



Founded 1889

United Association of Journeymen and Apprentices of the
Plumbing and Pipe Fitting Industry of the United States and Canada

Three Park Place • Annapolis, Maryland 21401
(410) 269-2000 • Fax (410) 267-0262 • <http://www.ua.org>

Mark McManus
General President

Patrick H. Kellett
General Secretary-Treasurer

Michael A. Pleasant
Assistant General President

General Office File Reference: TGB

May 5, 2021

Re: Legionella Prevention Policy Hearing

Good morning Senators,

Thank you for sponsoring Senate bill 1285. Sometimes I shake my head when I think about how easily we could eliminate fatal sicknesses like Legionnaires disease by, just doing preventive measures like senate bill 1285 suggests and implementing the many professional guidelines and mandates that have been in existence for many years. It's an honor to be testifying before this Senate Committee and to be on a panel with such distinguished experts. In my opinion Dr. Janet Stout, a fellow Pittsburgher is the leading expert in the world on Legionella and is huge contributor to vital curriculum and policy content for the many standards that we follow today. Thank you to everyone here for their concerns for the public health of the citizens of Pennsylvania. We take for granted everyday the privilege of having clean sustainable air to breathe, water to drink and proper sanitation in our homes, places of work, hospitals, airports, and all places of gathering. Clean water is a necessity of life. No one wants to wake up and find out that their city or town face major health risks from its water system.

But it is occurring more frequently. Even when water coming into a building is safe, public health risks can be created by contamination from metals, bacteria, and chemicals found within premise piping systems. For example, incoming water may be relatively free of bacteria at the point it enters the building but become unsafe due to certain internal conditions. This occurs when water becomes stagnant and is combined with heat and nutrients that foster bacteria growth. Such problems have been driving the recent spike in cases of Legionnaires disease. Because of the recent pandemic, many buildings have been shuttered and unoccupied possibly creating a perfect storm for legionella growth in plumbing systems.

The United Association of Plumbers and Pipefitters worked collectively with ASSE, IAPMO, WPC and other industry experts in developing steps for Reopening and Safeguarding Building Occupancy at the height of the Pandemic. Along with CDC guidelines we were able to prepare building owners for the safe return of their occupants to their workplaces. It should also be stressed that a unique aspect of premise piping in the plumbing systems that should also be considered is the fact that safety issues are not just about drinking water. With respect to internal piping, it must be recognized that health hazards can come from mere exposure to water, such as when toxins are inhaled or permeate the skin while bathing or showering. The latter is caused by exposure to water particles in the air, which is precisely how legionnaires' disease is transmitted. Part of the problem with premise piping is there is almost a complete absence of government regulation. The fact is federal law does not generally regulate internal piping systems.

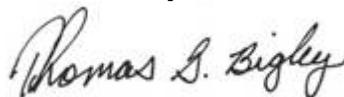


Historically, the primary means for ensuring water quality on the inside of buildings has been state and local plumbing codes, which simply require premise piping systems to deliver “potable” water, i.e., water safe for human use and consumption. However, most of these laws require very limited testing of water quality, and this normally occurs only for new facilities at the end or close-out of the construction process. If bacteria, lead, or other contaminants enter these systems at any subsequent point, which could be years or even decades later, they will usually not be detected until harm is caused.

The absence of government regulation in this area is not altogether surprising. For the past several decades, the quality of incoming water from most public water systems has been relatively safe. As a result, there was no real need to worry. EPA standards have only very limited, narrow application to premise piping and in most situations have no impact whatsoever. State and local laws, including plumbing codes, were never designed to deal with the multiple challenges now being presented to internal systems by aging pipes, modern chemical threats or unforeseen conditions fostering bacteria growth. Considering these facts and growing evidence of new risks presented by premise piping, policy reforms should be developed to address challenges in this area.

With respect to short-term risks, new standards and protocols are needed for internal piping systems, especially for older buildings or other facilities that require more intensive monitoring, including schools and healthcare facilities. I am pleased to see that the authors of Senate Bill 1285 adopted ASSE 12000 series which will ensure that the person who is testing for Legionnaires is qualified and licensed. The ANSI/ASHRAE Standard 188, Legionellosis: Risk Management for Building Water Systems, defines legionellosis risk management requirements for building water systems. The ASSE 12000 series afford a verification and validation path to compliance with standards and guidelines related to cooling towers, water-features, potable water systems, fire protection, ice machines, humidifiers, and all piped systems that currently reside in all occupied buildings as well as the knowledge and competency to become a member of a water safety team involved in the development of a risk assessment analysis and a water management and sampling plan for protection from Legionella and other water borne pathogens. The people who are testing the water must be certified and trained if we want Senate Bill 1285 to succeed. Thank you again for the opportunity to address this bill.

Sincerely Yours,

A handwritten signature in cursive script that reads "Thomas G. Bigley".

Thomas G. Bigley
Director of Plumbing for
The United Association of
Plumbers and Pipefitters
Chairman of the World Plumbing Council