

TAPTALK H₂O!

Division of Public Health • Summer 2014

Tapping Into Good Health

DEWARN Success Stories

by Rob Penman

The Delaware Water/Wastewater Agency Response Network (DEWARN) is only a year old, and yet it has already positively impacted several public water system members. A few of its success stories:

- A member utility was in need of a specialty item that would restore water service to one of its major customers. An e-mail blast went out to all of the DEWARN members and one member happened to have the item sitting on their inventory shelf. The utility in need retrieved the item and had their customer back in service by the end of the day. Arrangements were made afterwards to either pay for or to replace the item.
- A member utility had a main break that put a number of customers out of service for an extended period of time. They needed to borrow a water buffalo to supply their customers with water until the main could be repaired and put back in service. Again an e-mail blast went out, and a neighboring utility came to the rescue with the needed equipment.

Lead and Copper Rule: Child Care Centers - Why Testing for Lead is so Important

by Katie Huegel

Child care providers: It is your responsibility to know that there is no safe lead consumption level for children. Our office strives to enforce that there is as little lead in your water supply as possible.

Lead can be leached into drinking water through the corrosion of plumbing materials, such as fixtures and faucets. If your child care facility was built prior to 1986, there is a possibility that copper piping with lead solder may exist. Lead that leaches into your drinking water can cause a wide array of adverse health effects in children under your care. Even a small amount of lead is especially harmful to babies and children under the age of six.

Lead exposure health effects include, but are not limited to: delays in physical and mental development, attention span deficits, and learning disabilities. Adults who are exposed to lead in their drinking water may have an increase in blood pressure, and could suffer from kidney complications over time.

To ensure a safe environment, and safe drinking water for you and the children in your care, please be sure to strictly follow sampling instructions. Remember to always sample on time!

For more information about lead in drinking water, please visit <http://water.epa.gov/drink/info/lead/> or contact Katie Huegel at Katie.Huegel@state.de.us or 302-741-8598.

- A water system that had just signed the DEWARN agreement one week earlier called in a panic. Their entire treatment facility was flooded and had to be shut down. DEWARN advised them on what steps to take to get their system back in operation. DEWARN also assisted them in locating a water buffalo to supply their customers with water while the repairs were made.
- With assistance from EPA, the Delaware Rural Water Association, and the Chesapeake Section of the American Water Works Association, DEWARN held a one-day seminar and tabletop exercise. Over 45 people attended. This very successful workshop helped numerous utilities look at how they handle emergency conditions, and how DEWARN can assist in emergency situations.

To date, there are 16 public water system members of DEWARN, and we are still growing. Is your utility a member? If you're interested, contact Rob Penman at rpenman@artesianwater.com or give him a call at (302) 453-6946.



**Know what's below.
Call before you dig.**

IT'S THE LAW!

Delaware Law requires anyone digging to give notice at least two full business days (not counting weekends or holidays), prior to the day they plan to start work. This law includes professional excavators as well as property and homeowner's contractors.

Call Miss Utility of Delmarva at 811 or 1-800-282-8555, or visit www.missutilitydelmarva.com any time of the day or night and follow these steps:

1. **WAIT** for the site to be marked with paint, flags or stakes by the utility line owners.
2. **RESPECT THE MARKS.**
3. **DIG WITH CARE.** This means hand digging within two feet on either side of any marked facility.



DELAWARE HEALTH AND SOCIAL SERVICES

Division of Public Health

Office of Drinking Water

The Administrator's Corner



By Ed Hallock

Program Administrator, Office of Drinking Water

My hope from the last newsletter has been granted. People are taking vacations, and water systems are seeing demand rise as customers water their lawns and gardens. It was a wetter than normal spring, but only time will tell what the end of summer's weather holds in store for us.

I want to welcome Kevin Cottman to his new position within the Office of Drinking Water. Kevin accepted the position of Public Water System Supervision Program Manager, replacing Anita Beckel. We are now in the process of back-filling his previous Capacity Development Program Manager position. I hope to have that position filled by mid-August.

I recently met with Rick Duncan, Executive Director of the Delaware Rural Water Association (DRWA), to discuss training opportunities for water operators. My office will be working closely with Rick's staff to develop continuing education classes around new regulations and our regulatory requirements. If you have ideas for classes you would like to see, please let either Rick or me know, so that we may meet your needs. It has been my experience that if I can make your job easier, that makes my job easier! Don't be shy; let us know what you need.

Lastly, I want to give everyone a head's up about the Division's intention to move forward with cross connection control regulations. I am working closely with our Office of Engineering and our Plumbing Permit and Inspection Program to draft regulations for review by the Attorney's General Office. Once that is completed, I will work with the DRWA to hold workshops to gather input from all interested stakeholders. I expect those workshops to be later this year, and for a set of proposed regulations to be published in early 2015.

Reminders/Notes

- Water system owners are required to notify the Office of Drinking Water (ODW) when making any changes to a water system. ODW must also be notified of any chemical overfeeds or unusual events.
- Water system administrators are advised to ask for water operator credentials when contracting a new operator. Every water operator in Delaware must have a Delaware Water Operator license from Delaware Health and Social Services.
- Under the Revised Total Coliform Rule, all public water systems will be required to submit a new Sample Siting Plan. ODW will hold Sample Siting Plan trainings during the next several months.

Did You Know? Facts About Drinking Water: Alkalinity and Hardness

by Keith Harrison

- Alkalinity is the measure of the water's capacity to buffer or neutralize acidity.
- Alkalinity is not a pollutant; it is a natural characteristic of the water.
- Very low and very high values of alkalinity can cause nuisance problems. Water with an alkalinity value of less than 75 ppm may be corrosive which can lead to potentially harmful metals dissolving from the plumbing into the drinking water. Water with an alkalinity value over 500 ppm is associated with hard water and can lead to scale build up in the plumbing system. Alkalinity values of 100-200 ppm are ideal in drinking water. Note that alkalinity values are different than hardness values in the chart below.
- Hardness refers to the water's mineral content, primarily calcium and magnesium.
- As the mineral content in water increases, the hardness level increases.
- Hardness does not pose a health risk. In fact, calcium and magnesium are nutrients needed by our bodies.
- Hard water can be a nuisance. Hard water causes problems such as build-up of scale on pipes and fixtures, lowered efficiency of hot water heaters, and difficulty of getting soap and detergent to foam.
- The U. S. Geological Survey's water hardness scale:

Grains per Gallon	Parts per Million (ppm)	Classification
Less than 1.0	Less than 17	Soft
1.0 – 3.5	17 - 60	Slightly Hard
3.5 – 7.0	60 – 120	Moderately Hard
7.0 – 10.5	120 – 180	Hard
Over 10.5	Over 180	Very Hard

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Consumer Confidence Report: CCR Templates

by Keith Harrison

Creating a Consumer Confidence Report (CCR) can be quite challenging. There are a number of factors to consider, such as presentation of drinking water data, required Environmental Protection Agency (EPA) language, formatting text and tables, compliance with drinking water rules and regulations, and more.

The EPA provides all the necessary information for creating a CCR in their booklet publication, *Preparing Your Drinking Water Consumer Confidence Report, Guidance for Water Suppliers*¹. This EPA publication is included on the CD-ROM distributed to all community water systems each year by the Office of Drinking Water (ODW). This publication includes all the CCR requirements with explanations; and there are even two sample CCRs in the booklet. Although this EPA publication is thorough and complete, it can be intimidating for the first-time creator of a CCR.

ODW offers CCR training at least once per year, usually in early spring. ODW is currently investigating the possibility of creating a CCR template and making it available to all of Delaware's community water systems. ODW will also offer training on the use of the template. Look for more information on this topic in the next issue of TapTalk in the fall of 2014.

¹*Preparing Your Drinking Water Consumer Confidence Report, Guidance for Water Suppliers, EPA, April 2010.*

E. coli – Why Me?

by Keith Harrison

“Why did this happen to my water system?”

This is the question we sometimes hear in the Office of Drinking Water (ODW) when E. coli bacteria are detected in a community drinking water system. Many times we do not have an answer, but sometimes we can point to a cause.

Recently a water system experienced an early morning pipe-fitting failure in the pump house. The pump house was flooded up to and including the failed fitting, which was only about two inches above the floor. By chance, ODW arrived later that morning to pull a monthly routine compliance bacteria sample. Laboratory results showed that the sample contained E. coli.

E. coli are fecal bacteria that live in the human environment, not the groundwater environment that the water system uses for drinking water. So E. coli in this drinking water system indicated that some of the above-ground human environment was getting into the below-ground drinking water. In this instance, we may presume that the cracked fitting was siphoning some of the contaminated floodwater off the floor into the distribution system.

Fortunately, the water system detected the leak early and was able to replace the faulty fitting. However, the water system personnel did not contact ODW to report this incident as they are required to do under Delaware regulations. It is important to report all unusual incidents. To protect public health, ODW issued a precautionary boil water advisory to this system because this particular system does not use disinfection. If the system was chlorinated, ODW would have asked the operator to maintain a free chlorine residual throughout the system.

There are many species of E. coli, and most of them are harmless. However, many E. coli species may cause illness in the form of mild to severe diarrhea. Help protect public health by notifying ODW during any unusual event.

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Approved Sampler/Tester (AST) Training

An approved sampler/tester is certified by Delaware Health and Social Services for conducting routine water sampling and water quality analyses. The approved sampler/tester works under the supervision of a fully licensed water operator. During training, the participant will learn about waterborne bacteria and the Total Coliform Rule that regulates bacteria in drinking water. They will also learn about other chemicals and compounds that may enter drinking water. The focus of the training is to help participants understand drinking water regulations in relation to public health.

Training Locations

- Newark: Oxford Building
256 Chapman Road (University Plaza), Newark, DE 19702
- Dover: Office of Drinking Water
43 South DuPont Hwy (Edgehill Shopping Center) Dover, DE 19901
- Milford: Delaware Rural Water
210 Vickers Drive, Milford, DE 19963

Upcoming Approved Sampler/Tester Trainings (AST)

Please note that registration is required for all trainings; call 302-741-8630.

AST Basic

The Basic course is a three-hour training for those new to the AST program.

AST Basic, 9:00 a.m. - noon

August 15, 2014, Newark
September 11, 2014, Dover
October 9, 2014, Dover
October 10, 2014, Newark
October 30, 2014, Milford
November 13, 2014, Dover

AST Refresher

The Refresher course is a one-hour course designed to reinforce your knowledge of bacteria, sampling and testing, public health, and chlorine residuals. **Bring your testing kit** if you have one.

AST Refresher, 9:00 a.m. – noon

August 15, 2014, Newark
August 28, 2014, Dover
September 25, 2014, Dover
October 10, 2014, 8:00 a.m., Newark
October 23, 2014, Dover
October 30, 2014, 8:00 a.m., Milford

Other Training Opportunities

- Sampling Plan Training,
November 6, 2014, Dover

Office of Drinking Water
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43 S. DuPont Hwy
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35-05-505