

Ohio EPA Approach to Improving Public Water System Sustainability

October 26, 2015

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Raising the Bar

- Capability & Asset Management
(Chapters 3745-87 & 3745-92)
 - Proposed legislation to require implementation of asset management plans and expand escrow requirements did not make it into Ohio EPA fiscal year budget
 - Reassessing what changes will be proposed as part of five year rule review

Demonstration of Capability

- More than just compliance
- Managerial and Financial capability
- Asset Management
 - Inventory and evaluation of assets
 - Operation and maintenance programs
 - Contingency Planning
 - Criteria and timelines for infrastructure re-hab/rplcmt
 - Approved Capacity projections and CIP
 - Long term funding for asset management
- Screening tool







What is Asset Management?

- Inventory - What assets do you have?
- Condition – What can you do with existing assets?
- Level of service – What do you want to do?
- Reality check – What do you need to improve to meet level of service goals?
- Planning to meet goals – What funding and planning/engineering do you need to get there?

Screening Tool

- Currently being used for all systems getting a WSRLA loan
- Planning to expand use for those systems potentially headed toward enforcement, trying to identify underlying causes of non-compliance
- Others as their capability issues become of concern

Screening Tool –Governing Body

- Does the governing body hold meetings that are open to the public and announced in advance?
- Is there an organizational chart for the governing body with clearly defined job duties and assigned individuals?
- Do operators, the governing body and other employees regularly attend training to enable them to maintain their skills?
- Is the governing body informed and responsive to issues related to drinking water such as production, capacity, water loss, O&M, water quality or compliance?

Screening Tool –O&M/PM

- Does the system have an up-to-date and written O&M plan?
- Does the system implement an adequate preventative maintenance plan, including exercising valves, flushing water mains, and inspecting/cleaning storage tanks (as applicable)?
- Does the system routinely maintain, repair or replace equipment prior to failure?
- Does the system experience routine failures (e.g., chlorinator, leaks, low pressure or main breaks)?

Screening Tool –Source Water Protection

- Does the system actively utilize an up-to-date source water protection plan/protective strategies checklist?

Screening Tool –Water Supply and Demand

- Does the system regularly monitor water supply and demand and update projections on a regular basis?
- Is the system's approved capacity/contract adequate to meet demand over the next five years?
- If long term (>5 years) projections or other available information shows that the system will exceed approved capacity, is the system planning for this shortfall?
- If the system loses its primary water source, will the combined capacity of all remaining water sources meet demand under normal demand conditions?

Screening Tool –Emergency Prep

- Does the system have an adequate, up-to-date contingency plan that is regularly practiced and implemented when necessary?
- Does the water system have an operational emergency or standby electrical power source sufficient to run critical system components?
- Does the water system have accurate maps of the distribution system?
- Does the water system have an established emergency or supplemental water supply available, such as an interconnection with a neighboring system, or a second source?

Screening Tool –Asset Management

- Does the system have a comprehensive Asset Management Plan, updated within the last five years, that includes:
 - Asset Inventory
 - Criticality Analysis
 - Condition Assessment Protocols
 - Criteria and timeline for replacement
 - O&M and funding source(s)

Screening Tool – Budgeting

- Does the system have an annual budget that includes necessary reserve funds?
- Does the system have a capital improvements plan (CIP) and a multi-year projection that addresses future expenses?

Screening Tool – Rates and Reserve Accounts

- Are all customers billed per metered water usage?
- Are rates and rate structures evaluated on a routine basis (i.e., at least every 3 years) and adjusted as necessary?
- Does the water system's current rate structure produce enough income to cover current expenses (i.e., operations and maintenance), future costs and all necessary reserves?
- Does the water system have funding available to cover the system's most expensive or critical component if it should fail?

Screening Tool – Water System Policies

Has the system adopted written policies on:

- Security
- Use of system equipment
- Routine billing, including a backup billing system
- Customer deposits and payments
- Collections, customer service disconnection and shutoff notices
- Connection charges
- Customer complaints
- Purchasing authority

Screening Tool – Compliance

- If the system has/had a significant deficiency, has it been addressed or is it on an acceptable schedule to be addressed?
- Have all requirements cited in previous survey letter(s) or other correspondence been addressed?
- Is the system in compliance with the certified operator requirements of Chapter 3745-7 of the Administrative Code, specifically, operator certification, minimum staffing, and documentation
- Is the system in compliance with the backflow prevention requirements of Chapter 3745-95 of the Administrative Code?
- Has the system had primary MCL or TT violations in the previous twelve months?
- Is the system in compliance with the plan approval requirements of Chapter 3745-91 of the Administrative Code?
- Has the system been under enforcement in the last 5 years?
- Has the system obtained a license to operate in each of the last 5 years?

Screening Tool – Water Loss

- Does a recent water audit show less than 15% nonrevenue water?
- Are steps being taken to detect and address leaks?

Asset Management Going Forward

- Having an active asset management program would be considered to be a demonstration of capability
- Ohio EPA will be developing rules to describe what an acceptable asset management program would look like
- Will also develop triggers to determine when an asset management program is required

AWWA Asset Management

- Ohio EPA staff will be participating in the new AWWA Asset Management Committee
- We want to learn from those with experience in the industry
- The purpose of this effort is to raise the capability bar for all public water systems in Ohio

Free Training

- Ohio RCAP has developed free classroom and online training
- Online training – Utility Management and Financial Management
- Classroom training – Utility Management, Financial Management, Asset Management, Budgeting & Rate Setting, and Applied Asset Management Using CUPSS

Benefits of Capability

- Sustainable systems
- Efficiency improvements
- Better service to consumers
- Less negative press

Questions?

Thank you

Contact

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