#### EARNHART HILL REGIONAL WATER & SEWER DISTRICT

#### BACKFLOW PREVENTION GUIDELINES

The Ohio EPA requires all public water supplies to have a backflow prevention program. OEPA considers a well, cistern, or pond as an auxiliary water supply and as such, it is considered a potential contamination source.

If plumbing from an auxiliary source enters the premises served by a public water supply, the owner must do one of the following:

## Remove the Auxiliary Source Plumbing from the Premises

The plumbing from the auxiliary source must be completely removed from inside the premises. The auxiliary source plumbing, including the pressure tank, must be removed from inside the premises. If the owner wants to maintain an outside spigot for watering purposes, a yard hydrant can be installed outside the premises and a simple on/off switch installed to operate the auxiliary pump. EHRWSD personnel must inspect the plumbing annually and a fee of \$3.00 per month will be charged to your account to cover the cost of this inspection.

The Owner must also sign an agreement, which specifies the penalties for creating a connection between the public water system and the auxiliary system.

## **Abandon the Auxiliary Source**

There are no annual inspection fees with this option.

#### Wells

Remove the pump and seal the well with cement or bentonite grout. Costs associated with abandoning are estimated at \$200. Abandoning your well requires a permit from the County Health Department.

## Cisterns

Remove the pump and all control equipment from inside the premises. Fill the cistern with #57 gravel.

#### **Ponds**

Remove the pump and all control equipment from inside the premises.

# Install a Reduced Pressure Principle Backflow Prevention (RPZ) Device

The cost of a RPZ device will range from \$100 to \$150 plus installation. Anyone can install a RPZ device but a certified technician must test and inspect the device within 30 days from the date of installation. A certified technician must also test the device annually, at an estimated cost of \$50 to \$75. The device must be rebuilt or replaced when it fails the testing. Even though a RPZ device has been installed, there cannot be a cross connection between our water lines and an auxiliary water source.

#### **Installation Requirements**

## RPZ devices must be:

- 1. Installed so as to be readily accessible for inspection, testing and maintenance.
- 2. Installed immediately after the shut off valve and before any branches in your service line.

- 3. Installed with minimum of 12" of space on all sides to allow for inspection, testing, maintenance and disassembly.
- 4. Protected from freezing by installation within a heated building.
- 5. Mounted in a horizontal position except for certain models that have been specifically designed to be installed in a vertical position.
- 6. Installed above ground level or floor level whichever is higher.
- 7. Installed so that there is a visible free discharge from the relief port with no extension of piping.

EHRWSD has RPZ devices available for our customers who choose this option. A list of all OEPA approved devices and certified technicians can be obtained at our office or from our web site at <a href="https://www.ehrwsd.org">www.ehrwsd.org</a>.

# In Ground Lawn Sprinkler Systems

The OEPA also requires in ground lawn sprinkling systems to have an approved backflow device. Since fertilizers, pesticides, animal droppings, and other yard debris can contaminate water in irrigation systems, it is a considered a source of contamination. If your irrigation system is connected to our system you must complete one of the following:

- 1. Install a RPZ device after the shut-off valve and before any branches in the service line. This option protects the public water supply but not the homeowner.
- 2. Install a Pressure Vacuum Breaker at lease 12 inches above all downstream piping and the highest flood level rim, outlet, or highest point of water use in a vertical position with adequate space to facilitate maintenance and testing. This option protects both the public water supply and the homeowner.

If your irrigation system is connected to an auxiliary supply you must install a RPZ device on our service line, after the shut-off valve and before any branches in the service line.

Both options require the backflow device to be tested at installation and annually thereafter by a certified backflow technician.

## **General Information**

At our current rates, a customer would need to save 24,000 gallons of water per year (by using an auxiliary supply) in order to break even on the cost of installing and maintaining a RPZ device over a five-year period.

The Ohio Administrative Rules 3745-95-01 thru 3745-95-08 govern backflow prevention. These rules can be viewed at <a href="https://www.epa.state.oh.us/ddagw/oac.html">www.epa.state.oh.us/ddagw/oac.html</a>.

The authorization for the administrative rules is provided in Ohio Revised Code Section 6109.13.

If you have additional questions, please call Stephen Ross at 740-474-3114 or email at <a href="mailto:sross@ehrwsd.org">sross@ehrwsd.org</a>.