

DISINFECTION FOR THE LAST TEN PERCENT

Koon Tang and Demissie Woyecha | NYS DEC

The impact of untreated and partially treated domestic wastewater on rivers and community water sources continues to raise public health and safety concerns. The organisms of concern in domestic wastewater include enteric bacteria, viruses, and protozoan cysts. If these pathogens are ingested they will cause harm to human. Disinfection is the primary mechanism for inactivating or destroying pathogenic organisms in sewage and preventing the spread of waterborne diseases to downstream users and the environment.

All the New England States require their wastewater treatment facilities to disinfect their effluent. Ninety percent of municipal sewage in New York is already being disinfected. New York is working to get the last ten percent disinfected over the next few years. New York is behind all of its neighboring states and is working hard to have the last ten percent of municipal sewage disinfected. Additionally, EPA has increased its efforts to make sure that all wastewater treatment facilities across the United

States disinfect their effluent.

DEC has reviewed the list of wastewater facilities that are currently not disinfecting their effluent and has developed a prioritization based on a facility's potential impact to public health and safety and environmental concerns. For example, DEC looked at the facility's proximity to residential or recreational areas and waterbodies used as sources of drinking water or for swimming. DEC also looked at facility readiness, which was measured by whether the facility has an existing plan to upgrade its treatment system.

To mitigate the financial impact of adding disinfection system to the treatment plants, DEC is prioritizing Water Quality Improvement Projects (WQIP) and Engineering Planning Grant (EPG) funding to assist these communities. DEC cannot guarantee these funds will be available long term. However, providing funds are available, disinfection of sewage treatment plant effluents will be one of DEC priorities for funding. 💧💧
