

Cyrus Rice Water Consultants, Inc.

Industrial Water Consultants.....Since 1916

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October 21, 2022

The Honorable Gene Yaw – Chair Senate Committee on Environmental Resources and Energy Pennsylvania Senate 501 North 3rd Street Harrisburg, PA 17120

Subject: Testimony related to Senate Bill 1125

Dear Chairman Yaw and Honorable Members of the PA Senate,

I would like to first thank you for this opportunity to provide written testimony in connection with the proposed legislation for "Senate Bill 1125" with regard to Legionnaires Disease.

My name is John J. Farmerie. I am an Executive Consultant and Owner of Cyrus Rice Water Consultants, Inc., I have over 35 years of experience in the water treatment industry, and I still provide consulting today in this field to many facilities in the State of Pennsylvania and other areas around this country. Some of which are municipal water systems and building and Building owners and their water systems. (I have attached my CV for your perusal to tell you more about myself.)

I support the Senate Bill 1125 and the requirement for both municipal utilities and commercial and industrial facilities and buildings to conduct risk assessments and write Water Management Plans to be used by the different parties to help prevent the disease.

I come at this from more of a mechanical and prevention maintenance standpoint. I do not like to just throw more chlorine or other drinking water chemicals at the problem to solve it. By conducting a true risk assessment, a facility can understand where their issues exist. With the constant changing dynamics of our cities with new construction and tearing down of old facilities and production facilities and the changing population, the utilities must understand how dead runs, low chlorine levels in certain areas of their supply, changes in size of piping and other flow dynamics in their systems are impacting the public health.

Also, by writing water management plans, which are not just for legionella but all waterborne pathogens, they will help their planning in case unexpected conditions occur, including water main breaks and natural disasters. (We have seen first-hand with facilities recently impacted by Hurricane Ian and how that impacted municipal water supplies and how those facilities receiving water from these municipal supplies need to prepare to take steps to protect their users of water from issues with the water supply and waterborne pathogens.) Having a plan allows the utilities

to get back on-line quicker and safer, because staff has thought about these issues and have put a plan into action. (Please Note: Most municipalities do not have highly measurable levels of legionella in their supplies, but it does exist in all water systems at low levels. It is the areas of poor oxidizer control and areas where small particulate can settle out and corrosion occurs, that can enhance the bacterial growth. It is the corrosive nature of water on carbon steel lines that can really enhance Legionella growth.)

For the commercial and industrial facilities, many do not understand how Legionella can impact them negatively. With the ASHRAE 188 document being written into existing laws around the country, it is becoming a standard of care. Facilities need to also conduct risk assessments to understand their facilities better and understand all of their water systems. These facilities cannot control the general health of people that enter their facilities. Some may be cancer survivors, others Covid survivors, or just people taking several of the beneficial drugs that can impact their immune systems. These people just entering a facility can become infected by just breathing in water droplets from a water feature, hot tub, vegetable spray misters or even from a domestic shower can contract the disease. The facility owner does not know because he is trying to keep his business operating. He does not know ASHRAE, nor does he know what causes Legionella or the other water borne pathogens. A risk assessment also helps then understand their risks.

Again, the water management plan brings this all into context because it allows the facility owner to think about what could occur before it does occur. Having a projected plan helps them address the issues.

When COVID-19 shutdown many facilities, we instructed many of our clients to have custodial and maintenance staff conduct periodic flushing of their facilities to prevent bacterial growth in their domestic water systems. This was almost six months before the CDC issued the same warnings. This not only protected the clients from Legionella but also Lead and Copper issues from stagnant water systems. Planning and thinking about what can occur because you have the knowledge helps the client do everything they can to help with all the potential negatives of an issue. (Bad publicity, reputation, rental of use of their facility, retaining employees and/or potential legal action.)

Most facilities will not take action unless Legislation governs them to because they just don't know about their water system and Legionnaires disease – "it is just something they read in the newspaper.".

I know Legislation will not stop all deaths from Legionnaires Disease and other waterborne pathogens, bacteria are too adaptive to their surroundings. However, if we can limit the disease, we will be protecting the unsuspecting public who really don't understand water and the dynamics involved with it and even if we save one person then we have accomplished something.

Feel free to contact me to discuss water issues at any time at 412-670-2880.

Respectfully submitted,

John J. Farmene

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ASSE Certified Legionella Expert and Trainer

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