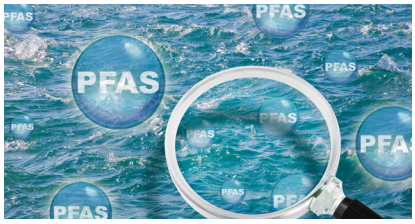
Utilities Section
Newsletter
League of Nebraska Municipalities
April 2024

EPA finalizes PFA rule for water systems

By Lash Chaffin,
Utilities Section Director

Earlier this month, the U.S. Environmental Protection Agency finalized rules for per- and polyflurinated substances (PFAS) in drinking water. PFAS are a series of man-made chemicals that can persist in the environment for a very long time. PFAS have been used in consumer goods and industrial processes for decades. Consumer products such as waterproof clothing, nonstick cookware, and stain resistant furniture typically are made with PFA compounds.

What does this mean for our municipal drinking water system? Some states such as Massachusetts, Michigan, New York, New Jersey, and others already have limits



in place so they will be on an expedited time frame for water systems to treat to a level to meet limits on PFAS.

However in Nebraska, the following timeline will be in effect:

- Within three years, municipal water systems will be required to conduct initial monitoring for PFAS or obtain approval to use previously conducted monitoring results such as the results that that Nebraska HHS is currently cooperatively conducting with municipal water systems.
- At three years (2027), municipal water systems must start an ongoing compliance monitoring program of quarterly or twice annually depending on the water system size.
- At three years (2027), municipal water systems must include results of their monitoring for the regulated PFAS in their Consumer Confidence Reports.
- At three years (2027), municipal water systems must start issuing public notification for any monitoring and testing procedure violations.
- At five years (2029), municipal water systems must comply with all regulated PFAS Maximum Contaminant Levels (MCLs).

Continued on page 2

Collecting quality water samples

By Jackson Sash, Utilities Field Rep./Training Coordinator

Coliform bacteria are a group of bacteria that are commonly found in the environment, including in soil, vegetation, and the intestines of warm-blooded animals, including humans. They are often used as indicators of water quality because their presence can suggest potential contamination.

Within the context of the drinking water system, coliform bacteria are monitored to assess the safety of the water supply. While most coliform bacteria themselves are not harmful, their presence can indicate the possible presence of other, more harmful pathogens, such as E. coli, which is a specific type of coliform bacteria found in the intestines of humans and other warm-blooded animals.

In drinking water systems, the presence of coliform bacteria is typically monitored through

routine water testing. If coliform bacteria are detected in drinking water samples, it can indicate that there may be issues with the water treatment process, distribution system, or potential contamination

Continued on page 2

1335 L Street, Lincoln, NE 68508
(402) 476-2829
Fax (402) 476-7052

UTILITIES SECTION

Lash Chaffin
Utilities Section Director
Jackson Sash
Utilities Field Representative

EPA finalizes PFA Rule for water systems

Continued from page 1

- At five years (2029), municipal water systems must provide public notification for violations of the PFAS MCLs.

What are the MCLs for the various PFAS**?**

Individual PFAS have MCLs and MCL goals and there also is a hazard index when there is a mixture of two or more PFAS present that can trigger non-compliance. PPT is parts per trillion.

PFOA: MCL 4.0 ppt; MCL Goal 0 ppt

PFOS: MCL 4.0 ppt; MCL Goal 0 ppt

PFHxS: MCL 10 ppt; MCL Goal 10 ppt

HFPO-DA (GenX chemicals): MCL 10 ppt; MCL Goal 10 ppt

PFNA: MCL 10 ppt; MCL Goal 10 ppt

Mixture of two or more PFHxS, PFNA, HFPO-DA, or PFBS: A hazard index calculation is initiated.

What treatment options are available?

The final rule does not state which treatment techniques must be used if treatment is necessary, so municipal water systems will need to work closely with their municipal engineer. The EPA has identified granular activated carbon, anion exchange, reverse osmosis, and nanofiltration as best available technologies. Anion exchange was specifically identified as best available technology for small systems.

Municipal water systems should contact their HHS field representative to see if they might be eligible for free PFAS testing.

Watch the *Utilities Section Newsletter* for further details as this issue begins to develop.

Collecting quality water samples

Continued from page 1

from external sources.

Collecting a Quality Sample

Hand hygiene – Hands should be washed both before and after each sample being taken. A new pair of latex gloves or powderless nitrile gloves should be worn for each sample.

Faucet selection – It is important to select sample sites that are in good working order and are in clean environments. For example, avoid collecting samples from swivel faucets, faucets leaking from handles, faucets with attachments, faucets used for food preparation, faucets with threaded nozzles or taps, and fire hydrants or other units that drain directly into the ground. If you are collecting a sample from a sink, ensure that you have removed the aerator from the faucet as it may harbor contaminates.

Avoiding unsterile contact – Ensure that your fingers, clothing, or other unsterile objects do not touch the interior or mouth of the container, container cap, faucet, or nozzle. Environmental factors can also contaminate the sample container. If outdoors, avoid windy

Continued on page 3

Collecting quality water samples

Continued from page 2
days to avoid the possibility of dust landing in sample container. If indoors, ventilation systems, fans, air conditioners, or central heating systems could also blow dust into sample containers. Reduce air flow to a minimum to reduce the chance of contamination.

Sterilizing nozzle or tap – There are several methods to sterilize the nozzle or tap from your sampling location, the flaming method, using a chlorine bleach solution, or using a commercial disinfectant. The flaming method uses a blow torch to heat the faucet. You want to heat the faucet, do not burn it. Run the flame back and forth over the outlet for approximately 30 seconds. Using a chlorine bleach method prepare a solution of 10 percent chlorine bleach using regular unscented bleach. This can either be used to immerse the outlet or can be sprayed on the outlet. Using commercial disinfectants follow the directions of the disinfectant being used.

Flushing – Make sure that you flush the line before collecting the water sample but after sterilization to collect a sample from the water main. For home taps flush for approximately 5-15 minutes and 3-5 minutes for sampling stations.

Preparing to take sample – In order to prepare to take the sample, first reduce the water flow to a ¼-inch stream with no air gaps. Avoid touching the nozzle or tap of the faucet being used for sample collection. Do not rinse the collection bottle as they are sterile from the factory.

Taking the sample – Carefully remove bottle cap, leaving it facing downward, but do not set cap down. Turn your head to the side and avoid breathing in the direction of the sample. Fill bottle as instructed by your lab and hold container at an angle to reduce aeration.

Storage and shipping – Replace the cap immediately after the sample has been collected. Place samples in a cooler with ice for transporting and store in a refrigerator if necessary. Send the samples to the lab within 24-48 hours or as lab directs otherwise.

SAFETY/HEALTH CORNER

Navigating the Water: Ensuring safety around floods

By Jackson Sash, Utilities Field Rep./Training Coordinator

As the seasons shift and weather patterns become increasingly unpredictable, it's crucial to address one of nature's most formidable forces: floods. Floodwater can wreak havoc on communities, posing significant risks to life and property. In this edition, we delve into essential tips and precautions to navigate safely around floodwaters.

Understanding the risks:

Floods are not just large bodies of water; they carry immense power and danger. Fast-moving water can sweep away vehicles, buildings, and even strong swimmers. Additionally, floodwaters often contain debris, sewage, and hazardous chemicals, increasing the risk of contamination and injury.

Preparation is key:

1. Stay informed: Keep track of weather forecasts and flood alerts issued by local authorities. Understanding the potential for flooding in your area allows you to prepare adequately and take timely action.

2. Create a plan: Develop an emergency plan that includes evacuation routes, meeting points, and communication strategies. Ensure everyone knows the plan and practice it regularly.

3. Build an emergency kit: Assemble a comprehensive emergency kit containing essential supplies such as non-perishable food, water, medications,

Continued on page 5

Navigating the Water: Ensuring safety around floods

Continued from page 4

flashlights, batteries, and a first aid kit. Keep these supplies easily accessible in case of evacuation.

During a flood:

1. Evacuate early: If authorities advise evacuation, do not delay. Act swiftly to relocate to higher ground or designated shelters. Waiting too long can increase the risk of being trapped or stranded by rising waters.

2. Avoid floodwaters: Never attempt to walk, drive, or swim through floodwaters. The depth and currents can be deceivingly strong, making it extremely dangerous. Even shallow water can carry enough force to knock you off your feet or float a vehicle.

3. Turn off utilities: Shut off electricity, gas, and water mains to prevent electrical hazards, gas leaks, and contamination.

After the flood:

1. Wait for clearance: Do not return to your home or community until authorities declare it safe to do so. Floodwater can cause structural damage and hide dangerous obstacles.

2. Inspect before entering: Before re-entering your property, inspect for structural damage, electrical hazards, and signs of contamination. Contact professionals if needed to assess the safety of utilities and infrastructure.

3. Clean and disinfect: Thoroughly clean and disinfect all surfaces that came into contact with floodwaters. Use protective gear such as gloves and masks to minimize exposure to contaminants.

In conclusion, staying safe around floodwaters requires vigilance, preparedness, and collective action. By understanding the risks and preparing effectively, we can navigate through these challenging situations with resilience and strength.

2024 Training calendar

Visit our website for a complete list of workshops and conferences.

May

May 21-23.... Rubber Gloving School..... Northeast Community College, Norfolk

June

June 12-14.... Municipal Accounting & Finance Conference..... Cornhusker Marriott Hotel, Lincoln

August

Aug. 13..... Backflow Workshop ..... Valentino's, Beatrice
Aug. 14..... Backflow Workshop ..... Fire Hall, Wayne
Aug. 15..... Water Operator Training Workshop ..... Seward
Aug. 20..... Backflow Workshop ..... MidPlains Community College, Ogallala
Aug. 21..... Backflow Workshop ..... Full Circle Venue (downtown), Grand Island
Aug. 22..... Water Operator Training Workshop ..... Grand Island

Service Awards

Remember to recognize your employees' anniversary milestones. The League provides certificates for 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, and 65.

You can request them by emailing brendah@lonm.org.

Retirements: Let us help recognize those municipal employees who are retiring after years of service.