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**WATER & WASTEWATER UTILITIES' PERSPECTIVE ON EMERGING CHEMICAL AND MICROBIAL
CONTAMINANTS (ECs)**

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ABSTRACT: In the late 1990's several research projects identified a variety of chemicals, at very low concentrations, in surface waters of the United States. These research projects were followed by a larger, much more comprehensive study by the United States Geological Survey (USGS), which collected and analyzed water samples from 139 rivers and streams in 30 states. This study identified a broad range of chemical compounds in the rivers and streams that are primarily coming from wastewater treatment effluents. These chemicals are used everyday in homes, business, and agriculture. Steroids, nonprescription drugs, and insect repellents were the groups of chemical compounds most frequently most detected. Caffeine and nicotine were specific compounds that were found in many samples. There have been several different buzz words/acronyms associated with this research/evolving issue. Two of the more common ones have been Endocrine Disrupting Compounds (EDCs) and Pharmaceuticals and Personal Care Products (PPCPs). This conference uses Emerging Chemical and Microbial Contaminants (ECs) as an encompassing title. Regardless of the acronym, the water and wastewater industry has followed this research and the ensuing scientific dialogue very closely. Water and wastewater utilities are trying to understand how their existing processes treat (i.e. remove or reduce) ECs. They are also trying to anticipate potential future EC regulation under the Clean Water Act (CWA) and/or the Safe Drinking Water Act (SDWA). This presentation will discuss the evolution of the EC issue from the water/wastewater perspective and how utilities are responding to fulfill their mission of protecting public health and the environment.

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