PWEA Position Statement Disinfection

Adopted by PWEA on August 14, 2014



PWEA Mission Statement

Enhance the knowledge and abilities of Pennsylvania's water quality professionals, promote sound sustainable water policies, and promote public awareness of the need to protect water resources.

The mission of the Pennsylvania Water Environment Association (PWEA) is to "enhance the knowledge and abilities of Pennsylvania's wastewater professionals, promote sound water policies, and promote public awareness of the need to protect water quality."

The purpose of disinfecting wastewater is to protect public health by decreasing the disease risks associated with the discharge of wastewaters containing human pathogens into receiving waters.

The most commonly and widely-used disinfectants have been chlorine-based chemicals, such as chlorine gas, calcium hypochlorite, and sodium hypochlorite, in addition to alternative disinfection methods, including ultraviolet (UV) radiation and ozonation.

Current disinfection practices have reduced risks to public health while cost-effectively meeting water quality objectives. Based on current knowledge, the known benefits of these disinfection practices far outweigh the known risks. Maintaining the availability of all disinfection alternatives, including the use of chlorine-based chemicals, allows facilities to effectively disinfect wastewater effluents

The Pennsylvania Water Pollution Control Association (PWEA) supports the continued responsible use of chlorine-based disinfectants in addition to alternative disinfection methods, including ultraviolet (UV) radiation and ozonation.

Wastewater disinfection requirements are site-specific, depending on treated wastewater characteristics, applicable water quality and disinfection standards, and treatment process configuration and constraints.

Therefore, all current disinfection options should remain available to allow a comparative evaluation of scientific, environmental, engineering, and economic benefits at each site. PWEA believes that a proposal to ban the use of any specific disinfectant, such as chlorine-based chemicals, is inappropriate unless justified through scientific studies.

PWEA will continue to support disinfection-related research, advances in technology, and improvements in current methods to enhance process effectiveness and efficiency, safety, and beneficial effects on human health and the environment.