

DDAGW Update

One Water Conference

April 2, 2019

Beth Messer, Assistant Chief

Division of Drinking and Ground Waters

Overview

- Program Update
 - Disruption of Service
 - Lead and Copper
 - Asset Management
 - Laboratory Reporting
 - Rule revision updates
 - Manganese
 - D/DBP
 - Other items
- USEPA Legislation - AWIA
- Future Priorities

Agency Changes

- New Director
 - Laurie Stevenson
 - OCAPP background
- Priorities = Lake Erie and Children’s Welfare
- H2Ohio
- Emerging Contaminant Section



Image courtesy of the Capital Square Review and Advisory Board

Disruption of Service Rules

- Effective 11/1/18
- Disruption of service defined as inability to maintain a minimum pressure of 20 psig
- Splits disruption of service into 4 types
- Spells out actions for each type

Disruption of Service Rules

- Type 1 and 2 do not require:
 - Reporting to Ohio EPA
 - A boil advisory; or
 - Total coliform sampling
- Any type 1 or 2 repair not meeting the repair criteria is elevated to the next type



Disruption of Service Rules

- Type 3 and 4 require:
 - Issuance of a boil advisory
 - Chlorine and bacteria testing after fixing the issue
 - Disruptions impacting > 100 service connections or 10% of the customers whichever is least must be reported to the agency by phone
 - All Type 3 or 4 disruptions require the submission of an after action report using the online reporting tool

Disruption of Service

- # of after hours calls has reduced
- The online reporting tool has been modified for **After Action Reporting.**
- Use of the tool required for Type 3 and 4 disruptions



Guideline for Water Line Repairs and Replacements in Areas with Lead Service Lines

- For types 2, 3 and 4 the rule addresses repairs and replacements in areas with known or likely to contain lead service line
- Agency worked with a sub-group of Ohio AWWWA on guidance (PWS-06-001)
- Focuses on simultaneous compliance with notification requirements of the Disruption of Service and Lead & Copper rules



Guidelines for Water Line Repairs and Replacements in Areas with Lead Service Lines

PWS-06-001
Division of Drinking and Ground Waters
Issued: November 1, 2018

Lead and Copper

Treatment Unit Filter Requirements

- Must offer filters for main replacements in the areas of lead service lines or on partial lead service line replacements is effective on 10/1/18.
- If you do full LSL replacement, no filters are required.
- Keep good records – need them for maps and future lead monitoring and filter provision requirements.

Lead and Copper

- Reorganizing website
- Developing Optimal Corrosion Control Team



Lead and Copper – WIIN Act

- Water Infrastructure Improvements for the Nation Act (WIIN Act) Grant

Programs:

- Addresses, supports and improves America's drinking water infrastructure.
- Includes three new drinking water grants that promote public health and the protection of the environment
- The budget for Fiscal Year 2018 includes appropriations in the Congressional Budget.

Lead and Copper – WIIIN Act

- WIIIN Act – Section 2107: Lead Testing in School and Child Care Program Drinking Water
 - USEPA allocated \$20 million dollars for testing only for lead in schools and daycares
 - Non-competitive grant
 - ODH taking the lead
 - Focusing on day cares since Ohio had the School Lead Fixture grant program during the last 2 years.
 - All 50 states applied
 - State allocations late March 2019
 - May 20, 2019 State Workplans due

Federal Lead and Copper Rule

- Due in 2018
- Health Based drinking water number
- Requirements for school lead testing?
- 2019?



Asset Management Implementation

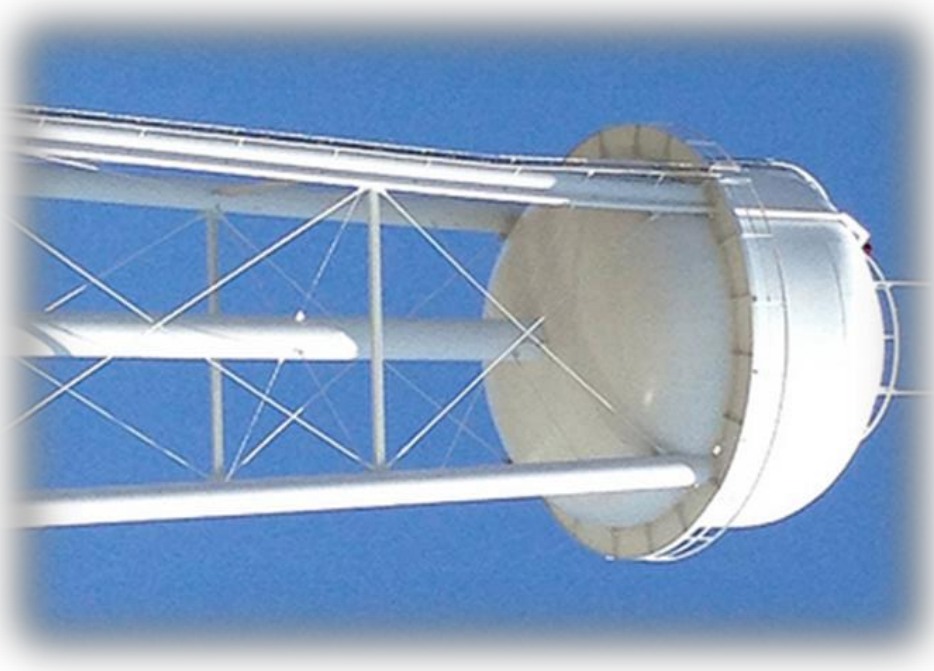
- Do NOT submit written documentation of your asset management program to Ohio EPA unless requested but maintain onsite
- Make sure your contingency plans and valve exercising programs are documented and up to date
- Sanitary survey questions added
- Capability screening is initial AMP review tool

Implementation Tools

- Guidance available for small systems, larger system guidance will be released soon, expectations will vary based on system type and complexity
- Templates available for very small systems
- Asset Management Webpage: <http://epa.ohio.gov/ddagw/pws.aspx#113435168-asset-management>

Funding for Asset Management

- Planning loans are available
 - Terms of 5 years at 0% interest
 - Application accepted at any time



Laboratory Analysis and Reporting Rules

- Changes to Ohio Administrative Code Rule 3745-89-08 became effective May 1, 2018
- Previous version required different reporting deadlines for chemical and microbiological results.
- Revised rule synchronizes reporting deadlines
- Lots of outreach to notify labs in 2018

OAC 3745-89-08 Revisions

Analysis

- Complete analysis (including QC) within 30 business days of receipt of sample
- 60 business days for radiologicals

OAC 3745-89-08 Revisions

Reporting

- All chem and micro reported by the 10th day following completion of analysis (including QC) unless next business day requirement
- New next business day requirement;
 - Detections of microcystins in raw water
 - All Pb & Cu results
 - Seasonal startup total coliform results

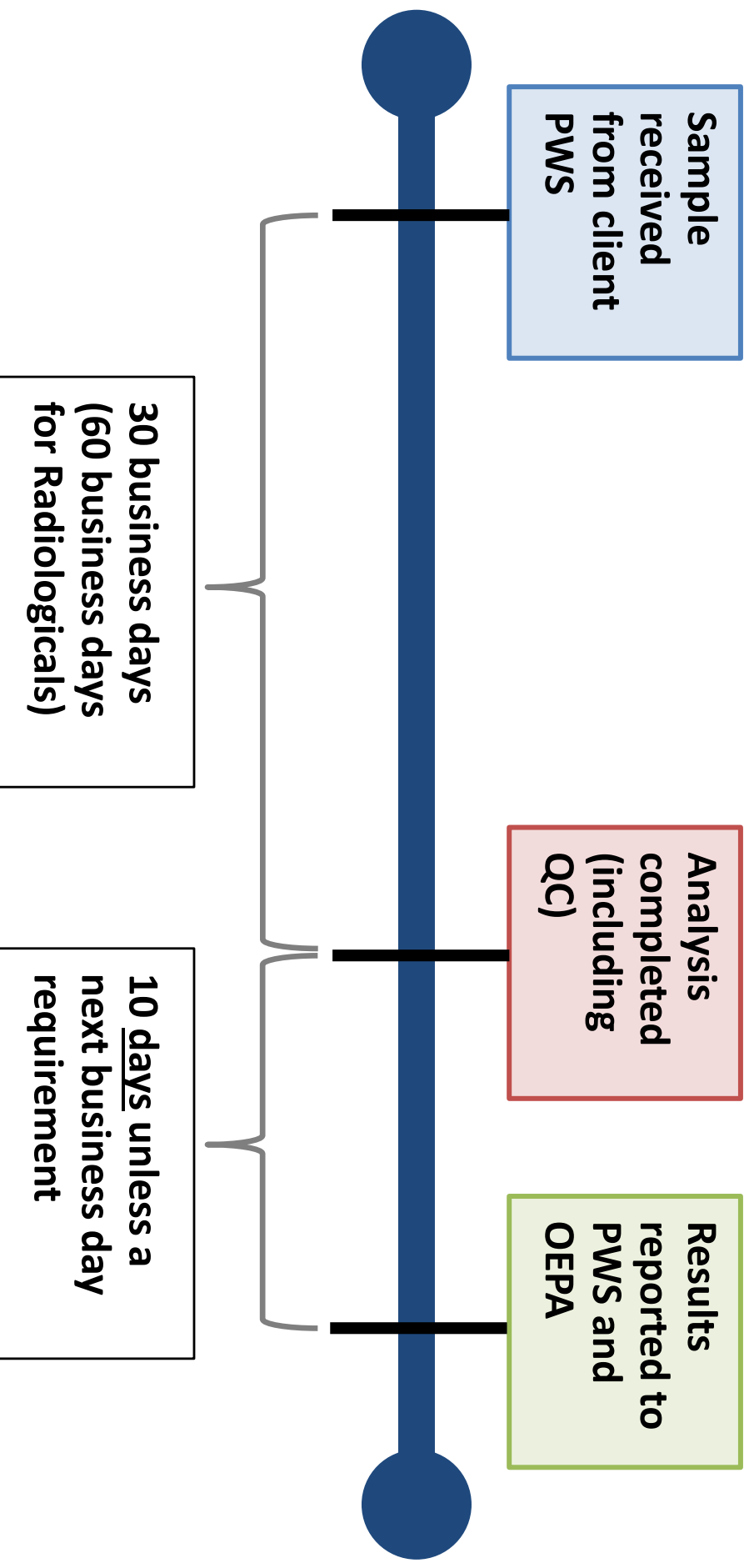
Results Required Next Business Day

Analyte/Result	New or Existing Requirement
Positive total coliform result	Existing
Positive Escherichia coli result	Existing
Repeat total coliform result	Existing
Repeat Escherichia coli result	Existing
<u>Seasonal startup microbiological result</u>	<u>New</u>
Maximum contaminant level exceedance (all analytes)	Existing
Resample to confirm MCL	Existing
Detection of total microcystins in finished water	Existing
<u>Detection of total microcystins in raw water</u>	<u>New</u>
Detection of cylindrospermopsin gene	Existing
Detection of saxitoxin gene	Existing
Detection of anatoxin-a gene	Existing
<u>All lead tap water results</u>	<u>New</u>
All copper tap water results	New

Exceptions

- Monthly Operating Reports (MORs)
 - Unchanged
 - Due 10 days after the end of each month (OAC 3745-81-75)
- Water Quality Parameters
 - Updated with lead and copper rules (OAC 3745-81-90)
 - Due 10 days after the month when sample results were received by PWS.

Analysis and Reporting Timeline



General Reporting Tips

- Reporting tips document
- Reporting SOP for staff absences
- Ohio EPA review of COC and SOP
- Call Ohio EPA with questions
- Complete info from PWS client
- “When in doubt report it out”

Web Resources

- DDAGW Public Water System page
 - <http://www.epa.state.oh.us/ddagw/pws>
 - PWS Monitoring Schedules
 - Apparent Violations
 - Program contacts
 - Current Advisories
 - Drinking Water Watch

Web Resources

- eMessage Subscriptions
 - <https://www.epa.ohio.gov/ddagw/listserv.aspx>
- Ohio EPA YouTube Page
 - <https://www.youtube.com/user/PIC1049>

Manganese

- Second Early Stakeholder Outreach
- Clarifying acceptable treatment and assuring we are covering schools and daycares with sensitive populations
- UCMR 4 Monitoring

Disinfection Byproducts

- TTHM/HAA5 MCL exceedances are the most common health based violation
- Ohio has approximately 300 consecutive PWS
- 25% of consecutive PWS have experienced DBP MCL exceedances
- Consecutive PWS often have little control over the treatment of their water

Disinfection Byproducts Possible Rule Revisions

- Step-by-step approach to determine whether or not water leaving the wholesaler is high in DBPs
- Consecutive systems triggered into sampling at master meter(s) based on OEL exceedances
- If individual results > MCL, wholesaler triggered into sampling at same master meter(s)
- Joint OEL required if either PWS has individual DBPs > MCL
- Wholesaler monitoring locations become additional compliance locations if LRAA > MCL

Operational Evaluation Reports

- Evaluate treatment and distribution
- Operational practices
- Storage tank operations
- Excess storage capacity
- System flushing
- Changes in source water/quality
- Treatment changes
- Actions PWS will take and when

2018 Operator Workforce Summit

- Summit convened in September 2018
 - Identified existing opportunities to assist in obtaining or developing certified operators
 - Identified ideas for:
 - Marketing the profession
 - Educational opportunities
 - Succession planning
 - Training
 - Shared services
 - Final Report under career information tab on Opccert Website

Consumer Confidence Reports

- DDAGW has lots of resources available on our CCR web page to help PWS comply:
- <https://www.epa.state.oh.us/ddagw/pws#113432740-consumer-confidence-reports>
- Tools were added for calculating contaminant levels for the table on our website
- Detections found during the 2018 UCMR sampling should be listed in a separate table in the CCR
- DDAGW CCR staff will provide draft reviews of CCRs if the drafts are submitted no later than May 15th. Draft CCRs can be submitted at CCR@epa.ohio.gov.

Water Quality Table 2016

Contaminant	Date	Unit	MCL	MCLG	Detected	Detected	Violation	Typical Source of contaminants
Inorganic Contaminants								
Barium	2016	ppm	2	2	0.02	0.02	no	Discharge of drilling wastes, Discharge from metal refineries, erosion of natural deposits
Fluoride	2016	ppm	4	4	1.29	0.84-1.29	no	Erosion of natural resources, additive which promotes strong teeth
Nitrates	2016	ppm	10	10	0.67	0.10-0.98	no	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits

Microbiological									
Turbidity	2016	NTU	100%	<0.3	NTU	0.16 & 100%	0.06-0.16	no	soil runoff
Total Organic Carbon (TOC)	2016	none	N/A	TT removal > 1.0	1.08	1.0-1.76	no	no	normally present in environment
Total Coliform	2016	% positive	5%	0	0%	0	no	no	Bacteria Present in environment

Residual Disinfectant									
Total Chlorine	2016	ppm	4.0 (MRDL)	4.0 (MRDLG)	1.54	1.11-1.76	no	no	water additive used to control microbes

Volatile Organic Contaminants									
Total Trihalomethanes	2016	ppb	80	N/A	46	14.5-72.7	no	no	byproduct of drinking water chlorination
Halocetic Acids	2016	ppb	60	N/A	24.2	6.7-49.4	no	no	byproduct of drinking water chlorination

Lead and Copper								
Lead (ppb)	15 ppb	Action level (AL)	Individual Results over the AL	90% of test results were less than	Violation	Year Sampled	Typical Source of Contaminants	
	1.3 ppm				NO	2015	Corrosion of household plumbing fixtures, erosion of natural deposits	
	0 out of 30 samples were found to have levels in excess of the lead action level of 1.3 ppm				NO	2015	Corrosion of household plumbing fixtures, erosion of natural deposits	

Microcystins								
Microcystins	2016		0.3 Children under 6 years 1.6 anyone 6 or older		NO	no	no	Toxins produced by harmful algal blooms

Radioactive Substances (PCT/L)								
Gross Alpha	2015	pCi/L	15	0	ND	N/A	no	Erosion of natural deposits
Radium 228	2015	pCi/L	15	0	ND	N/A	no	Erosion of natural deposits

How to read the water quality table: the EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to regulatory limits. Substances not detected are not included in the table

Table of Detected Contaminants

- Only include detections
- Must include chlorine
- Include most recent detections from 3, 6 or 9 year sample schedules
- SW and their satellite systems must include turbidity
- For lead and copper include the number of samples over the AL out of the total number of samples AND list all individual results above the AL



Common CCR Mistakes

- Reporting the highest copper or lead result instead of the calculated 90th percentile
- Using the wrong units for a contaminant and the MCL/ MCLG (must use “CCR units”)
- Missing detected contaminants (Barium, chlorine)
- Failing to provide a number to call to receive a paper copy of the CCR on the water bill
- Missing the source water susceptibility determination/how to get a copy of the report

AWIA (U.S. EPA Legislation)

- These are all federal requirements that US EPA will implement. Timeframe unknown.
- CCRs
 - electronic delivery,
 - 2x/yr for facilities serving >10,000
 - Possible changes to report
 - Info on corrosion control will be required
- Involuntary consolidation or sale
 - US EPA given authority to require consolidation or sale of non compliant systems

AWIA (U.S. EPA Legislation)

- Risk Assessment and Emergency Response Plans
 - Federal Register notice 3/27/19
 - Systems certify compliance with the requirements to US EPA
 - Additional guidance prior to 8/1/19
 - Staggered deadlines based on facility size

Future Activities

- Rule Implementation
- Finding Efficiencies
 - Electronic Plans
- Integration of Asset Management
 - More resilient and sustainable systems
 - Role Source Water Protection
- Assists with emerging contaminant challenges

Questions?

Beth Messer, Assistant Chief

Division of Drinking and Ground Waters

614-644-2752

beth.messer@epa.ohio.gov

<http://epa.ohio.gov/ddagw/>