

DATE: January 10, 2024

POLICY NO.: PM2024-0001

TITLE: Disinfection and Flushing of Building Potable Water Systems

RELATED DEPT. & DIVISION: Development Services Department

Austin Public Health

TOPIC: Plumbing

DECISION MAKER: Todd Wilcox, Building Official

Dr. Desmar Walkes, Health Authority

SUMMARY: To control any potential contamination of legionella growth, this policy

memo implements an existing requirement for the timing and proof of disinfection and flushing of building potable water systems in new nursing

homes and hospitals.

CODE SECTIONS: 2021 International Building Code (IBC)

• § 308.3 (Institutional Group I-2)

- Nursing homes
- Hospitals

2021 Uniform Plumbing Code (UPC)

- § 609.10 (Disinfection of Potable Water System)
- § N 105.0 (Disinfection) of Appendix N (Impact of Water Temperature on the Potential for Scalding and Legionella Growth)
 - Excluding the ultraviolet light method referenced in N 105.1 (Disinfection Documentation)

American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE)

- ANSI/ASHRAE Standard 188 Legionellosis: Risk Management for Building Water Systems
- ANSI/ASHRAE Guideline 12 Minimizing the Risk of Legionellosis Associated with Building Water Systems

POLICY:

Background and Terminology

ANSI/ASHRAE Standard 188 establishes the minimum requirements for legionellosis risk management with specific considerations for healthcare facilities and is supplemented by ANSI/ASHRAE Guideline 12, which provides additional compliance guidance. To establish a required timeline for documentation, "beneficial occupancy," defined in Standard 188, shall mean within 'three (3) weeks before a certificate of occupancy is issued' for purposes of this policy.

Requirements

Potable water systems must be disinfected prior to use according to the requirements and methodology of Section 609.10 of the Uniform Plumbing Code (UPC). UPC Section N 105.0 (*Disinfection*) requires documentation of disinfection and provides alternative methods for system disinfecting to those outlined in Section 609.10; however, the Health Authority excludes the use of the ultraviolet light method in Section N 105.1 (2).

Timing of Disinfection and Flushing

Per ANSI/ASHRAE 188, the Health Authority establishes the following timeline for the flushing and disinfection that is needed prior to a certificate of occupancy:

- (A) Disinfection and flushing shall be completed prior to beneficial occupancy, as defined above.
 - 1. If beneficial occupancy of any part of the building is delayed more than two (2) weeks but less than four (4) weeks after disinfection, <u>flushing</u> of all fixtures shall again be completed.
 - 2. If beneficial occupancy of any part of the building is delayed four (4) weeks or more after disinfection, <u>flushing and disinfection</u> of all fixtures shall again be completed.

Proof of Disinfection and Flushing

Within three (3) weeks of the certificate of occupancy being issued, building owners or their representatives are required to provide proof of disinfection and flushing of building potable water systems in new nursing homes and hospitals. Development Services Department (DSD) Commercial Plumbing Inspections Division will collect proof of compliance before the final plumbing inspection is finalized. A temporary certificate of occupancy will not be affected by this requirement.

Toda Wilcox, Building Official

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Dr. Desmar Walkes, Health Authority