

HEALTH

Chemical-Free Air Purifier Protects Public Spaces

By Heidi Splete, Senior Writer
For NewsUSA

(NU) - Cooling towers, a key component on large buildings, require special levels of cleaning to control biocontaminants including Legionella, heterotrophic bacteria, and others. However, poorly maintained towers, which are often treated with corrosive chemicals, can become ‘super spreaders’ of Legionnaires’ Disease, an acute bacterial infection of the lower respiratory tract that is not rare and causes severe pneumonia.

According to the Centers for Disease Control and Prevention, potable water is the most frequent source of Legionella exposure, but cases have been linked to cooling towers. Because it is difficult to distinguish from other forms of pneumonia, unless specifically investigated, many cases of Legionnaires’ Disease go undiagnosed and unreported.

In August 2019, the National Academies of Sciences, Engineering and Medicine (NASEM) reported that the real number of Legionnaires’ disease cases may be as many as 70,000 cases per year in the United States.

Clean, efficient, and effective treatment of cooling towers can improve the air quality and reduce the spread of disease-causing bacteria into the atmosphere.

A novel, chemical-free technology, the Plasma Disinfection System (PDS) uses a combination of high-temperature plasma streamers, ultraviolet rays, and ozone to reduce the impact of air- and water-borne bacteria and viruses that can spread in public spaces through cooling towers.

The PDS is a state-of-the-art, fully-automated, integrated treat-



ment technology for liquids.

What makes PDS solution unique is its combination of three major treatment technologies: novel plasma (the 4th state of matter) plus two traditional technologies (biocidal ions and hypochlorite), that work together to provide continuous reduction and management of Legionella and bacterial growth in water systems. The PDS also reduces the use of corrosive chemicals, thereby vastly extending the life and warranty life of costly mechanical equipment.

Public health organizations in the United States and worldwide have expressed concerns over the risks for Legionnaire’s Disease and other respiratory infections due to poor management of cooling towers. Private industry has responded by publishing guidance for water management programs.

In June 2017, the CDC published a toolkit for businesses on “Developing a Water Management Program to Reduce Legionella Growth & Spread in Buildings;” the toolkit stated that “legionella water management programs are now an industry standard for large buildings in the United States.”

Visit www.reverseionizer.com for more information about how Reverse Ionizer’s chemical-free technology can improve air quality in public spaces and reduce the spread of disease.