NORTHEAST CONFERENCE ON THE SCIENCE OF Pfas: Public health and the environment

Northeast Waste Management Officials' Association

Commissioner Martin Suuberg

Massachusetts Department of Environmental Protection

MassDEP PFAS Efforts

Adopted Drinking Water and Cleanup Standards

Conducting Statewide Sampling & Analyses for Public Water Systems and Private Wells

Firefighting Foam Take-Back Program

Assessing Sources & Environmental Levels: e.g. mosquitocides

Providing Technical Assistance, Education, Outreach, Coordination

Evaluating other Media and Exposure Pathways

Work with Legislative Task Force

MassDEP PFAS Regulations

- **MassDEP is addressing a subclass of PFAS – currently six**
  - **More than 50% of MA public water supply samples have 3 or more PFAS**
- **The six in the regulated subclass include those:**
  - **very closely related chemically**
  - **most frequently detected in drinking water**
  - **typically detected at the highest levels in drinking water**
  - **of greatest concern due to persistence in the human body and toxicity**
- **Review of rules will take plave between now and the end of 2023**

Regulatory Requirements for Public Water Suppliers

Community and Non-Transient Non-Community PWS are required to take action if PFAS6 is detected > MCL of 20 ppt

Actions may include:

Issuing Public Education	Issuing Public Notice	Reducing PFAS6 levels below the MCL in finished water

Public Water Supply Sampling Status

- 1,468 PWS required to sample
- 991 PWS sampled for PFAS to date
- 1,066 signed up for free sampling program
- 104 PWS detected PFAS6 > 20 ppt MCL
- 95% of residents drinking water below MCL

State Funding to Date for PFAS Remediation

- Funding provided by two supplemental budgets: Chapter 142 of the Acts of 2019 and Chapter 31 of the Acts of 2020)
- $8.4M for PWS testing and treatment design, including reimbursement for costs already incurred, including three rounds of grant funding:
    - PFAS Design Grants #1 - $1.98M to 10 PWS
    - PFAS Design Grants #2 - $3M for 17 PWS
  - State funding for Public Water Supply Testing
  - Free Private Well Drinking Water testing -

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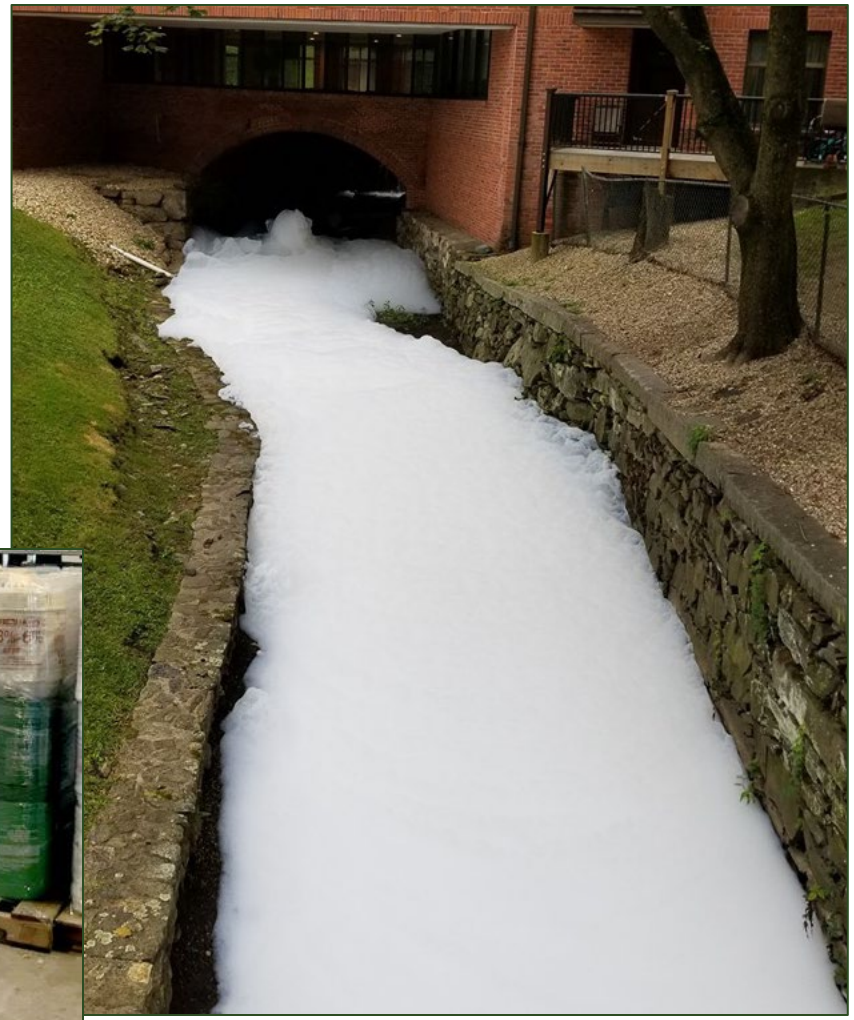
State Funding for PFAS Remediation

- Clean Water Trust; State Revolving Fund
  - Priority funding; 0% loans
  - $180 million in SRF financing for 16 projects in 2021
  - More in 20222

AFF Takeback Program 2018-2019

- Partnered with the Department of Fire Services (DFS)
- ~200,000lbs from 75+ public safety agencies (~ $213,000)
- 149,016 pounds (17,531 gallons)removed and disposed



EPA/MassDEP PFAS Permit Requirements for Municipal and Industrial Discharges

- Monitoring
  - Municipal WWTPs
    - Quarterly influent, effluent, and sludge samples
    - Annual effluent samples from industrial facilities discharging to WWTP
  - Industrial
    - Quarterly effluent samples

- EPA Timing
  - Conditions go into effect 6 months after EPA's multi-lab validated method for PFAS in wastewater is made available

MassDEP's Additional PFAS Conditions in Wastewater Permits

- Industrial Dischargers' Permit Source Reduction
  - Within 6 months of effective date of permit must evaluate use of PFAS-containing products and whether use can be reduced or eliminated
  - EEA Office of Technical Assistance to work directly with industrial dischargers and industrial facilities discharging into municipal WWTPs

- MassDEP Timing
  - Most facilities: monitoring begins 6 months after EPA's multi-lab validated method for PFAS in wastewater is available, **or 2 years from the effective date of the permit**, whichever is earlier
  - For facilities discharging upstream of drinking water intakes, effluent monitoring begins **180 days** after the effective date of the permit

PFAS in Residuals: Context

- Wastewater residuals: 38% reused as fertilizer in MA
- MassDEP regulates 35 entities that land apply residuals
- PFAS Testing: quarterly requirement for residuals that are land applied (as of July 2020)
- Land application standards; MassDEP evaluating options and consulting with stakeholders
- Alternative disposal alternatives include landfill, incineration, export
- Policy issues
  - Impacts of PFAS on water, crops, biota
  - Impacts of regulating reuse and reuse market disruption

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PFAS in Residuals: MassDEP Actions

- Stakeholder Process
  - Industry groups, AOS holders, environmental advocacy organizations, health advocacy organizations, academic researchers, agriculture groups, and other state agencies
  - First meeting held in 2021. Gathering information and perspectives

- Technical work underway
  - Leachate model
  - Review of others' research/coordination with other states
  - Technical subcommittee meeting
  - Establish screening values

River Sampling

- MassDEP jointly funded a U.S. Geological Survey (USGS) water quality study to evaluate the presence of PFAS in Massachusetts' rivers and streams at 64 sites in 27 2020 and analyzed the samples for 24 individual PFAS.
- Sampling sites were located upstream or downstream of discharges from 24 wastewater treatment facilities and at 16 other stream sites, including sites downstream of suspected nonpoint and industrial sources and at sites not associated with suspected PFAS sources.
- https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas#pfas-in-massachusetts-rivers-

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Where Next?

- **Continued Work with Water Suppliers and Affected Communities**
  - **MCL implementation**
  - **Site Discovery**
  - **Funding for Remediation**
- **Engagement with the Legislative Task Force as it considers recommendations**
- **Ongoing work on residuals and surface water quality issues**
- **3 year review of MCLs**
  - **Consider work underway by EPA**
- **Implications for Landfill Monitoring**
- **Air Program**
- **Other**

More Information on MassDEP PFAS webpage

https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas

or just google MassDEP PFAS