

www.ruralmembershipwater.com Mailing: PO BOX 239 / 301 S. Ferguson St Henryville, IN 47126 Office: 812-294-1481 / Fax: 812-294-1743 PWSID # 5210009

## Cross Connection and Backflow Prevention Program

#### It is all of our responsibility to protect our drinking water!

- What is a cross connection? A cross connection is: any physical arrangement whereby a public water supply is connected, directly or indirectly, with any secondary water supply system, sewer drain, conduit, pool, storage reservoir, plumbing fixture, or other device which contains or may contain any water, contaminated liquid, or other waste of unknown or unsafe quality that could impart a contaminant to the drinking water as a result of backflow or backsiphonage.
- <u>How is cross connections controlled?</u> The installation of a backflow prevention device, otherwise known as a cross connection control device, is required under any circumstance where contamination may occur.
- What is a backflow? A backflow is the flow of any foreign liquid, gas, or substance into the distributing pipe lines of a potable supply of water. A backflow may occur under two conditions: pressure greater than atmospheric (see back pressure), and pressure that is subatmospheric (see backsiphonage).
- Back pressure Back pressure is any backflow caused by a pump, elevated tank, boiler or other means that could create pressure within the system greater than the supply pressure. This happens when the pressure of the contaminant source exceeds the positive pressure in the water distribution main. An example would be when a drinking water supply main has a connection to a hot water boiler system that is not protected by an approved and functioning backflow preventer. If pressure in the boiler system increases to where it exceeds the pressure in the water distribution system, backflow from the boiler to the drinking water supply system may occur.
- **Backsiphonage** a form of backflow due to a negative or subatmospheric pressure within a water system. This is caused by a negative pressure (vacuum or partial vacuum) in the water distribution system. This situation is similar in effect to the sipping of water through a straw. Negative pressure in the drinking water distribution system can happen because of a water main break or when a hydrant is used for fire fighting.

#### • Responsibility for Cross-Connection Control

#### Responsibility of State -

- Indiana Department of Environmental Management (IDEM) is responsible for administering the state regulations for cross connection control and water quality standards, 327 IAC 8-10.
- Indiana State Department of Health is responsible for water quality standards, 170 IAC 6-1-20.
- Indiana Department of Homeland Security is responsible for Indiana Plumbing Code, 675 IAC 16-1.3-64 through 85.

#### <u>Responsibility of Rural Membership Water Corporation</u> –

- Responsible for providing customers with safe clean drinking water that meets all State and Federal drinking water standards and laws.
- Exercise reasonable vigilance to insure that the customer has taken the proper steps to protect the public water system. When it is determined that a backflow prevention assembly is required, the water supplier shall require the customer to install an approved backflow preventer device with respect to the degree of hazard.
- Responsible for identifying and implementing a cross connection and backflow prevention program.
- Responsible for keeping test records for cross connection and backflow prevention devices.

#### Responsibility of Customers of Rural Membership Water Corporation –

- Using water in a manner that does not jeopardize the water quality in the public water system.
- The customer will be responsible for installation, testing immediately upon installation, proper repair and maintenance of the assembly, testing the device yearly and keeping adequate records of each test.
- Filing the test results to Rural Membership Water Corp.
- Failure to comply could result in violation fees and possible termination of water service.

#### • What is the State required frequency of testing the Backflow Device?

- o Reduced pressure principle devices must be tested at 6 month intervals.
- o Pressure Type Vacuum Breakers must be tested 1 year intervals.
- o Double Check Valve Assemblies must be tested at 1 year intervals.
- o Double Check Detector Assemblies must be tested at 1 year intervals.

#### • Who is eligible to test Backflow Devices?

- o Only State approved and registered testers can test backflow prevention devices.
- A list of Indiana Certified installers and testers can be found at http://extranet.in.gov/WebLookup/Search.aspx

#### • Where should I submit my Backflow Device Test results?

o Test results must be submitted within 30 days of testing

Mail-RMWC, PO BOX 239, Henryville, IN 47126

Indiana Department of Environmental Management's Cross Connection Control and Backflow Prevention Manual will also be used on determining all information pertaining to *Rural Membership Water Corporation's* Cross Connection Program.

# LIST OF LOCATIONS REQUIRING BACKFLOW PREVENTION AND DEVICES 327 Indiana Administrative Code 8-10 Cross Connection Control (327 IAC 8-10) Facilities That Require a Backflow Prevention Device

If the activities on your premises are listed below then you must have or install a state approved cross connection control device on each water service line and promptly submit test results to Rural Membership Water Corporation. The state designates the following list of facilities as cross connection hazards; a state approved reduced pressure principle backflow preventer shall be installed on the customer service line serving these facilities, unless otherwise specified.

### Reduced Pressure Principle Assembly or Pressure Vacuum Breaker Only

All customers who have land irrigation systems, including residential. Either a pressure type vacuum breaker or a reduced pressure principle backflow preventer can be used for cross connection control.

# **Double Check Detector Assembly or Reduced Pressure Detector Assembly Only** All customers fire service lines.

#### **Reduced Pressure Principle Assembly Only**

- 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.

#### **Prohibited Connections**

No secondary source of water supply shall be physically connected on the customer service line to or into the facility; i.e. a well water supply.