

Pharmaceuticals and Personal Care Products in Drinking Water

In 2008, the Associated Press released a three-part story on pharmaceuticals and personal care products in drinking water sources. While OCWA was not one of the systems covered by the story, the article did provoke further discussion and action internally. Accordingly, in 2008 we implemented an annual testing program to learn more about potential pharmaceutical and personal care product contaminants that might be found in our Otisco Lake and Lake Ontario water supplies.

While none of us want to find any contaminants in our drinking water, it is important to begin the process of gathering occurrence data to allow researchers to target the more commonly found contaminants. As such, we have continued to collect data related to pharmaceuticals and personal care products in water and have continued our process of sharing the data with both researchers and consumers.

To learn more about the test results and related information, you can visit our web site (www.ocwa.org). Click on the Water Quality tab across the top of the page and scroll down to the Pharmaceuticals and Personal Care Products in Drinking Water. Anyone who has questions about the results, or any of the other water quality reports posted on our web site, is encouraged to contact our Water Quality Department at 315-455-7061, extension 3157.

Medication disposal: *To help safeguard water quality, discard your medications in the trash, rather than dumping down sink or toilet. For more information on proper disposal and drop-off locations for pharmaceuticals, please visit: <https://www.dec.ny.gov/chemical/67720.html>.*

General Information related to Pharmaceuticals and Other Emerging Contaminants

Pharmaceuticals and personal care products, known in the water industry as PPCPs, are a group of compounds consisting of human and veterinary drugs (prescription or over the counter) and consumer products, such as fragrances, lotions, sunscreen, and housecleaning products. These compounds have been detected in trace amounts in surface water, drinking water and wastewater effluent sampling because water professionals have the technology today to detect more substances, at lower levels, than ever before.

Many PPCP compounds are being found at extremely low levels, typically single digit parts per trillion (ppt). Drinking-water standards are typically set in the parts per-billion range, which is 1,000 times higher. The fact that a substance is detectable in drinking water does not mean the substance is harmful to humans.

However, the water community is committed to protecting the public's health. Water professionals are examining the occurrence of PPCPs in drinking-water supplies and the effectiveness of current treatment techniques for removal. They are also paying close attention to health-effects research in this area, including research being conducted by the Water Research Foundation.

USEPA and New York State consider certain so-called emerging contaminants such as per- and polyfluoroalkyl substances (PFA's) and 1,4-dioxane to be important environmental contaminants. These contaminants are a group of man-made compounds which persist in the environment. Some of these compounds were included in the Unregulated Contaminant Monitoring Rule 3 Sampling back in 2014-2015. As a result, regulations for these compounds are now in effect. See page 20 for recent monitoring results.

Additionally, every five years the USEPA implements the Unregulated Contaminant Monitoring Rule (UCMR). The purpose of the UCMR is to collect data from across the country on emerging contaminants that may be present in drinking water and could potentially cause health risks. As a result of past monitoring, regulations for some of these compounds are now in effect. See pages 20- 21 for recent monitoring results.