



Disinfection Position Statement

Approved by PWEA on February 11, 2021

PWEA Mission Statement

Advancing Pennsylvania's water quality professionals through education and training, promoting sound sustainable water policies, and fostering public stewardship of our water resources.

The purpose of disinfecting water and wastewater is to protect public health by decreasing the disease risks associated with both sanitary drinking water and/or 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 benefits of these disinfection practices far outweigh the risks. The availability of all disinfection alternatives, including the use of chlorine-based chemicals, allows facilities to effectively disinfect public water supplies and wastewater effluents.

PWEA supports the continued responsible use of chlorine-based disinfectants in addition to alternative disinfection methods, including ultraviolet (UV) radiation and ozonation; while continuing to monitor the efficacy of these disinfection methods against current health standards

Water and wastewater disinfection requirements are site-specific. Treated water or wastewater characteristics, applicable water quality and disinfection requirements, and treatment process configuration and constraints all play a part in determining the proper disinfection method.

Therefore, all current disinfection options should remain available to allow a comparative evaluation of scientific, environmental, engineering, and economic benefits. PWEA believes that a proposal to ban the use of any specific disinfectant, including chlorine-based chemicals, is inappropriate at this time.

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