# **Rule 10. Cross Connections; Control; Operation**

#### 327 IAC 8-10-1 Definitions

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 1. In addition to the definitions in IC 13-11-2 and 327 IAC 1, the following definitions apply throughout this rule: (1) "Air gap" means an unobstructed vertical distance through atmosphere between the:

(A) discharge end of a pipeline supplied from a public water supply; and

(B) overflow rim of the receiving portion of the customer water system.

(2) "Atmospheric vacuum breaker backsiphonage prevention assembly" means an assembly containing:

(A) an air inlet valve;

(B) a check valve seat; and

(C) an air inlet port.

(3) "Backflow" means the flow of water or contaminants into the public water supply distribution system from a source other than the public water supply.

(4) "Booster pump" means a pump installed on a pipeline to increase water pressure or flow.

(5) "Commissioner" means the commissioner of the Indiana department of environmental management, or the commissioner's authorized representative.

(6) "Cross connection" means any physical arrangement, including cross connection control devices not in working order, whereby a public water supply distribution system is directly connected, either continuously or intermittently, with any secondary source of supply, sewer, drain, conduit, pool, piping, storage reservoir, plumbing fixture, or other device that contains, or may contain, and is capable of imparting to the public water supply, contaminants, contaminated water, sewage, or other waste or liquid of unknown or unsafe quality.

(7) "Cross connection control device" means any device or assembly, approved by the commissioner for construction on or installation in water supply piping, that is capable of preventing contaminants from entering the public water supply distribution system.

(8) "Cross connection control device inspector" means a person who has:

(A) successfully completed training in testing and inspection of cross connection control devices from a training provider approved by the commissioner;

(B) received a registration number from the commissioner; and

(C) not been notified by the commissioner that the registration number has been revoked in accordance with section 11(b) of this rule.

(9) "Cross connection hazard" means any customer facility that, because of the nature and extent of activities on the premises or the materials used in connection with the activities or stored on the premises, would present an immediate or potential danger or health hazard to customers of the public water supply should backflow occur.

(10) "Customer" means any person who receives water from a public water supply.

(11) "Customer service line" means the pipeline from the public water supply to the:

(A) first tap, fixture, receptacle, or other point of customer water use; or

(B) secondary source of supply or pipeline branch in a building.

(12) "Customer water system" means all piping, fixtures, and appurtenances, including secondary sources of supply, used by a customer to convey water on his or her premises.

(13) "Double check valve assembly" means a device or assembly composed of two (2) tightly closing shutoff valves surrounding two (2) independently acting check valves, with four (4) test cocks, one (1) upstream of the four (4) valves and one (1) between each of the four (4) check and shutoff valves.

(14) "Downstream" means the direction of flow when only the public water supply is supplying water through the customer water system and backflow is not occurring.

(15) "Pressure vacuum breaker" means a device or assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the downstream side of the check valve for relieving

a vacuum or partial vacuum in a pipeline.

(16) "Public water system" means a public water supply for the provision to the public of water for human consumption through pipes or other constructed conveyances, if the system has at least fifteen (15) service connections or regularly serves at least twenty-five (25) individuals daily at least sixty (60) days out of the year. The term includes any collection, treatment, storage, and distribution facilities under control of the operator of the system, and used primarily in connection with such the system and any collection or pretreatment storage facilities not under the control that are used primarily in connection with the system.

(17) "Reduced pressure principle backflow preventer" means a device composed of two (2) tightly closing shutoff valves surrounding two (2) independently acting pressure reducing check valves that, in turn, surround an automatic pressure differential relief valve, and four (4) test cocks, one (1) upstream of the five (5) valves and one (1) between each of the four (4) check and shutoff valves. The check valves effectively divide the structure into three (3) chambers. Pressure is reduced in each downstream chamber allowing the pressure differential relief valve to vent the center chamber to atmosphere should either or both check valves malfunction.

- (18) "Registration number" means a unique number assigned to a person by the commissioner demonstrating that the person:
  - (A) has fulfilled the education and examination requirements as described in section 11 of this rule; and
  - (B) is recognized by the state as a cross connection control device inspector.

(19) "Secondary source of supply" means any well, spring, cistern, lake, stream, or other water source, intake structure, pumps, piping, treatment units, tanks, and appurtenances used, either continuously or intermittently, to supply water other than from the public water supply to the customer, including tanks used to store water to be used only for firefighting, even though the water contained therein is supplied from the public water supply.

(20) "Spill resistant vacuum breaker" means an assembly containing an independently operating, internally loaded check valve, and an independently operating, loaded air inlet valve, located on the discharge side of the check valve. The assembly is to be equipped with a properly located, resilient seated test cock, a properly located bleed or vent valve, and tightly closing, resilient seated shutoff valves, attached at each end of the assembly.

(21) "Supplier of water" means any person who owns or operates a public water supply.

(22) "Training provider" means an organization that conducts or presents a cross connection control device inspector course approved by the commissioner in conformance with section 12 of this rule.

(23) "Upstream" means the direction of flow opposite to downstream.

(Water Pollution Control Division; 327 IAC 8-10-1; filed Sep 24, 1987, 3:00 p.m.: 11 IR 714; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2515; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; filed Mar 6, 2000, 7:56 a.m.: 23 IR 1629; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; filed Nov 13, 2012, 11:39 a.m.: 20121212-IR-327100414FRA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)

#### 327 IAC 8-10-2 Cross connection prohibited; bypass

Authority:	IC 13-7-7-5; IC 13-7-14-5
Affected:	IC 13-7-7-5; IC 13-7-14-5

Sec. 2. No customer shall cause or allow the construction or maintenance of a cross connection. Piping installed to bypass a cross connection control device constitutes a cross connection unless the bypass piping is also fitted with a similar cross connection control device. (*Water Pollution Control Division; 327 IAC 8-10-2; filed Sep 24, 1987, 3:00 pm: 11 IR 715; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA*)

#### 327 IAC 8-10-3 Booster pump connection

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 3. No customer shall cause or allow the installation or maintenance of a booster pump in a public water system unless a device is installed to control operation of the booster pump when pressure to pump suction drops as follows:

(1) Wherever a fire suppression system has a booster pump installed only for fire suppression, it shall have an audible or visual alarm to provide warning when flow occurs and a control valve shall be installed on the booster pump discharge to automatically throttle the flow as necessary to maintain a minimum of ten (10) pounds per square inch, gauge, pump suction pressure.

(2) For all booster pumps other than those described in subdivision (1), a control device shall be installed to either prevent operation of the booster pump, or else to automatically throttle flow to or from the booster pump as necessary to maintain a minimum of twenty (20) pounds per square inch, gauge, pump suction pressure. The supplier of water may require that the control device be calibrated to maintain a higher than twenty (20) pounds per square inch, gauge, pump suction pressure, where necessary to provide a minimum pressure of twenty (20) pounds per square inch, gauge, throughout the pressure zone of the public water system distribution system to which the customer is connected.

(Water Pollution Control Division; 327 IAC 8-10-3; filed Sep 24, 1987, 3:00 p.m.: 11 IR 715; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2516; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)

#### 327 IAC 8-10-4 Cross connection hazards; notice; exemptions

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 4. (a) Wherever a cross connection hazard as specified by subsection (c) is designated:

(1) an air gap shall be constructed or a reduced pressure principle backflow preventer shall be installed, in accordance with section 7 of this rule, on the customer service line for:

(A) any new facility;

(B) any modified customer service line; or

(C) any existing facility where a higher capacity meter is installed; and

(2) neither an air gap nor a reduced pressure principle backflow preventer shall be required to be incorporated into customer service lines that both are utilized solely for fire suppression and are fitted with an audible alarm that will activate when water is detected to be flowing in the customer service line.

(b) Customers who have a cross connection that has resulted in a contaminant being introduced into a public water system or a customer water system:

(1) shall immediately construct an air gap or install a reduced pressure principle backflow preventer on the customer service line in accordance with section 7 of this rule; or

(2) is exempt from the requirements of subdivision (1) because the affected customer service line is both utilized solely for fire suppression and is fitted with an audible alarm that will activate when water is detected to be flowing in the line.

(c) The following customer facilities are designated cross connection hazards:

(1) Aircraft and missile manufacturing plants.

(2) Automotive plants, including those plants that manufacture motorcycles, automobiles, trucks, recreational vehicles, and construction and agricultural equipment.

(3) Beverage bottling plants, including dairies and breweries.

(4) Canneries, packing houses, and reduction plants.

(5) Car washes.

(6) Chemical, biological, and radiological laboratories, including those in high schools, trade schools, colleges, universities, and research institutions.

(7) Hospitals, clinics, medical buildings, autopsy facilities, morgues, other medical facilities, and mortuaries.

(8) Metal and plastic manufacturing, fabricating, cleaning, plating, and processing facilities.

(9) Plants manufacturing paper and paper products.

(10) Plants manufacturing, refining, compounding, or processing fertilizer, film, herbicides, natural or synthetic rubber, pesticides, petroleum or petroleum products, pharmaceuticals, radiological materials, or any chemical that could be a contaminant to the public water supply.

(11) Commercial facilities that use herbicides, pesticides, fertilizers, or any chemical that could be a contaminant to the

public water supply.

(12) Plants processing, blending, or refining animal, vegetable, or mineral oils.

- (13) Commercial laundries and dye works, excluding coin-operated laundromats.
- (14) Sewage, storm water, and industrial waste treatment plants and pumping stations.
- (15) Waterfront facilities, including piers, docks, marinas, and shipyards.
- (16) Industrial facilities that recycle water.

(17) Restricted or classified facilities (federal government defense or military installations), or other facilities closed to the supplier of water or to the commissioner.

(d) Customer facilities not designated as a cross connection hazard by subsection (c) may be designated a cross connection hazard by written notification from the commissioner to the customer and to the customer's public water system. The notice shall specify the nature of the customer activity that necessitates designation of the customer's facility as a cross connection hazard, and the date by which the customer shall install a cross connection control device in accordance with section 7 of this rule, on the customer service line to the facility so designated.

(e) The commissioner may issue a letter exempting a customer from the requirements of subsection (a) if the customer can show to the satisfaction of the commissioner that the activities taking place at the customer's facility, and the materials used in connection with these activities or stored on the premises, cannot endanger the health of customers of the public water system should backflow occur. An exemption shall remain valid for no more than three (3) years from the date of issuance. If the commissioner finds that the customer facility has become a cross connection hazard, the commissioner will void the exemption and so notify the customer. (*Water Pollution Control Division; 327 IAC 8-10-4; filed Sep 24, 1987, 3:00 p.m.: 11 IR 716; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2516; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)* 

## 327 IAC 8-10-5 Secondary sources of supply; installation of air gaps or other devices

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 5. (a) Customers shall construct an air gap or install a reduced pressure principle backflow preventer or a double check valve assembly in accordance with section 7 of this rule on the customer service line to:

(1) tanks used only to store water from the public water supply for fire suppression that are constructed to maintain the bacteriological quality of the water, in compliance with 327 IAC 8-2; or

(2) secondary sources of supply that:

- (A) use well water as the only private source of supply;
- (B) are constructed to maintain the bacteriological quality of the water, in compliance with 327 IAC 8-2; and

(C) produce, without treatment, water meeting the drinking water quality standards enumerated in 327 IAC 8-2.

(b) Customers shall construct an air gap, or install a double check valve assembly or reduced pressure principle backflow preventer in accordance with section 7 of this rule for a fire sprinkler system, to prevent stagnant water from backflowing into the drinking water supply. For a fire sprinkler system with a chemical additive, customers shall install a reduced pressure principle backflow preventer to prevent the chemical additive backflowing into the drinking water supply.

(c) No secondary source of supply of a type other than those enumerated in subsections (a) and (b) shall be physically connected on the customer service line to or into the facility. (*Water Pollution Control Division; 327 IAC 8-10-5; filed Sep 24, 1987, 3:00 p.m.: 11 IR 716; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2517; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; filed Nov 13, 2012, 11:39 a.m.: 20121212-IR-327100414FRA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)* 

#### 327 IAC 8-10-6 Land irrigation facility buried below ground; installation of air gaps or other devices

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 6. Customers shall construct an air gap, or install a reduced pressure principle backflow preventer or pressure type

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vacuum breaker in accordance with section 7 of this rule, on the water line connecting the public water supply to any land irrigation facility buried below ground that has a sprinkler outlet located less than six (6) inches above grade and is constructed after July 19, 1985. (*Water Pollution Control Division; 327 IAC 8-10-6; filed Sep 24, 1987, 3:00 p.m.: 11 IR 717; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2518; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)* 

#### 327 IAC 8-10-7 Construction and installation requirements for air gaps or other devices

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 22-13-2

Sec. 7. (a) The discharge pipe of an air gap shall terminate a minimum of:

(1) two (2) pipe diameters of the discharge pipe or six (6) inches, whichever is less, above the maximum recorded flood level or above the flood level rim of the receiving vessel, whichever is higher; or

(2) three (3) pipe diameters of the discharge pipe or six (6) inches, whichever is less, above the maximum recorded flood level or above the flood level rim of the receiving vessel, whichever is higher, where:

(A) a side wall, rib, or similar obstruction is spaced closer than three (3) diameters from the piping affecting the air gap; or

(B) two (2) intersecting walls are located closer than four (4) pipe diameters from the piping affecting the air gap.

(b) Only those models of double check valve assemblies, reduced pressure principle backflow preventers, and pressure vacuum breakers that have been listed by the "List of Approved Backflow Prevention Assemblies", by the Foundation for Cross Connection Control and Hydraulic Research of the University of Southern California, February 7, 2012, or those acceptable under the Indiana plumbing code under the fire prevention and building safety commission rules at 675 IAC 16-1.2 [675 IAC 16-1.2 was repealed filed Jun 30, 1999, 2:53 p.m.: 22 IR 3414] and 675 IAC 16-1.3, shall be installed.

(c) Reduced pressure principle backflow preventers shall be installed horizontally or vertically as listed by the Foundation for Cross Connection Control and Hydraulic Research of the University of Southern California, February 7, 2012, with:

(1) no plug or additional piping affixed to the pressure differential relief valve port; and

(2) the pressure differential relief valve port a minimum of twelve (12) inches above floor level.

Additionally, the device must be installed at a location where any leakage from the pressure differential relief valve port will be noticed, and that allows access to the valve for maintenance and testing from floor level, without use of a ladder or other similar temporary apparatus. The device must not be installed below ground grade level and must not be subject to flooding, excessive heat, or freezing.

(d) All double check valve assemblies shall be installed at a location that allows access to the device for maintenance and testing from floor level, without use of a ladder or other similar temporary apparatus, and that will not subject the device to flooding, excessive heat, or freezing.

(e) Pressure vacuum breakers and spill resistant vacuum breakers shall be installed as near as possible to the irrigation facility, at a location that allows access to the device for maintenance and testing from floor or ground level, without use of a ladder or other similar temporary apparatus, and that will not subject the device to flooding, excessive heat, or freezing. Additionally, the device must be installed between two (2) tightly closing shutoff valves, with its center line or datum point a minimum of twelve (12) inches above:

(1) floor level;

(2) the highest downstream piping or shutoff valve; and

(3) the highest downstream overflow rim or discharge point.

(f) Atmospheric vacuum breaker backsiphonage prevention assemblies must be installed at a location that allows access to the device for maintenance and testing from floor or ground level, without use of a ladder or other similar apparatus, and that will not subject the device to flooding, excessive heat, or freezing. Additionally, the device must be installed as follows:

(1) A minimum of six (6) inches clearance above the overflow rim or downstream piping.

(2) Absolutely no means of shutoff on the discharge side of vacuum breaker.

(3) Must not be under continuous pressure for more than twelve (12) hours in any twenty-four (24) hour period.

(Water Pollution Control Division; 327 IAC 8-10-7; filed Sep 24, 1987, 3:00 p.m.: 11 IR 717; filed Mar 31, 1999, 1:50 p.m.: 22

IR 2518; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; filed Nov 13, 2012, 11:39 a.m.: 20121212-IR-327100414FRA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)

#### 327 IAC 8-10-8 Inspection of devices; time limits

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 8. (a) The customer shall install and maintain in working order at all times any cross connection control device or booster pump control device required by this rule.

(b) To ensure that each cross connection control device required by this rule is in working order, the customer shall have each device inspected or tested by a cross connection control device inspector at the time of construction or installation, and at the following intervals, in the following manner:

(1) Air gaps shall be inspected at intervals not exceeding one (1) year to ensure that they continue to meet the requirements of section 7 of this rule.

(2) Reduced pressure principle backflow preventers shall be tested at intervals not exceeding one (1) year to ensure that:(A) both check valves are drip-tight under all pressure differentials; and

(B) the pressure differential relief valve will maintain pressure in the center chamber at least two (2) pounds per square inch below that of the inlet chamber.

(3) Double check valve assemblies shall be tested at intervals not exceeding one (1) year to ensure that both check valves are drip-tight under all pressure differentials.

(4) Pressure vacuum breakers and spill resistant vacuum breakers shall be tested at intervals not exceeding one (1) year to ensure that the air inlet opens fully when water pressure is at or below atmospheric pressure.

(5) Atmospheric vacuum breaker backsiphonage prevention assemblies must be inspected at intervals not exceeding one (1) year to ensure proper operation of the air inlet valve. Removal of canopy may be necessary to determine free movement of air inlet valve.

(c) The customer shall permit access to the customer's premises by the inspector, the customer's public water system, or the commissioner, at reasonable times, and upon presentation of identification, for inspection of the customer water system or testing of cross connection control devices installed in accordance with this rule.

(d) Those customers granted an exemption in accordance with section 4(e) of this rule shall report to the commissioner and to the supplier of water any proposed change in process, plumbing, or materials used or stored at the exempted facility at least fourteen (14) days prior to making the change. Failure to do so shall void the exemption. (*Water Pollution Control Division; 327 IAC 8-10-8; filed Sep 24, 1987, 3:00 p.m.: 11 IR 717; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2518; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; filed Nov 13, 2012, 11:39 a.m.: 20121212-IR-327100414FRA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)* 

#### 327 IAC 8-10-9 Inspectors; reports of inspection or test

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-16-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 9. (a) All cross connection control device inspectors shall do the following:

(1) Be registered with the commissioner in accordance with section 11 of this rule.

(2) Submit reports of all inspections as required by subsection (b).

(3) Annually test and calibrate testing equipment for accuracy.

(4) Install an inspection tag upon completion of testing, calibration, or repair, of any cross connection control device. The inspection tag must have at least the following information:

- (A) The name of the inspector.
- (B) The date of the inspection.

(C) The registration number, model number, serial number, and size of the cross connection control device.

The inspection tag must be waterproof and protected against tampering.

(b) The inspector shall report to the public water system, the customer and, if requested, the commissioner, on a form provided by the commissioner, the results of inspections or tests conducted under section 8(b) of this rule on the following:

(1) Air gaps.

(2) Reduced pressure principle backflow preventers.

(3) Double check valve assemblies.

(4) Pressure vacuum breakers.

Reports shall be submitted to the public water system and to the customer within thirty (30) days of the inspection or test. (*Water Pollution Control Division; 327 IAC 8-10-9; filed Sep 24, 1987, 3:00 p.m.: 11 IR 718; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2519;* errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; filed Nov 13, 2012, 11:39 a.m.: 20121212-IR-327100414FRA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)

## 327 IAC 8-10-10 Noncompliance; retention of reports; access

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 10. (a) Because cross connections may cause disease through transmission of contaminants via the public water system, the commissioner shall order the public water system to remove the customer service meter or otherwise sever the public water system connection to any customer which the commissioner finds or has reason to believe is in violation of any provision of this rule.

(b) The supplier of water shall retain the three (3) most recent reports of tests conducted on air gaps, reduced pressure principle backflow preventers, double check valve assemblies, and pressure vacuum breakers installed in accordance with this rule. The supplier of water shall permit access to these files at reasonable times and upon presentation of identification by the commissioner.

(c) If so requested, the public water system shall submit to the commissioner copies of any report required to be retained by subsection (b). (*Water Pollution Control Division; 327 IAC 8-10-10; filed Sep 24, 1987, 3:00 p.m.: 11 IR 718; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2519; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)* 

## 327 IAC 8-10-11 Registration of inspectors; list of registered inspectors; list of approved devices

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 4-21.5; IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 13-18-11-8

Sec. 11. (a) Upon reviewing and finding the information certified by the training provider acceptable, the commissioner shall issue a registration number to each person whose training provider has certified that the applicant has met the following requirements of education and examination:

(1) The information supplied by the applicant must be reviewed and acceptable to the training provider.

(2) Each applicant must attend forty (40) hours of education and successfully complete a written and oral examination for cross connection device inspectors administered by a training provider.

(b) The commissioner may revoke the registration of any cross connection control inspector, following a hearing under IC 4-21.5, when it is found that the inspector has violated any of the provisions set out in this rule or IC 13-18-11-8.

(c) The commissioner shall maintain a list entitled "Indiana Registered Cross Connection Control Device Inspectors, All Inspectors", which is comprised of cross connection control device inspectors registered in Indiana.

(d) The commissioner shall maintain a list entitled "Indiana Registered Cross Connection Control Device Inspectors, Active Inspectors", which is comprised of cross connection control device inspectors:

(1) that are registered in Indiana in accordance with subsection (a); and

(2) who have requested their inclusion on this list in writing to the commissioner during the previous two (2) years.

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(e) The commissioner shall maintain a list entitled "List of Approved Backflow Prevention Assemblies, February 7, 2012, by the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California", which is comprised of a listing of cross connection control devices from the Foundation for Cross Connection Control and Hydraulic Research of the University of Southern California.

(f) The commissioner shall make the following lists as described in this section available to the public upon request:

(1) Indiana Registered Cross Connection Control Device Inspectors, All Inspectors.

(2) Indiana Registered Cross Connection Control Device Inspectors, Active Inspectors.

(3) List of Approved Backflow Prevention Assemblies, February 7, 2012, Foundation for Cross Connection Control and Hydraulic Research, University of Southern California.

(Water Pollution Control Division; 327 IAC 8-10-11; filed Sep 24, 1987, 3:00 p.m.: 11 IR 718; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2519; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; filed Nov 13, 2012, 11:39 a.m.: 20121212-IR-327100414FRA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)

# 327 IAC 8-10-12 Approval of an organization as a training provider of cross connection control device inspectors; record keeping

Authority: IC 13-13-5-1; IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18 Affected: IC 4-21.5; IC 13-11-2; IC 13-18-11-8

Sec. 12. (a) The commissioner shall approve an organization as a training provider of cross connection control device inspectors if the training provider's proposed course meets the following requirements:

(1) The proposed course instruction and examination have a total duration of at least forty (40) hours.

(2) The proposed course deals with matters directly related to the cross connection control devices that include, but are not limited to, the following:

(A) Cross connection identification, degree of hazard, prevention, control devices, and practices.

(B) Backflow prevention assembly field test procedures and gage accuracy verification, Section 9 from the "Manual of Cross Connection Control", Tenth Edition, published October 2009, by the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California.

(C) Cross connection control device inspection, repair, and maintenance.

(D) Content, intent, and related policy of this rule.

(E) Responsibilities of the customer, public water system, and cross connection control device inspector.

(3) Each instructor of the proposed course must be recognized by Indiana as a cross connection control device inspector and qualified by academic work or practical experience directly related to cross connection control device inspection to teach the assigned subject.

(4) Includes both a written and oral examinations proctored by different instructors and meets the following requirements:

(A) A written examination that tests the student's comprehension of the material discussed in subdivision (2).

(B) An oral examination that tests the student's ability and competency to perform inspections, test procedures specified under subdivision (2)(B), and troubleshooting on cross connection control devices.

(5) The organization submits a written request to the commissioner for approval as a training provider of cross connection control device inspectors. The request shall contain the following:

(A) The:

(i) name, address, and telephone number of the organization;

(ii) name of the course;

(iii) specific topics on which there are to be presentations;

(iv) time devoted to each topic; and

(v) dates and locations where the course will be offered.

(B) All instructors':

(i) names;

(ii) registration numbers;

(iii) educational backgrounds;

(iv) professional experiences; and

(v) current professional affiliations.

(C) Information to demonstrate fulfillment of the requirements of subdivision (2) to the satisfaction of the commissioner.

(D) A written class outline.

(b) The commissioner's approval of an organization as a training provider of cross connection control device inspectors shall be valid for a duration of five (5) years.

(c) All training providers must maintain records on the following:

(1) The dates of all courses.

(2) The names of all individuals attending the course.

(3) The duration of the course.

(4) All instructors' names.

(5) The program content.

These records shall be maintained for five (5) years.

(d) Training providers must submit to the commissioner a record of individuals attending courses within thirty (30) days of the conclusion of the course. These records shall be maintained for a five (5) year period. The records shall contain the following:

(1) The name of the course.

(2) The name, address, and current phone number of the individual attending the course.

(3) The date of the course.

(4) Performance on the written and oral examinations required by subsection (a)(4).

(e) The commissioner may revoke the approval of a training provider, following a hearing under IC 4-21.5, when it is found that the training provider has violated any of the provisions set out in the approval of the training provider's cross connection control device inspectors course, in this rule, or IC 13-18-11-8. (*Water Pollution Control Division; 327 IAC 8-10-12; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2520; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; filed Nov 13, 2012, 11:39 a.m.: 20121212-IR-327100414FRA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA)* 

## **327 IAC 8-10-13 Incorporation by reference**

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1 Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 13. (a) The following materials, including titles and names and addresses of where they may be located for inspection and copying, are incorporated by reference into this rule:

(1) "List of Approved Backflow Prevention Assemblies, February 7, 2012, by the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California", Foundation for Cross Connection Control and Hydraulic Research, University of Southern California, Kaprielian Hall 200, Los Angeles, California 90089-2531 or from the Indiana Department of Environmental Management, Office of Water Quality, Indiana Government Center North, 100 North Senate Avenue, Room N1255, Indianapolis, Indiana 46204.

(2) Backflow Prevention Assembly Field Test Procedures and Gage Accuracy Verification, Section 9 from the "Manual of Cross Connection Control", Tenth Edition, 1993, published October 2009, by the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California, Kaprielian Hall 200, Los Angeles, California 90089-2531 or from the Indiana Department of Environmental Management, Office of Water Quality, Indiana Government Center North, 100 North Senate Avenue, Room N1255, Indianapolis, Indiana 46204.

(b) The technical standards presented in subsection (a) are continuously revised on a twenty-four (24) month cycle. The commissioner shall commence rulemaking efforts to update the documents incorporated by reference in this section. (*Water Pollution Control Division; 327 IAC 8-10-13; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2521; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; errata filed Feb 6, 2006, 11:15 a.m.: 29 IR 1938; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; filed Nov 13, 2012, 11:39 a.m.: 20121212-IR-327100414FRA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-*