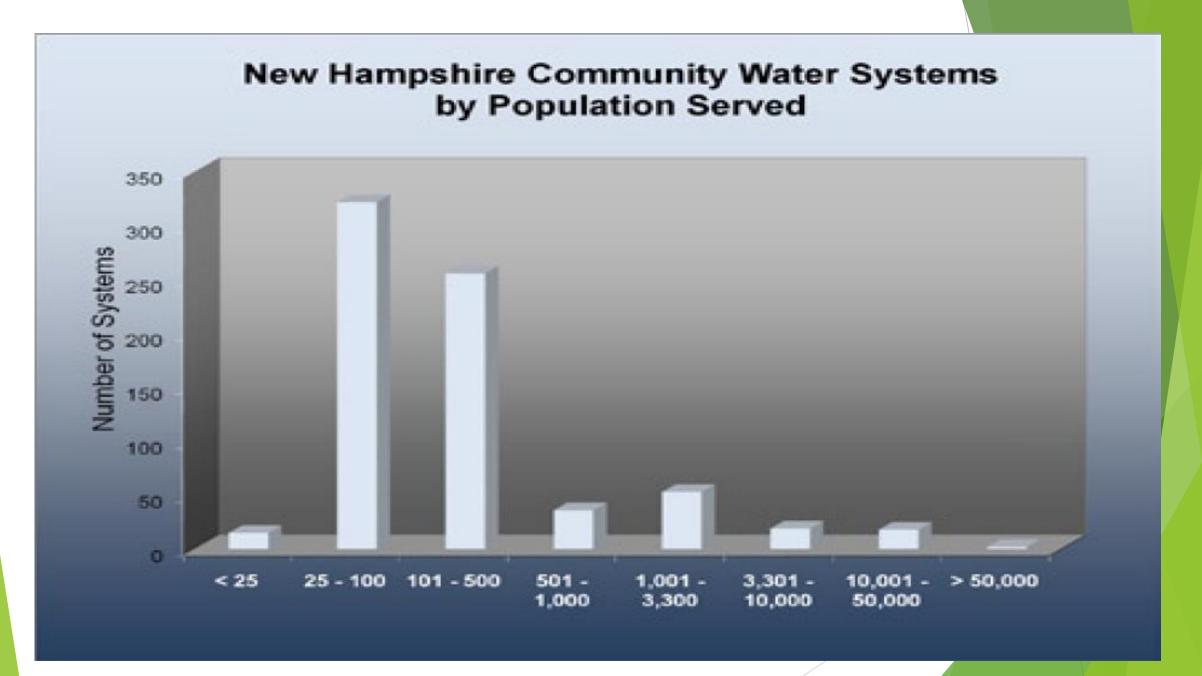
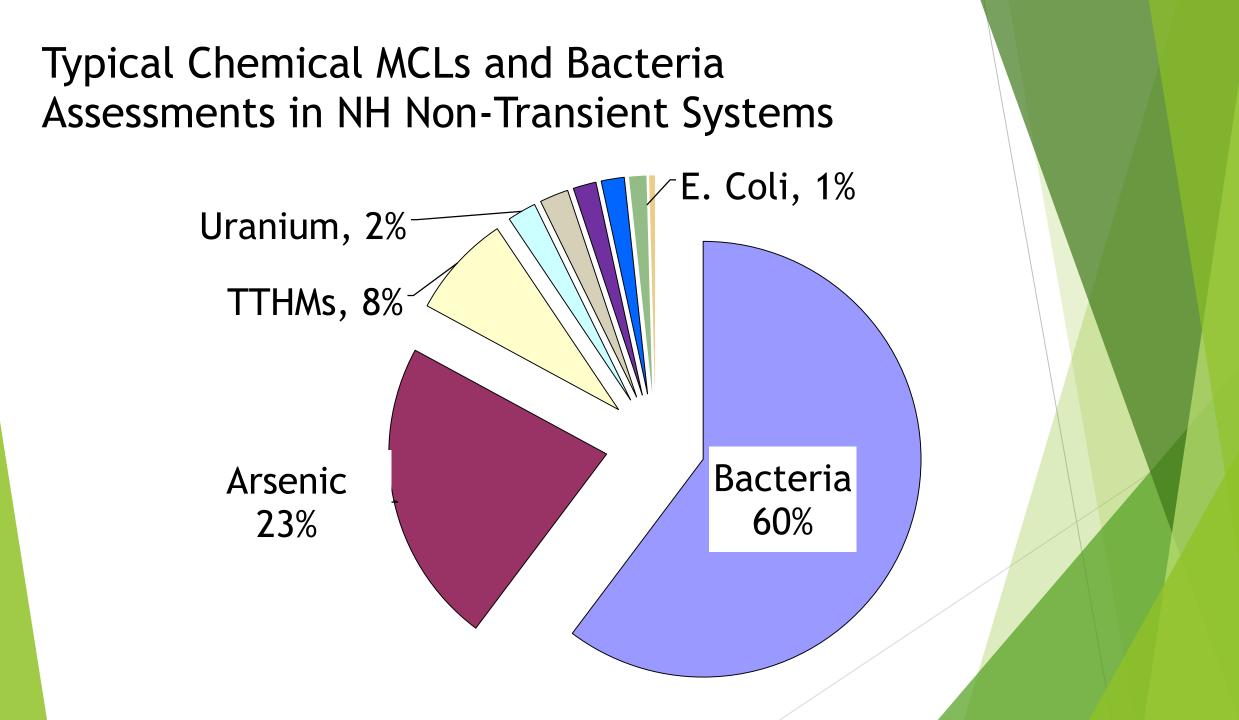
Compliance Strategies for Arsenic and PFAS

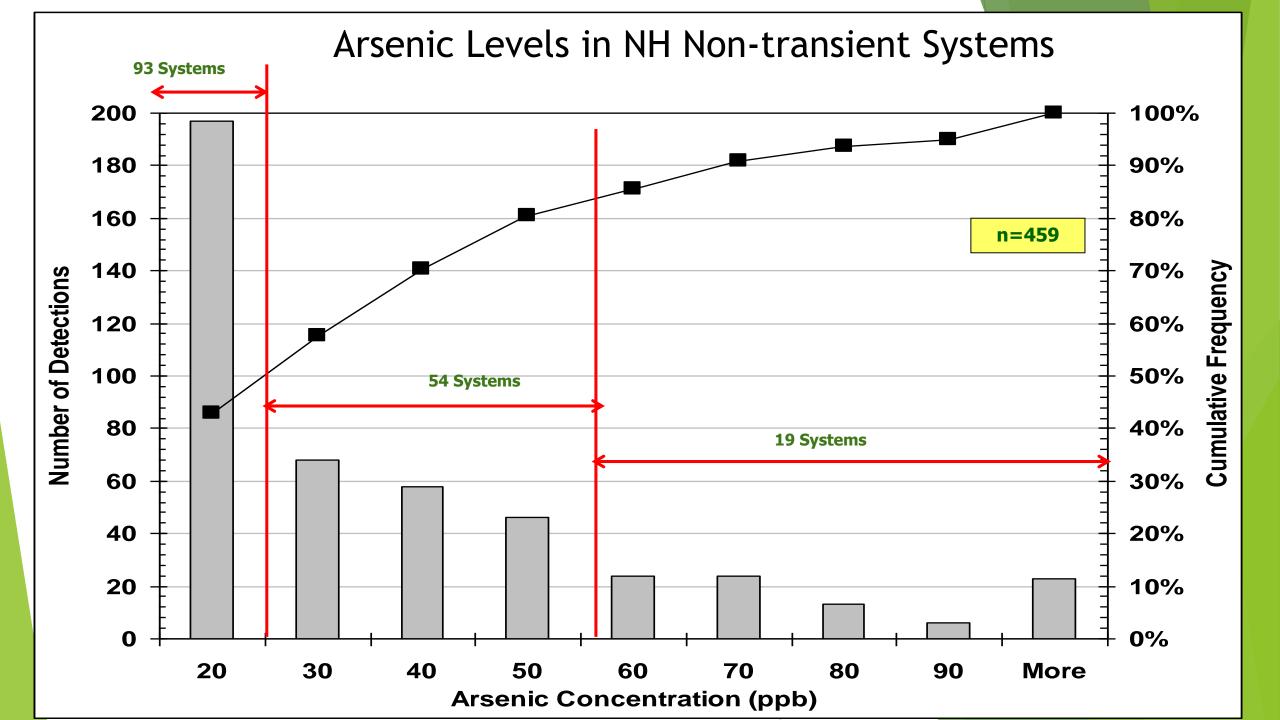
Cynthia Klevens, P.E. NHDES Drinking Water & Groundwater Bureau

WATER IS ESSENTIAL - NHWWA Annual Tradeshow October 20, 2020

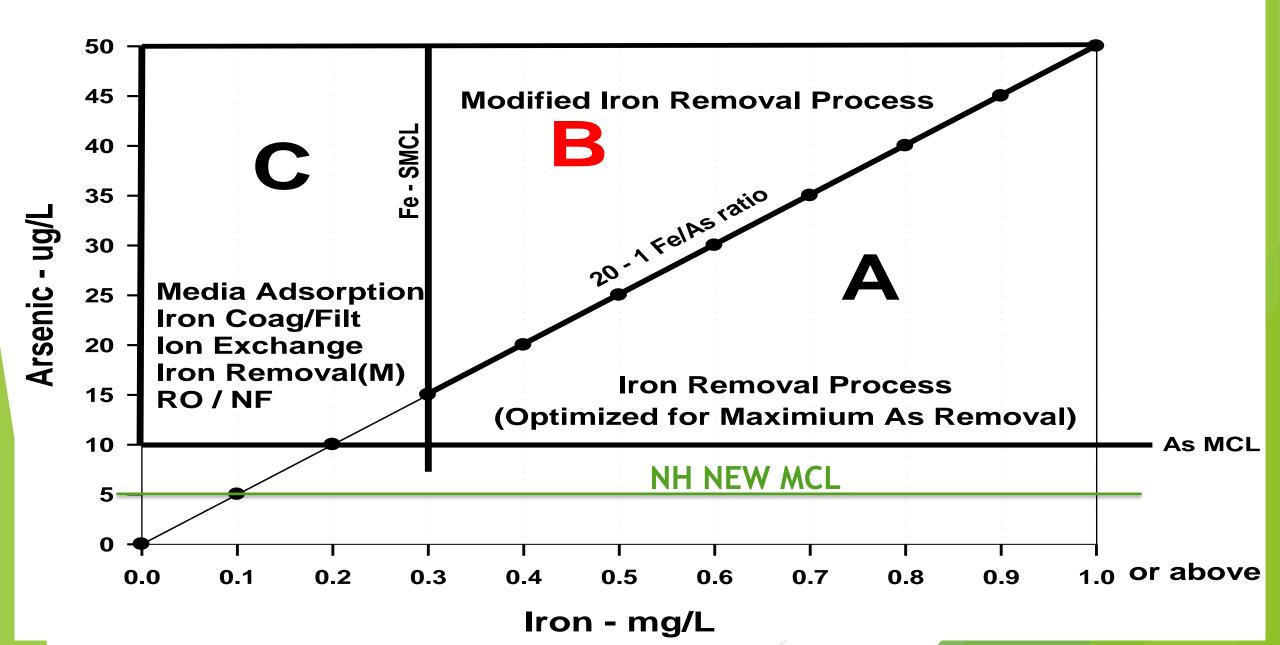




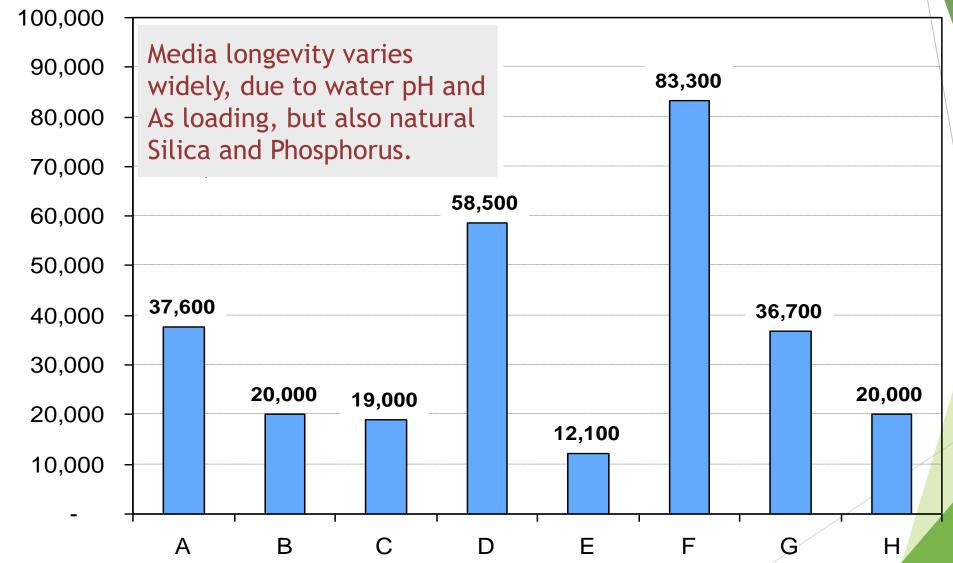
Arsenic Compliance



Arsenic Treatment - Process Selection Guide

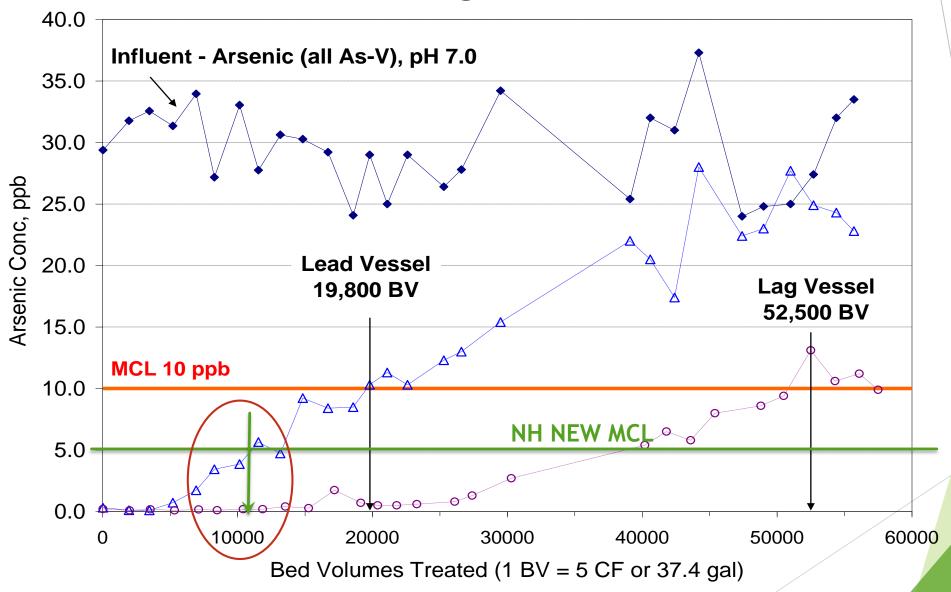


Adsorptive Media Bedlife Performance



Bed Volumes of Water Treated to 10 ppb breakthrough

Arsenic Breakthrough Curve - Goffstown



Snapshot Arsenic > 5.0 ppb

~70 Community water systems
 ~6 Municipal / Large systems

~50 NTNC systems
 ~20 schools / daycares

PFAS Compliance

PFAS Treatment Options

CARBON PFAS RESIN POINT OF USE





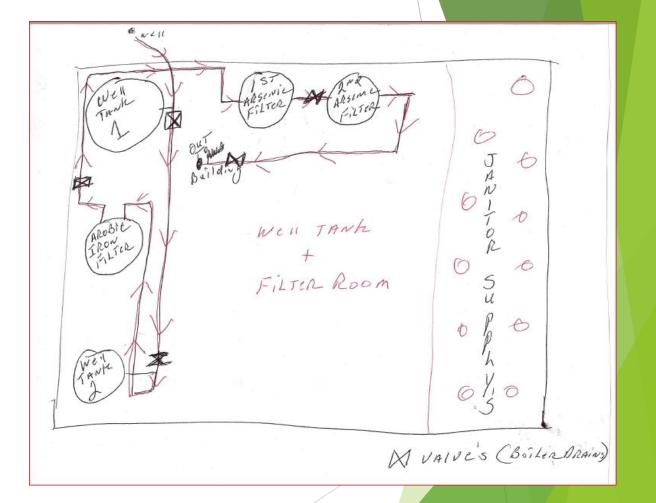
Letter of Deficiency (LOD) Response

- 30 days Identify Consultant
- 60 days Submit Design Plans and Specs
- 90 days DES Approval to Install
- 120 to 180 days Installation / Startup

Extended timelines may warrant an Administrative Order or AOC

Treatment Approval

- 1. Process Schematic vessel sizes, sampling taps, media volumes
- 2. Well flowrate
- 3. Raw water quality
- 4. Backwash Info rate, frequency, discharge location



NOTIFY DES WHEN SYSTEM IS ONLINE TO UPDATE YOUR SAMPLING SCHEDULE

PFAS FUNDING - SCHOOLS & LICENSED CHILDCARES

Treatment Evaluation / Design Reimbursement

- \$4,816 or 26% of install cost
- Does not need to be a public water system



PFAS LOANS



10% Loan principal forgiveness disadvantaged systems
Modian Household Income (MHI) < State MHI</p>

- Median Household Income (MHI) < State MHI</p>
- Water rate > 0.8% of MHI
- More than 50% year-round, non-seasonal

Contingent reimbursement

- Up to 50% loan principal reimbursement





Cynthia.Klevens@des.nh.gov Small Systems

<u>Amy.Rousseau@des.nh.gov</u> PFAS Funding