NOTICE TO RESIDENTIAL PROPERTY OWNERS REGARDING EXISTING BACKFLOW PREVENTION ASSEMBLIES

As a result of revisions to the ONWASA Utility Ordinance that were adopted in March 2018, some residential properties with an existing backflow prevention assembly may be eligible to remove it. This is due to changes in the method by which backflow hazards are determined on residential properties.

To determine if a specific property is eligible, a site survey must first be conducted by ONWASA personnel to verify there are no on-site hazards present. As defined in the revised Utility Ordinance, hazards requiring that a backflow prevention assembly be installed and maintained include the following:

- Residential waterfront facilities, defined as any structure which has an exterior potable water fixture located within fifty (50) feet of the high tide mark and/or water's edge of any permanent source of non-potable water (i.e. ocean, sound, canal, river, stream, or pond).

- Residential properties with a swimming pool directly plumbed to the public potable water system.

- Residential properties with an irrigation system directly plumbed to the public potable water system.

Upon completion of the site survey, you will be notified in writing of the results and whether or not you may remove the existing backflow prevention assembly. To schedule a no-cost site survey, please contact one of the ONWASA Backflow Cross-Connection Inspectors at (910) 937-7558 or (910) 937-7530.

If you choose to have a backflow prevention assembly removed, a North Carolina licensed plumber should perform this work and verify the existence of (or install) an in-line dual check valve on your service line, as required under Section 608 of the NC Plumbing Code. After the assembly has been removed and the dual check valve located or installed, a no-cost final inspection must be scheduled with ONWASA by calling the phone number listed above. Both the area where the assembly was removed and the dual check valve must be visible (i.e. not buried) for this inspection.

Please be advised that the authorization to remove the existing backflow assembly is based upon current site conditions and regulations. Plumbing modifications, the addition of identified hazards at this location or subsequent rule changes may require installation of a new assembly in the future.

ONWASA encourages all of its customers to practice backflow prevention; the back of this notice provides information on ways you can help protect the potable water supply from unintentional contamination, and you can review additional information and the revised Utility Ordinance Article VI – Water System Cross-Connection Control at www.onwasa.com.

What is a Cross-Connection?

The North Carolina Administrative Code (NCAC)Title 15A, Subchapter 18C Section.0102 defines “cross-connection” as (a) any physical connection between a potable water supply system and any other piping system, sewer fixture, container, or device, whereby water or other liquids, mixtures, or substances may flow into or enter the potable water supply system; (b) any potable water supply outlet which is submerged or is designed or intended to be submerged in non-potable water or in any source of contamination or; (c) an air gap, providing a space between the potable water pipe outlet and the flood level rim of a receiving vessel of less than twice the diameter of the potable water pipe.”

Example: A hose submerged in a swimming pool, bucket or other container; the connection of a pesticide or herbicide applicator to a garden hose; an underground irrigation system, etc.

What is Backflow?

The American Backflow Prevention Association defines backflow as “the undesirable reversal of flow of non-potable water or other substances through a cross-connection and into the piping of a public water system or consumer’s potable water system. There are two types of backflow: backpressure backflow and backsiphonage.”

Backpressure Backflow – Caused by a downstream pressure that is greater than the supply pressure in a public water system. In simple terms, water is pushed from the consumer’s water system into the public water system.

Backsiphonage – Caused by negative pressure (i.e. a vacuum or partial vacuum) in a public water system that draws water from the consumer’s potable water system. The effect is similar to drinking water through a straw.

Why do we need to prevent Backflow?

The backflow of non-potable water into the public water supply system can contaminate potable drinking water. This can have a wide variety of effects, from creating water quality concerns (such as taste, odor or cloudiness) to creating a serious hazard to the public health through the introduction of toxic, chemical, biological, or radiological substances into the water.

How can we prevent Backflow?

DO NOT

- Submerge hoses in buckets, pools, tanks, sinks or other liquid-containing vessels.
- Don’t leave the ends of hoses lying in or near puddles where they could become submerged.
- Use spray attachments on hoses or piping containing soaps, herbicides, pesticides, etc. without an approved backflow prevention assembly on the water service
- Connect waste pipes from water filter or treatment systems to septic or sewer lines
- Use a hose to unplug toilets, sewers or septic lines
- Connect private water wells to pipes served by the public water supply
- Run water supply lines to docks or piers without an approved backflow prevention assembly on the water service
- Make direct cross-connections (plumb) potable water lines to swimming pools, Jacuzzis or hot tubs without an approved backflow prevention assembly on the water service

DO

- Keep an air gap between the end of the hose and any pool, bucket, tank or vessel being filled
- Install hose bib-type vacuum breakers on hose spigots
- Install approved backflow prevention assemblies on underground irrigation systems
- Report to ONWASA if you see anyone except the fire department connected to a hydrant without a visible meter and backflow assembly
- Share this information with others
- Call ONWASA with any questions or concerns with regard to cross-connections and backflow prevention

Additional resources available: United States Environmental Protection Agency Cross-Connection Control Manual, EPA Publication Number 816R03002