Down the Drain

Could what we are pouring down our sink drains and toilets, at work and at home, be introducing toxic chemicals to the marine environment or to groundwater supplies?

What happens when you pour something down the drain? It gets "treated", right? Well, maybe and maybe not.

I have met with the folks that operate the wastewater treatment plants on San Juan, Orcas and Lopez regarding what happens to various types of waste, biological and chemical, when these materials go into a sink drain or toilet. What I learned was somewhat surprising.

Wastewater treatment plants are engineered facilities that are designed to treat biological waste, only. The primary treatment process that these facilities use is called 'aerobic digestion', where engineered bacteria break down biological waste. The wastewater treatment plants in San Juan County do nothing to treat chemical type wastes, like solvents, pesticides, paints, cleaning products, pharmaceutical drugs, etc. In essence, pouring these types of chemicals down the drain or flushing them down the toilet is the same as pouring them directly into the Bay.

If you are on a septic system, disposing of chemicals down a drain could pose a risk to your drinking water well or your neighbor's drinking water well. Individual septic systems are designed to store and treat biological solids using anaerobic bacteria while letting the clarified liquids filter through the subsurface soils in the drain field. Natural microorganisms in the subsurface soils help to eliminate pathogens and other biological waste products such as ammonia and phosphate. When properly maintained, these systems are extremely effective at treating biological waste and protecting groundwater. However, when chemicals are introduced to septic systems, not only could chemicals migrate, untreated, into groundwater, but they also can kill off the "good" microorganisms that are accomplishing the biological treatment, and this could further expose groundwater to contamination from biological pathogens and other wastes.

The essence of this message is that these types of chemical wastes are better disposed of in a permitted hazardous waste facility, which is difficult to accomplish on these islands. One option is to take advantage of the San Juan County Hazardous Waste Round-Up. This event occurs twice per year (on San Juan Island and Orcas Island in the Spring and on Lopez in the Fall) and is partially funded by charging individuals a small flat fee (for limited amounts of waste) and by charging businesses a per gallon fee to dispose of their hazardous waste. The spring, 2009 Hazardous Waste Round-Up events are already scheduled. The collection on Orcas is scheduled for Saturday, April 25th, 11 am to 2 pm at the transfer station for both households and businesses. The collections on San Juan Island are Friday, May 1st, from 10 am to noon for businesses and Saturday, May 2nd, from 10 am to 2 pm for households. Both the San Juan Island collections are held at the transfer station.

Businesses MUST pre-register by calling 370-0503 in order to participate. For more information on hazardous waste, check out the "Hazardous Waste FAQ (Frequently Asked Questions)" on the County's webpage: http://www.sanjuanco.com/publicworks/Haz_waste.aspx.

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