

Monday, January 24, 2022

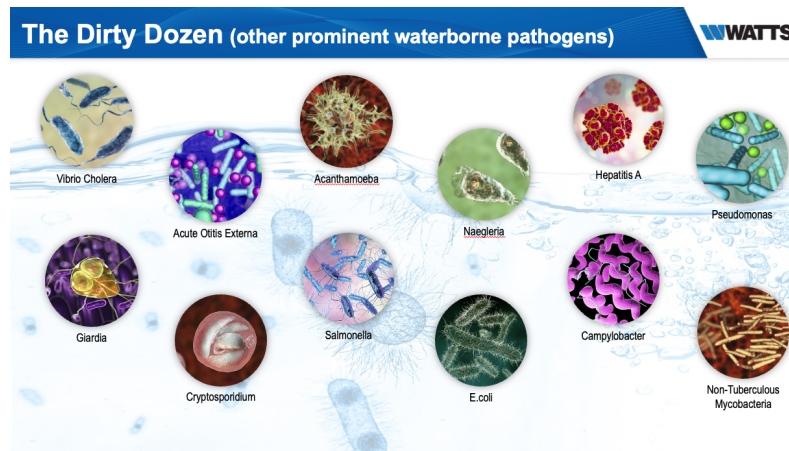
# Packaged Domestic Hot Water Pathogen Mitigation

Monday Morning Minutes | by Norm Hall, January 24, 2022

Domestic hot water systems should be designed to limit the risk of pathogen issues including Legionnaires Disease. Avoiding risk in the design of these systems may be difficult. Good news, engineers have a packaged solution ready to specify that addresses many of the concerns.



## Reducing Risk and Saving Time



I start this blog by focusing on the engineer and their responsibility in the design of a domestic hot water heating and pathogen protection system. I mentioned several components of a complete system in the last R. L. Deppmann Monday Morning Minutes titled, [Domestic Hot Water: Pathogen Mitigation](#).

There is little question that given the time and money, the consulting engineer can design a complete mechanical room hot water heating system with pathogen protection components all integrated with a control scheme to collaborate with each other.

It gets down to a question of time, money, space, and risk. The Engineering firm is a “for profit” entity. The number of design hours allotted should marry with the fees allowed in the contract.

There is also the concern over the risk. The risk of coordination issues in the documentation as well as the risk of operation to mitigate pathogens.

13 42 00 – Integrated construction, building modules, 22 31 16 – Commercial Domestic Water Softeners, 22 32 00 – Domestic Water Filtration Equipment, 22 34 00 – Fuel-fired Domestic Water Heaters, 25 34 00 – Integrated Automation Instrumentation and terminal devices for plumbing, 25 54 00 – Integrated automation control of plumbing, 46 66 00 – Ultraviolet Equipment

An engineered packaged solution such as the [Lync by Watts Element-Q](#) reduces the time in design and control as well as reducing the risk. It also provides clarity with the documents.

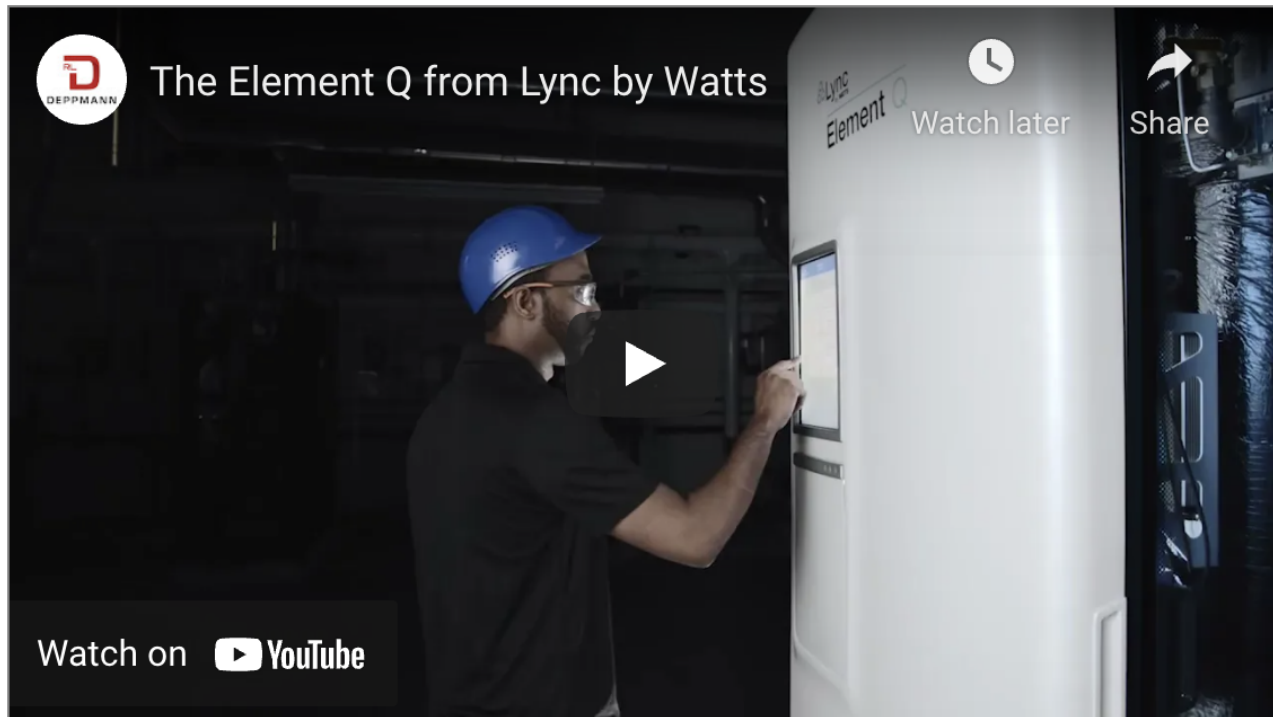
The engineer may want to start with a package design. They can learn more about the system component interaction and controls. At some point, after their knowledge increases, they may decide the packaged solution is the correct way to go to save space and field labor costs or they may design their own system.

## **Assisting Health Care, Hospitality, and Education Clients.**

Legionella concerns in water systems may be the cause of sleepless nights for your client who requires a new or renovated building. You and your owner client have a genuine concern for the health and safety of people in these buildings. Besides the safety of people, your client may also be concerned about reputation, litigation, and compliance.

Compliance with ASHRAE 12 and ASHRAE 188 or similar standards in our industry may be puzzling to them. So much process documentation, recording, and reporting with existing staffing levels which are already strained or short.

The consultant may choose to assist the owner in their water management planning. The [Element-Q](#) supports the owner's documentation requirement by providing event recording, timed sanitation processes, real time alerts, and maintenance scheduling. A great benefit for owners who have staff with time and knowledge constraints. Amazing control schemes exist for temperature sanitation.



If you are located outside of Michigan or Ohio click here to find [your local Lync by Watts representative](#) for more information.