonder if it is an expression of artistic taste or some new type of pipe. It is neither, but a regulatory requirement for recycled water. Recycled water is treated wastewater that is used for specific, non-potable functions. The purple pipe signifies that the water is recycled and anyone doing an excavation for a repair is aware that it is non-potable. While safe for irrigation, reused water is not used for consumption and cannot be interchanged with potable water.

The treated water is also called recycled water, reused water or reclaimed water. The terms are used interchangeably. The water is primarily used for irrigation which is a major component of water use during the hot summer months. If you have an irrigation system or hand water your lawn during the summer, you know that your water bill can increase as your usage increases.

HOW WE DO IT

Reused water is produced at the wastewater treatment plant under very stringent requirements. The water gets extended time in the secondary biological treatment process that we have discussed in an earlier newsletter. This additional treatment is called "tertiary treatment" which generally consists of a filtration process and comes after the disinfection process.

Potable or drinkable water is a scarce resource and is becoming more costly as a result. Population growth, increased restrictions on groundwater use and drought has put a strain on our water supply system. Recycling water saves an equal amount of potable well or surface water. Reusing water averts regulatory pumping fees and the purchase of increasingly expensive surface water.

HOW IT IS USED

While a major use of reused water is irrigation for agriculture and landscaping, it is also used for power plant cooling, industrial use and discharged back into either a lake or river.



In West Texas recycled water is increasingly used to reduce costs. While some people are concerned about the reuse of water for these purposes, especially for irrigation, there is no health risk if it is treated properly and used according to regulatory guidelines. Reused water must meet TCEQ 210 permit authorization parameters that ensure water quality. While the recycled water could be made potable, it would require extensive additional treatment. In addition, there could be a stigma by using recycled water for potable purposes.

PRESENT AND FUTURE USE OF RECYCLED WATER

The use of recycled water is growing as the cost of water continues to rise. Presently, there are several Inframark clients currently using recycled water with additional clients considering the use of recycled water. We also have districts that have installed the purple pipes to use recycled water in the future.

Studies reviewing Texas recycled water uses from 2015 to 2018 indicate that only 2% of water used in Texas is recycled compared to the national figure of approximately 10%. That number will rise as the cost of water continues to increase to meet a rapidly growing population.

In the Houston area, water reuse is being promoted by regulatory agencies like Subsidence Districts, Water Authorities, the Texas Water Development Board and other entities. Fourteen regional water planning groups have recommended water reuse as a water management strategy in their 2016 plans. As a group, the fourteen planning entities project to have an additional 1,107,000 acre-feet of additional water available due to reuse by 2070. An acre-foot equals 325,851 gallons.

Nationally, the EPA has developed water reuse guidelines that were updated in 2012. The leaders of water reuse in the United States are the states of Florida and California. Internationally, the arid countries of Australia and Israel lead the way.

The future will bring increasing use of recycled water and Inframark is proud that our clients are leading the way.

On behalf of the Texas MUD Leadership Team

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