



Study of Pharmaceuticals and Personal Care Products (San Diego Region)

What is it?

Pharmaceuticals and personal care products (PPCPs) include substances such as medications, dietary supplements, detergents and fragrances used for personal health or cosmetic reasons, as well as veterinary drugs. PPCPs can enter the aquatic environment both from both point and non-point sources. A variety of PPCPs continually enter wastewater treatment plants via human or domestic animal excretion, and through direct disposal. During the wastewater treatment process, the PPCPs can remain unchanged or undergo transformation before being discharged into the environment. PPCPs are one of many contaminants of emerging concern (CECs). CECs are a diverse group of relatively unmonitored and unregulated chemicals shown to occur at trace levels in wastewater discharges, ambient receiving waters, and drinking water supplies. Beside PPCPs, CECs include several thousand other commercial and industrial compounds.

The study on PPCPs in the San Diego region addresses the following monitoring questions:

1. What is the occurrence and extent of PPCPs in areas with discharge of treated wastewater, with septic tanks, with untreated human waste water, and at reference sites in the San Diego region?
2. Are PPCP levels causes for concern?

This year-long study began in November of 2009. A report on this study will be available in March of 2012.

Why is it important to the State?

State, local health and regulatory agencies are aware of the presence of CECs in the environment, but they have not developed a comprehensive strategy to address monitoring and regulatory actions regarding CECs. The first step is to formulate preliminary lists of priority CECs for

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monitoring in drinking water, recycled water, wastewater discharges, and ambient receiving waters. This study addresses PPCPs in wastewater discharges and ambient receiving waters. Results from this study will be used to fill key data gaps on PPCPs in the San Diego region and to inform future monitoring and regulatory actions.

Why is it important to me?

PPCPs have recently emerged as environmental contaminants with the potential of adverse impacts on various organisms and on human health. Results from this study will provide evidence to determine whether PPCPs are of major concern in surface waters of the San Diego region.

How will this information be used?

The PPCP data will be stored in the SWAMP database, and will be available to the public through the San Diego Regional Data Portal

(<http://www.ca-watersheds.com/reg9/>) and the California Environmental Data Exchange Network (CEDEN). The report on this PPCP study will be shared and communicated to stakeholders and other interested parties. The results will provide valuable information to assist in developing management strategies for addressing PPCPs in the environment in the San Diego region.