Follow-up Information on Managing Legionella in Building Water Systems

<u>Background:</u> During an NCDEQ Energy Management webinar on March 26, 2020, there were questions about potable water line flushing in public facilities during shutdowns and curtailed use. This question was prompted about controlling legionella bacterial growth rather than the COVID-19 virus. After a round of inquiries to municipal water systems and facilities staff at universities, the consensus was as follows:

If customers are not using water for an extended period, they may want to a good flush of the potable water system a couple of days before reoccupying.

Suggest running the system until they have a good level of disinfectant at the distal points for both hot and cold water.

There is an ANSI-ASHRAE 188-2018 standard For Legionnaires' Disease Risk Management. ASHREA 188 goes into detail on establishing a Water Management Program and risk analysis (mostly focused on open- and closed-circuit cooling towers and evaporative condensers in HVAC&R systems, whirlpools, spas, ornamental fountains, misters, atomizers, air washes, humidifiers, or other nonpotable water systems or devices that release water aerosols in the building or on the site).

Below is list of references for more information on controlling Legionella in building water systems, with a focus on health care and more sensitive health related environments.

Sensible Water Flushing Guidance Coronavirus related shutdown (practical summary from Contractor Magazine.)

https://www.contractormag.com/plumbing/article/21127309/rehabilitating-stagnant-building-water-systems

MANAGEMENT OF LEGIONELLA IN WATER SYSTEMS Science-Based Guidance for Facilities Managers https://www.nap.edu/resource/25474/interactive/

Water Management Program Template

https://www.tn.gov/content/dam/tn/health/documents/reportable-diseases/legionellosis/Water%20Management%20Program%20Template PDF.pdf

CDC Guidelines for Water-borne Infectious Disease Control in Health Care Facilities https://www.cdc.gov/infectioncontrol/guidelines/environmental/background/water.html

Addresses ASHRAE 188 application to Health Care Facilities https://www.hfmmagazine.com/articles/3033-minimizing-facility-water-system-risks

ANSI-ASHRAE 188-2018 document description and purchase links https://blog.ansi.org/2018/09/ansi-ashrae-standard-188-2018-legionnaires/#gref $\frac{https://static1.squarespace.com/static/5ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e923e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e924e83e2d09fb53c3d61f/t/5c4b72e07924e8386a207eda/15ad93e924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e83e2d09fb53c3d61f/t/5c4b72e07924e84e84e84e966fb61f/t/5c4b72e07924e84e84e96fb61f/t/5c4b72e07924e84e84e96fb61f/t/5c4b72e07924e84e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e07924e84e96ff61f/t/5c4b72e0796ff61f/t/5c4b72e0796ff61f/t/5c4b72e0796ff61f/t/5c4b72e07966ff61f/t/5c4b766ff61f/t/5c4b766ff61f/t/5c4b766ff61f/t/5c4b766ff61f/t/5c4b766ff61f/t/5c4b766ff61f/t/5c4b766ff61f/t/5c4b766ff61f/t/$

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