3745-95-01 **Backflow prevention and cross-connection control definitions and incorporation by reference.**

Except as follows, the definitions in rule 3745-81-01 of the Administrative Code apply to this chapter:

(A)

(1) "Air gap separation" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood level rim of the receptacle.

(2) "Approved" means that a backflow preventer has been accepted by the supplier of water and the director as suitable for the proposed use.

(3) "Auxiliary water system" means any water system on or available to the premises other than the public water system. Auxiliary water systems include used water or water from a source other than the public water system, such as wells, cisterns or open reservoirs that are equipped with pumps or other prime movers, including gravity.

(B)

(1) "Backflow" means the flow of water or other liquids, mixtures, or substances into the distributing pipes of a public water system from any source other than the intended source of the public water system.

(2) "Backflow preventer" means any assembly, device, method or type of construction intended to prevent backflow into a public water system.

(3) "Booster pump" means any device which is intended to increase the in-line water pressure.

(C)

(1) "Consumer" means the owner or person in control of any premises supplied by or in any manner connected to a public water system. When the consumer and the supplier of water are the same person, any requirements imposed on the consumer by this chapter apply to the supplier of water.

(2) "Consumer's water system" means any water system, located on the consumer's premises, supplied by or in any manner connected to a public water system. A

household plumbing system is considered to be a consumer's water system.

(3) "Containment principle backflow preventer" is a backflow preventer intended to prevent any water with contaminants from backflowing into the public water system. For single property community public water systems and for noncommunity public water systems, a containment principle backflow preventer is installed at the actual or potential cross-connection. For all other community public water systems, containment priniciple backflow preventers are installed on each service connection to a consumer's water system, unless otherwise specified in this chapter.

(4) "Cross-connection" means any physical connection or arrangement whereby backflow can occur.

(D)

(1) "Degree of hazard" is a term derived from an evaluation of the potential risk to health and welfare.

(2) "Double check valve assembly" means an assembly composed of two single, independently acting, check valves including tightly closing shutoff valves located at each end of the assembly and suitable connections for testing the watertightness of each check valve.

(3) "Double check-detector check valve assembly" means a specially designed assembly composed of a line-size approved double check valve assembly with a specific bypass water meter and a meter-sized approved double check valve assembly. The meter shall register accurately for only very low rates of flow and show a registration for all rates of flow.

(E) [Reserved.]

(F) [Reserved.]

(G) [Reserved.]

(H) "Health hazard" means any condition, device, or practice in a water system or its operation that creates, or may create, a danger to the health of users.

(I)

(1) "Interchangeable connection" means an arrangement or device that will allow alternate but not simultaneous use of two sources of water and includes an approved reduced pressure principle backflow prevention assembly or an approved reduced pressure principle-detector assembly on the public water system side of the connection.

(2) "Isolation backflow prevention device" means a device for the prevention of the backflow of liquids, solids, or gases that is regulated by the plumbing code adopted pursuant to section 3781.10 of the Revised Code

(J) [Reserved.]

(K) [Reserved.]

(L) [Reserved.]

(M) [Reserved.]

(N) [Reserved.]

(O) [Reserved.]

(P)

(1) "Pollutional hazard" means a condition through which an aesthetically objectionable or degrading contaminant, which is not dangerous to the public water system or health of users, may enter the public water system or portion of a consumer's water system.

(2) "Premises" means any building, structure, dwelling or area containing plumbing or piping supplied from a public water system.

(3) "Pressure vacuum breaker" means an assembly composed of an independently acting spring loaded check valve located downstream of an independently acting spring loaded air inlet valve including, tightly closing shutoff valves located at each end of the assembly and suitable connections for testing the integrity of the air inlet and check valves.

(4) "Process fluids" means any fluid or solution which may contain contaminants in a form or concentration such as would constitute a pollutional, system, health

or severe health hazard if introduced into the public water system or portion of a consumer's water system. This includes, but is not limited to the following:

(a) Process waters.

(b) Used waters originating from a public water system which may have deteriorated in sanitary quality.

(c) Cooling waters.

(d) Contaminated natural waters taken from wells, lakes, streams or irrigation systems.

(e) Chemicals in solution or suspension.

(f) Oils, gases, acids, alkalis, and other liquid and gaseous fluids used in industrial or other processes, or for fire fighting purposes.

(Q) [Reserved.]

(R)

(1) "Reduced pressure principle backflow prevention assembly" means an assembly containing a minimum of two independently acting check valves together with an automatically operated pressure differential relief valve located between the two check valves. During normal flow and at the cessation of normal flow, the pressure between these two checks shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the check valves at less than the supply pressure. The unit shall include tightly closing shutoff valves located at each end of the assembly, and each assembly shall be fitted with properly located test cocks.

(2) "Reduced pressure principle-detector assembly" means a specially designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a specific bypass water meter and a meter sized approved reduced pressure principle backflow prevention assembly. The meter shall register accurately for only very low rates of flow and show a registration for all rates of flows.

(S)

(1) "Severe health hazard" means a health hazard to users that could reasonably be expected to result in significant morbidity or death.

(2) "Single property community water system" means a community water system as defined in paragraph (P)(11)(a) of rule 3745-81-01 of the Administrative Code that is located on a single property or contiguous properties under the ownership or control of a single person.

(3) "System hazard" means a condition posing an actual or potential threat of damage to the physical properties of the public water system or a consumer's water system.

(T) [Reserved.]

(U) "Used water" means any water supplied by a public water system to a consumer's water system after the water has passed through the service connection and is no longer under the control of the supplier.

(V) [Reserved.]

(W)

(1) "Water system" means a system for the provision of piped water or process fluids, and includes any collection, treatment, storage or distribution facilities used primarily in connection with such system.

(2) "Weep holes" means a series of small diameter holes located in the wall of the supply pipe for a yard hydrant that allow for drainage of accumulated water from the delivery piping. These holes are usually part of a plunger and valve system that seals off the holes during water usage and opens the holes during shutdown. These openings are located below ground level and below the frost line in areas where the threat of freezing exists.

(X) [Reserved.]

(Y) "Yard hydrant" means a device that is located outside of a building, equipped with a valved mechanism that controls the delivery of potable water, and is not designed to supply a fire department pumper.

(Z) [Reserved.]

(AA) Referenced materials. This chapter includes references to certain subject matter or materials. The text of the referenced materials is not included in the rules contained in this chapter. Information on the availability of the referenced materials as well as the date of and the particular edition or version of the material is included in this rule. For materials subject to change, only the specific version specified in this rule are referenced. Material is referenced as it exists on the effective date of this rule. Except for subsequent annual publication of existing (unmodified) Code of Federal Regulation compilations, any amendment or revision to a referenced document is not referenced unless and until this rule has been amended to specify the new dates.

(1) Availability. The referenced materials are available as follows:

(a) "American National Standards Institute/American Water Works Association" (ANSI/AWWA). A copy may be obtained from "AWWA Bookstore, 6666 W. Quincy Avenue, Denver, CO, 80235," (303) 794-7711, www.awwa.org. The standards are available for review at "Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, OH, 43215."

(b) "American National Standards Institute/National Sanitation Foundation" (ANSI/NSF). A copy may be obtained from "NSF International, 789 N. Dixboro Road, P.O. Box 130140, Ann Arbor, MI 48105," (734) 769-8010, www.nsf.org. The standards are available for review at "Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, OH, 43215."

(c) "American Society of Mechanical Engineers" (ASME). A copy may be obtained from "ASME, Three Park Avenue New York, NY 10016-5990 or, a copy may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, CO 80112, (303) 397-7956 or (800) 854-7179, global.ihs.com. The standards are available for review at "Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, OH, 43215-3425."

(d) "American Society of Sanitary Engineering" (ASSE). A copy may be obtained from "American Society of Sanitary Engineering, 901 Canterbury Road, Suite A, Westlake, OH, 44145-1480", (440) 835-3040, www.asse-plumbing.org or from "Global Engineering Documents, 15 Inverness Way East, Englewood, CO, 80112" (303) 397-7956 or (800) 854-7179, global.ihs.com. The standards are

available for review at "Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, OH, 43215-3425."

(e) "Canadian Standards Association" (CSA). A copy of these documents may be obtained from Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6, Canada, www.csa.ca/default.asp?language=english. These documents are available for review at Ohio EPA, Lazarus Government Center, 50 West Town Street, Columbus, OH, 43215-3425.]

(f) "Foundation for Cross Connection Control and Hydraulic Research, University of Southern California." A copy of "Manual of Cross-connection Control" tenth edition, may be obtained from the "Foundation for Cross Connection Control and Hydraulic Research, University of Southern California, Research Annex 219, 3716 Hope street, Los Angeles, CA 90089-7700," (866) 545-6340, www.usc.edu/dept/fccchr.

(g) "Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers." A copy of "Recommended Standards for Water Works" may be obtained at www.health.state.mn.us/communities/environment/water/tenstates/standards.html.

(2) Referenced materials:

(a) "ASME A112.1.2, Air Gaps in Plumbing Systems," 2012.

(b) "ASME A112.1.3, Air Gap Fittings for Use with Plumbing Fixtures, Appliances, and Appurtenances," 2000, reaffirmed 2015.

(c) "ASSE 1013, Performance Requirements for Reduced Pressure Principle Backflow Prevention Assemblies," 2011.

(d) "ASSE 1015, Performance Requirements for Double Check Backflow Prevention Assemblies," 2011.

(e) "ASSE 1020, Performance Requirements For Pressure Vacuum Breaker Assemblies," 2004.

(f) "ASSE 1047, Performance Requirements For Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies," 2011.

(g) "ASSE 1048, Performance Requirements for Double Check Detector Fire Protection Backflow Prevention Assemblies," 2011.

(h) "ASSE 1056, Performance Requirements for Spill Resistant Vacuum Breaker Assemblies," 2013.

(i) "ASSE 1057, Performance Requirements for Freeze Resistant Sanitary Yard Hydrants with Backflow Protection," 2012.

(j) "ASSE 1060, Performance Requirements For Outdoor Enclosures For Fluid Conveying Components," 2006.

(k) "AWWA C510, Double Check Valve Backflow Prevention Assembly," 2007.

(l) "AWWA C511, Reduced-Pressure Principle Backflow Prevention Assembly," 2007.

(m) "CSA B64 Series" 2011, reaffirmed in 2016, as follows:

(i) "B64.1.2, Pressure vacuum breakers (PVB)."

(ii) "B64.1.3, Spill Resistant Pressure Vacuum Breaker (SRPVB)."

(iii) "B64.4, Reduced pressure principle (RP) backflow preventers."

(iv) "B64.4.1, Reduced pressure principle backflow preventers for fire protection systems (RPF)."

(v) "B64.5, Double check valve (DCVA) backflow preventers."

(vi) "B64.5.1, Double check valve backflow preventers for fire protection systems (DCVAF)."

(n) "Foundation for Cross Connection Control and Hydraulic Research, University of Southern California, "Standards for Backflow Prevention Assemblies contained in Chapter 10 of the Manual of Cross-Connection Control" tenth edition (2009)."

(o) "Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers', Recommended Standards for Water Works" (2018).

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