

**INTERPRETATION IC 188-2015-X OF  
ANSI/ASHRAE STANDARD 188-2015  
Legionellosis: Risk Management for building Water Systems**

**Date Approved:** February 1, 2019

**Request from:** Kathleen Fultz, Water Quality Association, 4151 Naperville Road, Lisle, IL 60532.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 188-2015, Sections 4, 7 and Normative Annex A, relating to the use of activated carbon filters within water fountain appliances.

**Background:** A manufacturer offers drinking water fountains with and without filters (activated carbon filters). A health care facility is developing a water risk management program based on the requirements of ASHRAE 188 in an effort to mitigate legionella. Based on the health care facility management team's interpretation of ASHRAE 188, they have requested the manufacturer of the drinking water fountain to replace their carbon filter with a non-carbon based filter. The product's design includes a tank and tubing between the filter and the non-aerated outlet which holds approximately one liter of filtered water; this water is under pressure and not subject to any potential new contamination sources, including legionella. The carbon filter being used is certified by NSF and WQA to NSF/ANSI 42 & 53 for the reduction of the following contaminants: lead, nominal particulate class 1, and chlorine; the micron size of the filter is 1 micron. In addition, the drinking water fountain, including the filter as part of the product, has been certified to NSF/ANSI 61 & 372.

The location and intended use of the filter provided with the water fountain described in this situation is consistent with the industry definition:

***Point-of-Use** - A plumbed-in or faucet-mounted drinking water treatment unit used to treat the drinking and/or cooking water at a single tap or multiple taps but not used to treat the majority of water used for washing and flushing or other non-consumption purposes at a building or facility. Any batch system or device not connected to the plumbing system is considered a point-of-use system (NSF/ANSI Drinking Water Treatment System Standards).*

ASHRAE 188 – 2015 provides the following requirements that relate to the use of a water filter in a potable water system:

**7. REQUIREMENTS FOR BUILDING WATER SYSTEMS**

*All water treatments implemented in connection with this standard shall be applied in conformance with, and shall comply with, all applicable national, regional, and local regulations.*

**7.1.2 System Maintenance.** *The Program documents shall include procedures for*  
*c. maintenance and monitoring procedures based on equipment manufacturers'*  
*recommendations for cleaning, dis-infection, replacement of system components, and*  
*other treatments that the Program Team decides are necessary for the following:*

*5. Water filters*

**A3. WATER SYSTEM FLOW DIAGRAM**

**A3.1** *The building water systems shall be graphically represented in water system flow diagrams that include*

*c. all water treatment systems and control measures, including disinfection and filtration;*

**A5. EXISTING BUILDINGS, NEW CONSTRUCTION, AND RENOVATIONS**

**2. System maintenance.** *The legionellosis risk management plan documents shall include procedures for*

*iii. maintenance and monitoring procedures based on equipment manufacturers' recommendations for cleaning, disinfection, replacement of system components, and other treatments the Designated Team decides are necessary for*

*(e) water filters;*

Based on the requirements of ASHRAE 188-2015 highlighted above we believe the following interpretation is correct.

**Interpretation:** The use of a Certified/Listed activated carbon filter used as a Point-of-Use (POU) water treatment device (as defined by industry standards) in a water fountain is considered to be in compliance with ASHRAE 188 based on the following:

- ASHRAE 188 does not specifically prohibit the use of carbon filters in this situation regardless of micron size.
- The *Water Management Program* documents include procedures for the maintenance and monitoring procedures based on the equipment manufacturer's recommendations for cleaning, disinfection and replacement. (Item 7.1.2.c)
- The Water Management Program documents include the procedures for application and confirmation that the products comply with applicable regulations. The product and filter components are tested and certified to the appropriate standards referenced in the model plumbing codes.
- The design is considered to be acceptable in a water management plan risk analysis based on the following assumptions:
  - the POU device is installed and maintained in accordance with manufactures instructions; and
  - the system is under pressure from the filter to the faucet outlet valve.

**Question:** Is this interpretation correct?

**Answer:** No. Standard 188 does not identify any equipment or components as acceptable or unacceptable. Acceptability of any equipment or components is to be determined by the water management team.