## Are There Drugs in Our Drinking Water?

For the past few years, there has been a buzz regarding Pharmaceuticals and Personal Care Products (PPCP) ending up in our water resources. The Florida Rural Water Association has taken the lead on educating Water and Wastewater Utilities throughout Florida regarding the need to hold collection events and educate their customers in the importance of "STOP FLUSHING THESE PPCP's DOWN THE DRAIN".

Unfortunately even the Food and Drug Administration (FDA) has a list of medications that they encourage disposing down the sink or toilet. The FDA has posted the following statement on their website under the Frequently Asked Questions.

"Does flushing the medicines on the list down the toilet or sink drain pose a risk to human health and the environment?

We are aware of recent reports that have noted trace amounts of medicines in the water system. The majority of medicines found in the water system are a result of the body's natural routes of drug elimination (in urine or feces). Scientists, to date, have found no evidence of harmful effects to human health from medicines in the environment.

Disposal of these select, few medicines by flushing contributes only a small fraction of the total amount of medicine found in the water. When a medicine take-back program isn't available, FDA believes that any potential risk to people and the environment from flushing this small, select list of medicines is outweighed by the real possibility of life-threatening risks from accidental ingestion of these medicines".<sup>1</sup>

<sup>1</sup>:http://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafe UseofMedicine/SafeDisposalofMedicines/ucm186187.htm

We somewhat understand FDA's human ingestion stance, however, we also understand that any drug making its way through the wastewater system can greatly increase the concentrations in the environment when these drugs are dumped down the drain at full strength. Although the FDA only encourages the flushing of certain drugs, what mechanism is holding the public responsible to the list and stopping them from flushing all their unused medications, including Hormones, Antibiotics, Pain Medications, etc.?

Although, minimal harmful effects to human health have been attributed from these medicines in the environment, recent discoveries of pharmaceutically polluted waters and abnormal fish are raising fears that our abundant use of drugs may be harming the ecosystem in unforeseen ways.

Tests have been conducted that have found changes in the reproductive systems of fish. The United States Geological Survey (USGS) has ongoing tests to help identify the effects to the environment and results can be found on there website at toxics.usgs.gov. These tests and studies will help determine what extra steps need to be taken to protect the environment. This could include extra treatment processes at water treatment facilities as well as extra costs that add to the customer water utility bills. Water utilities holding more collection events (take-back

programs) and educational programs are a necessity. Taking proactive steps may help to reduce future regulations and expense for protection and/or clean up.

Twice a year, usually in the spring and fall, the Drug Enforcement Agency (DEA) promotes a "**National Take-Back Initiative**" event. In conjunction with Local Law Enforcement and Municipalities throughout Florida, this DEA's program is helping to get unused pharmaceuticals drugs off the streets. However, not all of Florida's communities are involved and it is important to get as many utilities on board and for more people to access during these particular dates in which the Take-Back event is held.

## What can you as a Water or Wastewater system do to help promote or hold one of these events near you?

First, contact your local Law Enforcement and get them to agree to supply an officer to be onsite during the collection event. Once you have enrolled their help you can participate in the events already happening twice a year by going to DEA's website at http://www.deadiversion.usdoj.gov/drug\_disposal/takeback/ or contacting the DEA-Florida Branch at (954) 306-4650.

If you prefer to have an extra collection event or one not associated with the National Take-Back Initiative, you should contact the Florida Rural Water Association at (850) 668-2746 and we will assist you in scheduling and holding your collection event once you have obtained your local law enforcement willingness to provide the required personnel.

However you decide to participate in these programs it is very important that you educate your customers and the public of the need to prevent the flushing of unused PPCPs. This can be done through Public Meetings, your City, County or Utility websites, and/or local radio, newspaper and TV ads. The more publicity you can give your event and this issue, the more drugs we can keep off the streets and out of our water resources.

