New York Section AWWA
New York’s Water Event
Bureau of Water Supply Protection
Program Updates
April 13, 2016
Saratoga, NY

Roger C. Sokol, Ph.D.
Director
Update Topics

• Hot Issues
• Regulatory Updates/Reminders
• Funding Updates/Opportunities
• Special Projects
• Questions
Hot Issues

- Lead and Copper Rule
- Lead in Schools
- Unregulated Contaminants
- Disinfection By-Products
Regulatory and Program Updates
Lead and Copper Rule (LCR)

Recent events in Flint Michigan have put a renewed focus on the safety of our drinking water supplies relative to lead contamination.
Lead and Copper Rule Oversight

- As a result there will be enhanced oversight by the New York State Department of Health (NYSDOH), Local Health Departments (LHDs), and Environmental Protection Agency (EPA).

- EPA will be conducting LCR audits at Public Water Systems (PWSs) that had action level exceedances. Audits will be starting at the end of April 2016.
Lead and Copper Rule Implementation

As a reminder, PWSs should review the following key provisions of the LCR:

- **Sampling plan.**
  - Ensure that the correct number of samples are being collected, the sample site locations are correct (Tier 1, 2, or 3 sites)
  - Your sampling schedule reflects the most current lead and copper results (standard or reduced monitoring).
  - For PWSs on reduced monitoring, samples must be collected between 6/1 and 9/30.
  - During the sanitary survey, LHDS will ensure that the water system is following proper lead and copper sampling protocol.
LCR Implementation

• Sample Collection Guidance:

• Collect “first draw” samples. Water in pipes has stood motionless for at least 6 hours prior to sampling. Sample volume is one liter.

• Do not clean aerators prior to sampling. Regular aerator maintenance is recommended but homeowners should not be instructed to remove or clean aerators prior to or during collection of tap samples.
LCR Implementation

• Sample Collection Guidance (Cont.):

  • Do not conduct pre-stagnation flushing.
    • Do not recommend homeowners flush the tap for a specified period of time prior to starting the minimum 6-hour stagnation period.

  • Use wide-mouth plastic bottles to collect lead and copper compliance samples. This allows for a higher flow rate during sample collection which is more representative of what a consumer may use to fill up a glass of water.
LCR Implementation

• **Sample Invalidation:** A written request from the PWS must be sent to the State. The State can invalidate lead or copper tap samples if one of the following conditions is met:
  - The laboratory establishes that improper sample analysis caused erroneous results,
  - The State determines that the sample was taken from a site that did not meet the site selection criteria,
  - The sample container was damaged in transit, or
  - There is substantial reason to believe the sample was subject to tampering.
**LCR Implementation**

- **The 90th percentile value.**
  Ensure the 90th percentile value is calculated properly.
LCR Implementation

• **Action Level Exceedance (ALE).** Ensure the appropriate follow-up steps are performed if there is an ALE. Follow-up steps include:
  - Conducting public education,
  - Installing or optimizing corrosion control treatment (See new guidance released March 2016),
  - Source water monitoring,
  - Water Quality Parameter (WQP) monitoring,
  - Return to standard monitoring, and
  - Lead service line replacement if corrosion control treatment does not reduce lead levels below the action level.
LCR Implementation

• **Change in Source or Treatment.**
  • Any change in source or treatment must be reviewed and approved.
  • The Health Department will determine if the change warrants a return to standard monitoring due to potential changes in water quality.

Thursday, April 14th 2:00 to 3:30 pm EST
Registration link:
https://attendee.gotowebinar.com/register/7771236408109420035

OR

Tuesday, April 19th 2:00 to 3:30 pm EST
Registration link:
https://attendee.gotowebinar.com/register
Lead and Copper Rule

• In an effort to increase transparency and consumer confidence PWSs are encouraged to:
  
  • Make your materials inventory available on your public website.
  
  • Post your LCR compliance sampling results on your public website.
Lead and Copper Rule

Notification to Consumers

- Ensure residents receive lead sampling results from their homes in a timely manner.

- Provide public education materials in an expedited manner when there is an action level exceedance.
Future Revisions to the Lead and Copper Rule:

- EPA expects to publish for comment the Long Term Revisions to the LCR in 2017.
- EPA is currently evaluating the recommendations they received in December, 2015 from the National Drinking Water Advisory Council. Available at: 
  https://www.epa.gov/ndwac
- For additional information visit: 
  https://www.epa.gov/dwstandardsregulations/lead-and-copper-rule-long-term-revisions
Lead and Copper Rule

• Additional Guidance:

  • NYSDOH will be updating our website to include recent EPA clarification memos, guidance on LCR sampling protocols, and procedures for optimizing corrosion control. Information will be available under the Lead in Drinking Water link at:

  http://www.health.ny.gov/environmental/water/drinking/
Lead in School Drinking Water

- Schools on their own water supply must comply with the LCR
- Intermittent water use patterns at schools may increase likelihood of elevated Lead concentrations
- EPA developed the voluntary “3Ts for Reducing Lead in Drinking Water in Schools”
  - Guidance to assist schools with implementing a program for reducing lead in drinking water
  - Can be integrated into a school’s overall plan for reducing environmental threats
3T’s Program

• Guidance for school officials responsible for the maintenance and/or safety of school facilities

• 3T’s stand for:
  o Training
  o Testing
  o Telling
3T’s Program

• **Training**
  o Informing school administrators and custodians about health effects and sources of lead
  o Planning a program and developing partnerships

• **Testing**
  o Assessing facility plumbing
  o Sampling and interpreting results
  o Developing a remedial strategy

• **Telling**
  o Sharing information with parents and staff
## Lead Monitoring Summary

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Regulation or Guidance</th>
<th>Sample Volume</th>
<th>recommended bottle type</th>
<th>Action Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Water System (PWS)</td>
<td>LCR</td>
<td>one (1) liter</td>
<td>plastic, wide mouth</td>
<td>15 µg/L (ppb) (90th percentile)</td>
</tr>
<tr>
<td>Schools (with own water supply)</td>
<td>LCR</td>
<td>one (1) liter</td>
<td>plastic, wide mouth</td>
<td>15 µg/L (ppb) (90th percentile)</td>
</tr>
<tr>
<td>Schools (testing individual taps)</td>
<td>3Ts²</td>
<td>250 mL</td>
<td>plastic, wide mouth</td>
<td>20 µg/L (ppb) for individual taps</td>
</tr>
<tr>
<td>Private home</td>
<td>3Ts²</td>
<td>250 mL</td>
<td>plastic, wide mouth</td>
<td>20 µg/L (ppb) for individual taps</td>
</tr>
</tbody>
</table>

### Sample Collection Guidance

- Collect "First draw" samples (water in pipes have stood motionless for at least 6 hours)
- **Do not clean aerators prior to sampling:** Regular aerator maintenance (cleaning to remove particulate matter) is recommended, but should NOT be done prior to a sampling event.¹
- **Do not conduct pre-stagnation flushing:** Do not flush the tap prior to starting the minimum 6-hour stagnation time required for LCR sample collection.¹

¹ EPA Memorandum 2/29/2016: Clarification of Recommended Tap Sampling Procedures for Purposes of the Lead and Copper Rule

Revised Total Coliform Rule (RTCR)

- Implementation Date – April 1, 2016
- Total Coliform (TC) Sample Siting Plans required for all systems
- TC Maximum Contaminant Level (MCL) violation goes away
- Expect minimal impact to municipal water systems
- Still needs to be adopted into the New York State Sanitary Code, Subpart 5-1
RTCR TC Sample Siting Plan

• Ensure your system has a TC Sample Siting Plan

• Most systems will transition on their Total Coliform Rule (TCR) Sample Siting Plan

• Routine monitoring as outlined in Table 11, Subpart 5-1 will remain the same
RTCR TC Sample Siting Plan

- Repeat samples following a TC+ are reduced (four required under TCR, only three required under RTCR)
- Sample Siting Plan must include routine locations, repeat locations, any ground water source locations
- Local Health Department (LHD) will review during next regularly scheduled sanitary survey
RTCR Level 1 Assessments

- No more TC Maximum Contaminant Level (MCL) violation
- Level 1 Assessment triggered if > 5.0% of routine TC samples are positive or PWS fails to take every required repeat sample after any single TC positive sample
- Level 1 Assessment is self assessment by PWS, form available on the DOH website: http://www.health.ny.gov/forms/doh-5197.pdf
- Any defects must be identified and addressed
- PWS has 30 days to complete the assessment and submit to the LHD
RTCR Level 2 Assessments

- Level 2 Assessment triggered by *E. coli* MCL violation or two Level 1 Assessments triggered in a 12 month period
- Level 2 Assessment will be performed by the State or the LHD
- Similar in scope to a sanitary survey
- Any defects must be identified and addressed
**RTCR Additional Information**


- Will be added to Subpart 5-1 in the future

- Upcoming EPA Webinar – April 28th [https://attendee.gotowebinar.com/register/9197688918029994241](https://attendee.gotowebinar.com/register/9197688918029994241)
LT2 Reminder

Second Round of Source Water Monitoring to Begin:

Schedule 3 Systems – October 2016
Schedule 4 Systems – October 2017
LT2 Requirements

• Monitoring requirements are the same as the first round of monitoring.

• Grandfathering of data is not allowed for the second round of monitoring.

• All required submittals should be sent to your LHD (sampling plan, sample results, bin classification)
Cyber Security

“Critical Infrastructure Incidents Increased in 2015…”

- Hackers are finding ways to get into Industrial Control Systems (aka SCADA Systems in the Water Sector) AND MAKE CHANGES!

- Ransom Ware attacks are Increasing
Cyber Security – What to Do?

• Common Sense:
  o Limit Users, Maintain Firewalls; Do Security Software Updates, Patches and Fixes When They Become Available

• Review Water ISAC Updates for Cyber-Related Items

• Become Familiar with US DHS’s ICS – CERT (Cyber-Security Emergency Response Team)

• Consider Running ICS – CERT’s Cyber Security Evaluation Tool (CSET)

• Attend US DHS Webinar: Cybersecurity in the Lifeline Sectors: May 5, 2016
Monthly Operation Reports (MORs)

Reminder…..

Submit your MORs by the 10th calendar day of the month following the reporting period.
Funding Updates/Opportunities
Drinking Water Infrastructure Funding - UPDATE

Drinking Water State Revolving Fund
- FFY 15- Provided $433 million in financings including $9 million in Grants
- FFY 16 IUP-Changed Hardship Criteria- See Section 7 of IUP
- Subsidized interest rate funding line (80 Points)
- Hardship Evaluation Eligibility line (130 Points)

https://www.health.ny.gov/environmental/water/drinking/water.htm

New York State Water Infrastructure Improvement Act
- Total $400 million over 3 SFYs for drinking water and waste water projects
- Provided $50 million in Grants for drinking water and wastewater projects
  2015/16 SFY ($20 million for 12 Drinking Water Projects)
- Anticipate $175 million for each SFY 2016/2017 & 2017/2018
- Split for drinking water vs. waste water to be determined
- See WWW.efc.ny.gov/nyswatergrants
Drinking Water Fluoridation Grants Program

• DOH is completing review of applications for 2015 – 2016 round
• Awards will be announced in the near future
• A second round of funding for 2016-2017 will be made available
• Request for Applications will be posted to the Grants Gateway shortly
Special Projects
Harmful Algal Blooms (HABs)

- Staff served on regional and national HAB workgroups and as reviewers on EPA’s publication, *Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water*

- EPA selected a water supply in Western NY to create a Model Cyanotoxin Management Plan

- Coordination with DEC’s HAB surveillance and public notification efforts

- Stand prepared to conduct microcystin analysis at water systems impacted by HABs
2016 DOH Activities
• Education & Outreach Booth at the Empire State Plaza, sponsored by the Water and Wastewater Education & Outreach Committee
• Postings on the DOH Website & Social Media sites
• Local Tap Water Taste Contest
The 30th Annual Tap Water Taste Contest is a fun way to raise awareness on the importance and the value of our drinking water.

- The public tastes tap water samples from around New York State and votes for the best tasting water.

- Water systems compete April - August at local and regional events, culminating with the final competition at the State Fair in Syracuse on September 2, 2016.
The contest is sponsored by the Water & Wastewater Education and Outreach Committee and DOH.
Tap Water Taste Contest – Dates

• Local contest dates are still being finalized
• Dates for the regional contests and final competition are listed below

<table>
<thead>
<tr>
<th>REGIONAL CONTESTS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7/22/16</td>
<td>Northern</td>
<td>Ironman Lake Placid Expo</td>
</tr>
<tr>
<td>August</td>
<td>Central</td>
<td>Rosamond Gifford Zoo - Syracuse</td>
</tr>
<tr>
<td>August</td>
<td>Capital</td>
<td>Alive at 5 - Albany</td>
</tr>
<tr>
<td>August</td>
<td>Metro</td>
<td>American Museum of Natural History 81st Entrance - NYC</td>
</tr>
<tr>
<td>8/6/16</td>
<td>Western</td>
<td>Park Ave Summer Art Festival Rochester NY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STATE CONTEST</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9/2/16</td>
<td>State Finals</td>
<td>NY State Fairgrounds – Syracuse NY</td>
</tr>
</tbody>
</table>
Concluding Remarks
Bureau of Water Supply Staffing Change

Jane Thapa, P.E. has been promoted to Section Chief of the Professional Certification Section
Congratulations!

Partnership for Safe Water Award

**Directors Award**

Being presented to the Metropolitan Water Board of Onondaga County – Metropolitan Water Board of Onondaga County Water Treatment Plant

*The Directors Award is achieved by completing a comprehensive self-assessment of water treatment plant or distribution system operation.*

To be presented in June at this year's ACE16 conference in Chicago
Thank You

Questions?

New York State Department of Health
Bureau of Water Supply Protection
Empire State Plaza – Corning Tower Room 1110
Albany, NY 12237
(518) 402-7650; Fax: (518) 402-7599
bpwsp@health.ny.gov