DPH Drinking Water Section STRATEGY – PFAS in Public Drinking Water Systems
February 2019

SUMMARY:

The goal of the strategy is to minimize human exposure to Per- and Polyfluoroalkyl Substances (PFAS) from public drinking water supplies impacted by PFAS. The strategy utilizes existing policies, statutory and regulatory authority, internal mapping, monitoring and compliance tools, outreach to public water systems (PWS) and local health departments and districts, collaboration with other Department of Public Health (DPH) programs and sister State Agencies, staff training and participation in combination with monitoring the most recent national developments to achieve the goal.

BACKGROUND:

From 2013 to 2015, PWS serving over 10,000 customers monitored for six perfluoroalkyl substances: perfluorobutane sulfonate (PFBS), perfluorohexane sulfonate (PFHxS), perfluoroheptanoic acid (PFHpA), perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS), and perfluorononanoic acid (PFNA) under the Safe Drinking Water Act Third Unregulated Contaminant Monitoring Rule (UCMR3). In Connecticut, PWSs serving approximately 2.4 million customers or 85% of all CT PWS customers, participated in UCMR3 and monitored all of their drinking water sources for these six PFAS. None of the public water systems in Connecticut that were required to monitor for PFAS had detections of any of the six substances above the UCMR3 minimum reporting limits. This encompasses 38 PWS and 128 drinking water sources of supply, both surface water and ground water.

PROACTIVE APPROACH:

The DWS is organized into functional units, one of which is the Source Assessment and Protection (SA&P) Unit. This Unit is currently staffed with five Environmental Analysts whose sole responsibility is implementation of the various permitting and approval processes and policy evaluations that relate to public drinking water source protection. The SA&P Unit is also tasked with developing strategies to address emerging contaminants including PFAS. Through the staff
of the SA&P Unit, the DWS has been actively participating in the national conversation on PFAS and developing internal capacity to address PFAS in both proactive and reactive manners.

Proactive approaches to protecting public health are the cornerstone of Connecticut public drinking water laws and policies. The following laws are being used as a part of the DWS’s PFAS strategy:

- Connecticut is the only state in the nation that does not allow sewage discharges upstream of public drinking water surface supplies pursuant to Connecticut General Statutes (CGS) section 22a-417. This statute provides Connecticut residents consuming public drinking water with a protective barrier from contaminants that are typically found in waste water that does not exist elsewhere in the country.

- Connecticut requires all public water systems that serve over 1,000 individuals to prepare a plan pursuant to CGS section 25-32d. The contents of the plan are set forth in the Regulations of Connecticut State Agencies (RCSA) section 25-32d-1 through 6. Each individual water supply plan contains “an evaluation of source protection measures.” Circular Letter 2018-20 was sent to public drinking water systems that serve over 1,000 individuals ordering all public water systems to update their inventory of land use activities under this section to include potential PFAS generators. The DWS worked with a subcommittee of the CT Section of the American Water Works Association to develop a spreadsheet for use by all of the public water systems subject to this statutory requirement. This spreadsheet was distributed to all applicable public water systems through Circular Letter 2019-03.

- Public drinking water systems that utilize surface water supplies must annually inspect all the properties within the public drinking water supply watersheds pursuant to RCSA section 19-13-B102(b) and report to the DWS on their inspection results. The goal of the inspections is to identify violations of the public health code and work with the appropriate authority to ensure that appropriate measures are implemented to protect public health. New for the 2019 inspection cycle, the public water systems will have identified potential PFAS generators and inspected them. The DWS has scheduled a watershed inspector training for August of 2019 which will include a presentation on outreach to and inspection of potential PFAS generators.

- The DWS is using its authority under CGS section 16-262m “Construction specifications for water companies” and CGS section 25-32 “Department of Public Health jurisdiction over and duties concerning water supplies, water companies and operators of water treatment plants and water distribution system” to require all applicants for new public drinking water supplies to test for the six UCMR3 PFAS and provide analysis results prior to DPH approval of the use of new public drinking water sources of supply for human consumption. All public water systems and local directors of health were notified of this requirement through Circular Letter 2018-19.

- The DWS has a dedicated web page to provide educational materials on PFAS. This web page is frequently updated as new information becomes available. The information provided can be used for multiple purposes including educating consumers of public drinking water and providing outreach to entities that may generate PFAS.
CAPACITY TO RESPOND:

The DWS has established capacity to respond to potential PFAS contamination in public drinking water supplies:

- The DWS has established a Team that maintains subject matter expertise on PFAS in public drinking water.
- The DWS has staff trained to collect PFAS samples.
- The DWS has staff trained to provide education and outreach on PFAS to public drinking water systems.
- The DWS staff works closely with other DPH programs on PFAS policies and actions. Other DPH programs include but are not limited to Private Wells, Environmental and Occupational Health Assessment, Environmental Laboratory Certification, the CT Public Health Laboratory, the Office of Communications and the Legislative Liaison.
- The DWS staff works closely with sister local, state, regional and national government agencies and professional working groups, including the CT Department of Energy and Environmental Protection (DEEP), the United States Environmental Protection Agency’s (USEPA) Region 1 PFAS work group, the Association of Drinking Water Administrators’ (ASDWA) PFAS workgroup and the Northeast Waste Management Officials (NEWMOA) PFAS work group. These interactions provide the DWS with knowledge of the challenges facing States where PFAS contamination has been identified allowing the DWS to develop tools and additional capacity that can be used if PFAS contamination is identified in CT in the future.
- The DWS has experience responding to potential PFAS contamination: Specifically, when the State of New York informed the DWS of PFAS contamination in public water supply wells in NY, the DWS coordinated a response among the DEEP, the Greenwich Health Department (GHD) and the USEPA. Staff from the DWS and the DEEP identified vulnerable public and private drinking water supplies, provided direct education and outreach to the GHD and the owners of the identified supplies, collected two rounds of samples from public supplies, arranged for the samples to be analyzed at no cost to the owners and participated in a community outreach event organized by the GHD.
- CT’s Drinking Water State Revolving Loan Fund has established priority ranking points for treatment systems needed to deal with emerging contaminants including PFAS.