

## Utilities Connection: *Drug-Free Drains*

*By Esmeralda Almanza and Suzanne Michaels*

You discover expired prescription drugs or vitamins in your medicine cabinet. You'll never use them again, so what do you do? If your impulse is to flush them down the drain – don't!



Anything you flush down the drain becomes part of the city's wastewater that must be filtered, purified, cleaned up and is then used downstream by other communities.

Prescription drugs are not the only potential pollutants of the water supply; consider the personal care products we all use - shampoo, conditioner, toothpaste, perfume, sunscreen, and cosmetics. According to the Water Environment Federation, the average adult uses nine personal care products every day containing 126 unique compounds that could end

up in the water. Many, many compounds go into the wastewater that Las Cruces Utilities cleans up with the best technology available, and meeting stringent state and federal requirements, discharges the water into the Rio Grande for downstream use.

Tiny amounts of drugs such as antibiotics, birth control pills, painkillers, anti-depressants, cancer treatments, seizure medications, cholesterol lowering compounds and tranquilizers have been detected in water sources around the United States. So please, don't be a part of the problem: dispose of drugs properly, and leave our drains drug-free.

**PROPER DISPOSAL** of unused pharmaceuticals (according to the Water Environment Federation):

- Check with your local pharmacy to see if they accept unused or expired medications for proper disposal.
- Remove unused or expired prescription drugs from their original containers and throw the empty containers in the trash. Mix the pharmaceutical capsules or tablets with an undesirable

substance - such as used kitty litter or coffee grounds - in an empty can or used plastic bag and add the expired drugs to the household trash.



Why is it okay to throw the pills in the trash? Since the early 1990's U.S. landfills have been designed and built by environmental engineers with several liners in place to prevent groundwater contamination. In our area, we use two feet of compacted clay, a geothermal textile liner, a 60 mil high density polyethylene liner and two feet of sand on top to protect the engineered liners from the heavy equipment that crushes

and compacts the city's solid waste (trash) every day. Perhaps more importantly, in New Mexico, landfills are only sited in areas far removed from groundwater; the bottom of a landfill "cell" must be more than 100 feet above groundwater. (Picture an 8-story building between the city's trash and the nearest groundwater.)

"Arid regions of the West are especially vulnerable to the effects of drug-contaminated effluent," according to a University of Arizona report. The traces in the water are tiny and evidence suggests there is no risk to human health, but scientists have found that these compounds do interfere with aquatic organisms. Studies to find the full effects continue, but it's a good idea to understand your own environmental impact.

Please try to reduce the number of personal care products you put into the water supply. And help us keep our drains drug-free. We're all in this together!

For more information contact the Las Cruces Utilities Water office at (575) 528-3549.

*You can reach Las Cruces Utilities at 528-3511 from 8 a.m.-5 p.m. Monday-Friday. Utilities Connection is submitted by Suzanne Michaels, Education and Public Outreach for Las Cruces Utilities: WATER – GAS – WASTEWATER – SOLID WASTE services for almost 100,000 Las Cruces residents.*

