

Waterborne Pathogen Management Program (WPMP) Case Study

By Fred Just

Healthcare Case Study



Key Team Stakeholders

- Building Manager/Administrator/ Team Lead
- Facilities Services Department Leader
- Infection Control Department Leader
- Environmental Health and Safety Leader
- Risk Management/Licensing Department
- Public Affairs Leader
- Equipment Suppliers (Pall Medical)
- Water Treatment Professionals (West Inc., AquaServ)
- Certified Industrial Hygienist
- Engineering Consultant
- Environmental Health Specialists
- Environmental Services Leader
- State and Local Health Officials (CDC and CDPH)

Process Overview

Hazard Control Plan

- Building water systems are characterized and a Facility Assessment conducted.
- An analysis of building water systems, and at risk populations, is performed to evaluate where hazardous conditions related to potentially harmful human exposure to *Legionella* may occur.
- These risks are characterized qualitatively relative to each other.
- Measures to control these risks are identified.
- For each identified control measure, a control parameter is identified along with acceptable limits.

Process Overview

Hazard Control Plan (cont.)

- A monitoring interval for the parameter is selected.
- A responsible party to manage the control measure and associated monitoring is identified.
- Corrective actions are specified to be taken when the control parameter is outside of limits.
- Recordkeeping and procedural documents supporting implementation of the control measure are identified.

Results

- Comprehensive water treatment and water testing during and after program development .
- Comprehensive engineering/design study of the potable water piping system.
- Added secondary water treatment equipment to augment what the city already provides.
- Replaced/Disinfected sensor type faucets.
- Identified and remedied a dead leg in the plumbing system.
- Design changes were made to the emergency water holding tank.
- After 18 months, testing results identified 'non-detected' for both legionella and pseudomonas pathogens.
- Comprehensive Interdisciplinary Water Management Program completed and implemented.