One Utility’s LCRR and LSL Approach Across Multiple Public Water Systems

• Aqua Virginia owns and operates multiple public water systems with services in 37 counties across Virginia. Many of these are older smaller systems and like other Virginia systems with the challenges faced to comply with the LCRR and LSL inventory requirements.

• Aqua Virginia is a subsidiary of Essential Utilities, Inc. with water utilities located in a total of 8 states. We are preparing for LCCR and LSL inventory compliance through a comprehensive program utilizing physical observations, locally available records, as well as national engineering consultants to conduct site and document reviews. Use of GIS, tap cards, real estate and other data will prioritize our efforts for maximum efficiency and compliance.
AQUA Virginia’s and Essential Utilities Approach

- Local resources of all utilities are consumed with ongoing operations, regulatory compliance, O/M, and infrastructure rehabilitation construction projects. The LCRR requirements are vast and complex, requiring use of consultants with the specialization to complete the required tasks timely, efficiently, and accurately. Accuracy is key not only due to the investments and impacts on utility time and budgets, but most importantly public health protection.

- We are implementing inventories and LSL verifications simultaneously across multiple water systems.

- Lead service line replacements are beginning in some states.
AQUA Virginia’s and Essential Utilities Approach

- Arcadis is assisting with data collection and analysis to meet inventorying requirements for the individual public water systems
- 120 Water will likely be used for management of rule requirements for tap water sampling at childcare facilities and schools
- Assembled a coordinated & focused team
- Consult and work with ODW resources
- Adapt to the uniqueness of each system
Preparing for the LCRR and Improvements

Priority - Manage Risks

- Inventories for Systems with LSLs
- Corrosion Control Improvements
- 5th Liter Sample Evaluations
- Early LSLRs

Other Preparation

- Developing Corporate SOPs, Example Communications, Etc.
- Developing Timelines, Checklists, and Status Tracking
- Identifying Primary Schools and Licensed Daycares
- Modifying Sample Plans
- Preparing LSLR Plans
Determining Resource Requirements

**Preparation for New Requirements**
- Estimated hours to prepare for LCRR (2022-2024)
  - Revise sample plans
  - Develop initial service inventory (to support contractor)
  - Develop Initial LSL replacement plans
  - Identify schools and childcare facilities

**Ongoing LSLR**
- Estimated hours for LSL replacement activities (beginning 2022 and continuing)
  - Communication with customers
  - Provision of pitcher filters
  - Sampling and provision of results

**Effort to Comply with LCRR**
- Estimated hours to maintain compliance (beginning 2025 and continuing)
  - Annual notifications to customers
  - Public education
  - School sampling at 20% per year
Service Line Material Inventory Workflow

- Observation Data Internal
  - Work Orders
- Observation Data External
  - Contractor Meter Setting
  - Main Replacements
  - Potholing
- Customer Provided Information
  - Service Line Information
  - Tap Cards
  - Real Estate Data
- Reporting
- Decision Making
- Execution

Managing Multiple Sources of Information
Implementation

• Determine the additional labor hours required per year
• Determine any additional FTE requirements
  • Short term or long-term hires
  • Part time or full-time status
  • Contract consultants' involvement
• Who are they
  • Compliance staff
  • Operations staff
  • Office staff
  • Engineers
  • Construction crews
• Determine Budget Impact
• Execute the plan
  • Evaluate
  • Coordinate
  • Review and Revise