Connecticut Department of Public Health

Communicating PFAS: Interagency Collaboration and Community Outreach

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CT DPH – Drinking Water Section

EPA Region 1 Community Engagement
Exeter, NH
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Overview

- PFAS Public Water Testing History in Connecticut
- CT DPH Drinking Water Section PFAS Strategy
- Pilot testing the PFAS Strategy: Greenwich CT
- Community Outreach
- Lessons Learned
Connecticut Public Water Systems

• 2,550 Public Water Systems, serving 2.9 million people
  • 550 community water systems
  • 600 non-transient non-community systems
  • 1,400 transient systems

• 150 reservoir systems

• 4,000 wells

• CT Department of Public Health (CTDPH)
  • Regulates public drinking water under its Drinking Water Section (DWS)
  • Primacy of the Safe Drinking Water Act
PFAS Drinking Water History in Connecticut

2010-2015 Safe Drinking Water Act UCMR3

- EPA – Third Unregulated Contaminant Monitoring Rule (UCMR 3)
- Under the UCMR3 - No Public Water System in Connecticut that tested for PFAS had detections above the minimum reporting limits
- These Public Water Systems serve over 2,400,000 people

2016

- EPA issues Health Advisory for PFOA and PFOS
- DWS issues a “Circular Letter” to public water systems and local health departments informing them of the Health Advisory and UCMR 3 results.
- Other Drinking Water Issues
Connecticut Towns Served by Public Water Systems that have Tested for PFAS

2,435,776
Number of daily consumers served by systems that tested for and did not detect PFAS above the reporting limit.

CONNECTICUT DEPARTMENT of PUBLIC HEALTH

DPH Drinking Water Section
Drinking Water Section PFAS Strategy

• CT DPH DWS worked with Dept. of Energy and Environmental Protection (DEEP) Remediation on strategy development

  • Identify areas where PFAS may have been released to the environment
  • Identify public drinking water supplies that may be vulnerable to PFAS contamination
  • Develop web pages (DWS and DEEP) and public information
  • Propose actions if PFAS is found

• EPA Boston Region 1 developed a GIS Mapping Tool to assist states - identify areas that are vulnerable to PFAS Contamination
Drinking Water Section PFAS Strategy

• Analysis identified focus areas where PWS sources may be vulnerable to PFAS.
  • **Tier 1 Focus Area**: Areas within a one-mile radius of known PFAS contamination.
  • **Tier 2 Focus Area**: Areas within a one-mile radius of a facility that is known to have used or released PFAS.
  • **Tier 3 Focus Area**: Areas within a one-mile radius of types of facilities that may have used or released PFAS.

• CT DPH receives call from New York Dept. of Health: PFAS contamination is identified in PWS wells on the NY/CT border in New York.
Tier 1 Focus Area
Greenwich Approach

- Receive direct support, involvement and direction from DPH Commissioner’s Office
- Focus on Health
- Work with, involve, and listen to Local Health Department
- Work with Team of agency experts including EPA
- Use PFAS strategy to identify who will be sampled,
- Use DPH developed Action Level for PFAS (sum of 5 PFAS)
- Request EPA Chelmsford Lab assistance
- Provide educational information to all parties; treatment, health
- Make direct contact with the people to be sampled, phone calls and letters
- Hold informational session in community following receipt of results
- Provide updates
PFAS Team Approach - PFAS Strategy

• Gathered and Partnered with a Team of Experts from within the CTDPH and Locally

  • **Environmental and Occupational Health Assessment Program** - Private Well [Drinking Water Action Level](http://example.com) (70 ppt for Σ five PFAS) and [Public Messaging](http://example.com) toxicologists

  • **Katherine A. Kelly Public Health Laboratory** - Train sample team and collect samples from public water systems

  • **Private Well Program** - Private well identification and treatment advice

  • **Environmental Laboratory Certification Program** - Publish list of laboratories registered in CT

  • **Greenwich Local Health Department** – detailed knowledge of local area, guide public interaction/engagement, a wealth of experience with local water quality
Perfluoroalkyl Substances (PFAss) in Drinking Water:
Health Concerns

Environmental & Occupational Health Assessments

What are These Chemicals?

Perfluoroalkyl substances (PFAss) are a family of man-made chemicals with many useful properties including the ability to repel water, prevent staining and increase heat resistance. PFAss have many industrial and consumer uses including the coating of fabrics and non-stick cookware, in food packaging (e.g., microwave popcorn bags), as a mist suppressant in chrome plating, a fireman to put out petroleum fires, but not typically in the

The most studied PFAss are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). While we know the most about the harmful effects of PFAss, several others of high concern are also dicumic acid (DCA), perfluorohexane sulfonate (PFHxS), and PFOS. PFOS and PFA have been phased out of products and are used for long periods after being removed from the market.

How do PFAss get into drinking water?

The way in which these chemicals reach groundwater is still under investigation. In addition to new industries manufacturing consumer products, PFAss are found in chrome plating facilities as a source of groundwater contamination. Because of their use in fire training schoolyards, airports and bases where there was a large PFAss use on the ground, these chemicals can gradually enter and affect groundwater.

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Questions & Answers on PFAS Drinking Water Sampling in Public Water Supply Wells

What are PFAS? What are the potential sources of PFAS? Per- and Polyfluoroalkyl Substances (PFAS) are a class of man-made chemicals that are used in a variety of products and applications including non-stick cookware, upholstered furniture, clothing, food packaging, and firefighting foams in steel and aviation industries. PFAs release to groundwater may come from use or disposal of factories, airports, fire training academies, landfill sites, and other industrial facilities. The United States Environmental Protection Agency (USEPA) has a site devoted to Information about Per- and Polyfluoroalkyl Substances. The Connecticut Department of Public Health (CTDEP) Environmental and Occupational Health Assessment (EOHA) Program has developed a fact sheet entitled “Perfluoroalkyl Substances (PFAS) in Drinking Water: Health Concerns.”

Why is the State of Connecticut conducting the water sampling? Currently, there are no enforceable drinking water standards for PFAS. However, emerging information shows a health concern which has prompted the development of a drinking water health advisory level. Under the USEPA’s Unregulated Contaminant Monitoring Rule, all public water systems in Connecticut that serve over 10,000 people were tested between 2013 and 2015. PFAS were not detected in the water from these systems that serve over 2.5 million people. We are now further sampling wells in a section of Greenwich because of recent detections in a nearby area.

Who will be conducting the water sampling? A sampling team consisting of representatives from the State of Connecticut Department of Energy and Environmental Protection (CTDEP), Remediation Division’s Public Water Program and the CTDEP Drinking Water Section (DWSS)/Private Wells Program and Katherine A. Collyer State Public Health Laboratory have been trained in the collection of PFAS samples. Representatives of one or more of these agencies will be involved in the sampling.

Will I need to be present during the sampling? Yes. Someone will need to meet the sampler to show them where the new water tap is for each public water supply well. Each well must be pumped for 20 minutes before sampling, and it would be most helpful if that were completed before the sampler arrives.

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Team Approach - PFAS Strategy

- Coordinate with sister Environmental Agency (DEEP)
  - Remediation Division Western Region
  - Potable Water Program
- Request Assistance - EPA Region 1
  - EPA Region 1 Laboratory in Chelmsford, MA provides analytical services on an as-available basis
  - EPA contractor collects one round of samples at up to ten private homes with assistance from DEEP staff.
- Team – took 2 rounds of samples (5 PFAS) at private and public water systems, communicated results to entities, worked together on educational information, no funding available
- Learned and gathered information from other States and EPA
Team Approach - PFAS Strategy

- Town of Greenwich Local Health Department - Community Outreach and Engagement
  - Knows the Community that they serve
  - Provided valuable input and guidance on the best way to communicate with their community
  - Provided cover letters and was a point of contact for the community
  - Organized a “public availability session” once verified results were available
  - Lead the local media interaction

- Provided invaluable support
Community Outreach: Public Availability Session

- Held in the impacted community
- Provided Personal invitations plus press releases
- Facilitated by Local experts
- Staffed tables with hand-outs and display boards
- Guests were free to circulate and choose the programs to visit
- Convenient locations for confidential consultation
- Team Presentation at end of session
- Team members stayed to answer any and all questions

Residents ask questions on well water in northwestern Greenwich

By Robert Marchant  Updated 6:00 pm, Tuesday, May 15, 2018

Residents of the King Street area meet with health and water-safety officials at an informational event at the Harvest Time Church.
Lessons Learned From the Public Availability Session

- Hold the public session as soon as practical
- Directly and consistently Communicate with all entities sampled
- Work with Local Health Department
- Involve the team of experts in the session
- Format allowed for individual attention; affirmed that guests’ concerns were taken seriously
- Take the time to make sure that questions are answered satisfactorily
- Admit what you don’t know
- Important involvement from all levels, State, Local and Federal
- Assure the guests that you will continue to share information and engage
- Provide understandable, updated, science based information
- Trust important at all levels
Thank You

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CTDPH
Drinking Water Section