September 2011

Customer Pipeline

Emerald Coast Utilities Authority

New ECUA Environmental, Cost-Saving Water Reclamation Facility on Pensacola Beach Hits its Stride

Emerald Coast Utilities Authority (ECUA) efforts to protect the environment on Santa Rosa Island continue to progress with the dedication of a new "Reclaimed Water Facility" at its Pensacola Beach Wastewater Treatment Plant (PBWWTP).

The environmentally advanced and cost-saving facility, neatly tucked behind a row of multi-colored retail and souvenir shops and restaurants, provides the Santa Rosa Island Authority (SRIA) an alternative to potable water for irrigation of the rights-of-way and medians along Via de Luna Drive, Pensacola Beach's main road.

ECUA'S PENSACOLA BEACH RECLAIMED WATER REUSE FACILITY IS THE FIRST OF ITS KIND IN ESCAMBIA COUNTY

Reducing surface water discharges and conserving the drinking water supply have become critical issues in Florida as the number of residents and visitors increases. A practical and effective method to reduce effluent disposal and conserve drinking water is the substitution of highly treated wastewater, or reclaimed water, for potable water when the supply is intended for irrigation.

ECUA Director of Engineering Bill Johnson says, "The project provides irrigation water at a lower cost. The SRIA will see a decrease on its irrigation bill, potentially as high as sixty to seventy percent, and will eliminate some of the effluent discharge from the PBWWTP into local surface waters."

The growing demand for alternate water sources and increasingly stringent water quality discharge requirements are the two primary driving forces for using reclaimed water to meet some of society's water demands.

The PBWWTP hits three birds with one stone, so to speak. First and most importantly,

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Please Be Aware...

We have recently heard from several ECUA customers about a letter sent to them from the insurance company, HomeServe. HomeServe is a legitimate company that, by way of this letter, is offering an insurance product to homeowners for coverage of expenses specifically related to leaks in the water service lines on their property. The ECUA is responsible for any costs related to repairs of the service line from the water main to your water meter. The coverage that HomeServe is offering pertains to water service lines on the customer side of the meter. This optional coverage is totally independent of the ECUA and is a decision that a homeowner must make on an individual basis. As stated near the bottom of the HomeServe letter, ECUA is not affiliated at all with HomeServe; and ECUA in no way is endorsing this insurance coverage.

Save the DATE:

The next pharmaceutical Take-Back program date in Escambia County will be on Saturday, October 29, 2011.

Use this opportunity to safely disposed of medications that are out-of-date or no longer needed. Look for full details in next month's issue of the *Customer PipeLine.*

Pensacola Beach Reclaimed Water Facility: Project Highlights

- Total project cost (construction and design), approximately $2.0 million.
- Total design and construction time, approximately 3 Years.
- Eliminates the discharge of approximately 20 million gallons of treated water annually to the Santa Rosa Sound. The SRIA reclaimed water distribution system cuurently serves to irrigate the median and shoulders of Via de Luna Drive, from Avenida 11, east to the limits of the ECUA's service area near the Portofino Island Resort.

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it provides needed wastewater service to Pensacola Beach residents, second, it provides a cost-effective alternative to potable water for the SRIA's irrigation needs. Finally, reducing the amount of effluent discharge into Santa Rosa Sound is an environmentally pro-active and positive step.

Sprinklers irrigating the median on Via deLuna Road with reclaimed water in April 2011.

ECUA manager of water reclamation engineering, Steve Holcomb, PE, says, "We made a decision in the 1980's to upgrade the facility. The quality of reclaimed water generated at the plant exceeds water quality standards dictated by Florida Department of Environmental Protection (FDEP)."

One technological improvement at the upgraded plant is the use of a multi-compartment chlorine contact chamber, replacing the outdated ultra-violet (UV) system. The chamber features two tanks; as the treated wastewater enters the first chamber, the liquid chlorine is introduced into the flow, is analyzed and then is passed along into the second chamber.

The chlorine being used in the system is in the form of a liquid, sodium hypochlorite (essentially a strong bleach), and the de-chlorination is achieved by the addition of sodium bisulfate (a chemical that is also used in some fruit canning processes). By regulation, all the reclaimed water is disinfected prior to entering the reuse system for irrigation. The reclaimed water that is not used for irrigation is then treated to remove the chlorine (de-chlorination) prior to discharge into Santa Rosa Sound.

If the reclaimed water monitoring parameters do not achieve the FDEP standards, whether being discharged to the Sound or to the reuse irrigation system, the flow is diverted to a Reject Storage Tank where it can then be reprocessed to meet the FDEP discharge requirements.

Scott Jernigan, PE, Baskerville-Donovan Inc, added, "The SRIA/PBWWTP disinfection system project was the last step to bringing the first phase of public access reuse to Pensacola Beach. SRIA installed a 12" reclaimed water main in 2004, during a road widening project. Currently, the SRIA is using approximately 65,000 gallons per day (gpd) of reclaimed water for irrigation, with the capacity to expand the system as additional users are identified." To date, the maximum weekly demand has been 75,000 gpd.

Ensuring Your Home is a 'No Fly Zone'

Flies and maggots are a common, naturally-occurring problem for many municipal sanitation collection programs. Maggots are fly larvae and occur when flies lay eggs on organic waste. They typically have a 7-day life cycle with fluctuations depending on temperatures and other conditions such as moisture. Maggots are more common in warmer climates. To prevent maggots from developing, we have to prevent mature flies from laying eggs in the garbage can by eliminating odors and reducing their access to the inside of the can.

Remember to:

- Seal food waste in bags before placing in a larger garbage bag.
- Place bagged organic waste (shrimp shells, chicken bones, etc.) in the freezer. Discard these wastes in your garbage can the night before your scheduled pick-up.
- Seal garbage bags as tightly as possible before placing in the garbage can.
- Keep the garbage can's lid closed as much as possible.
- Put your green can out for collection every week, even if it isn't full.
- When cleaning out your refrigerator, wait until the day before your collection day, rather than the day after.
- Diatomaceous Earth is a natural fossil product that kills maggots, slugs, etc. Check garden centers and nurseries for availability.
- Store your cart in a well-ventilated area.

Finally, sanitation is important to reducing odors. Your green can should be cleaned regularly using a solution of bleach and water, or vinegar and water. Mild soaps can also be used to clean your can. Hose it off, inside and out, and be sure to dry the can thoroughly before use.