# **Standard 514-2023**



# ANSI/ASHRAE Standard 514-2023, Risk Management for Building Water Systems: Physical, Chemical, and Microbial Hazards

#### **Purpose**

Standard 514 is a new ASHRAE standard that provides minimum practices to manage overall risk from microbial, physical, and chemical hazards that are associated with both potable and non-potable water systems in buildings.

## **Significance**

The standard provides a framework for the systematic development of water management programs. It is intended to be used in combination with ASHRAE Standard 188, Legionellosis: Risk Management for Building Water Systems. Standard 514 mandates the use of Standard 188 for managing infection risk from Legionella bacteria, and Standard 514 then covers the risk from all other microbial hazards except Legionella.

#### Scope

This standard addresses the hazards posed by water in building systems, especially the specific risks posed by high water temperatures to certain vulnerable populations like infants, young children, and the elderly. The chemical hazards include disinfectants and their byproducts, corrosion products, and any chemicals that leach from plumbing materials. The framework for the water management program covers design, construction, building occupancy, as well as any post-occupancy modifications and renovations.

## **Highlights**

- √ Standard 514 is intended for use by building owners and managers, as well as those involved in the design, construction, installation, operation and maintenance of centralized building water systems.
- The standard contains sections that are required for compliance, as well as informative sections that are optional. The informative appendices include additional information on the different hazards that could be present in a given building water system and the specific conditions that make them dangerous.
- The informative appendices include guidance for using microbial testing in a facility, guidance on using personal protective equipment (PPE) when there is potential exposure to hazards, and guidance specifically for healthcare facilities, which may include additional hazards beyond those in other buildings.