National Drinking Water Advisory Council Public Meeting

December 2, 2020, 1 - 5 p.m. Eastern Time

If you need online technical assistance: Send an email with "NDWAC Meeting" in the email subject line to:

<u>audio-teleconf@epa.gov</u>



Support for the Water Sector during the COVID-19 Pandemic

National Drinking Water Advisory Council | December 2, 2020
Anita Maria Thompkins, Director
Drinking Water Protection Division



COVID-19 Activities

- Water Services
- Partnerships
- Support for Tribes
- Pivots
- Support Actions



Water is Critical for Public Health



Ensuring that water services are fully operational is important to containing COVID-19 and protecting Americans.

Our critical water infrastructure and its operators ensure the safe supply of water to our homes, hospitals, and schools.

Handwashing and cleaning depend on safe and reliable drinking water and effective treatment of wastewater.

EPA supports measures such as discontinuing service cut-offs and restoring service to ensure continued access to water during the COVID-19 pandemic.



Partnerships

Regular engagement with water sector stakeholders

- ASDWA
- RCAP
- AWWA
- NRWA
- Utilities & WARNs
- Environmental Finance Centers
- Federal
- State







Support for Tribes

- Working with the Regions to identify and address concerns for tribal water systems, including those with direct implementation responsibilities.
- Connecting through the Tribal Infrastructure Task Force (ITF) members to identify available federal resources, information and programs to support tribal water systems.
- Supporting efforts for delivery of bulk water for sanitation in Navajo communities without access.





COVID-19 Pivots

- Changed "in-person" activities to virtual
 - Virtual Site Visits
 - Virtual Training and Technical Assistance
- Provided "Existing Flexibilities Under SDWA" FAQs
- Extended deadlines (E.g., applications for WIIN grants)
- Organized virtual public hearings for UIC permits

EPA Support for the Water Sector



Resources and tools to support the operational needs of water utilities, including maintaining adequate staffing and laboratory capacity.

Resources to support the financial resiliency of drinking water and wastewater utilities. EPA provides funding and financing information and tools, including a financial impact tool to help water utilities assess the financial impact of COVID-19 on operations.

EPA is working with federal, state, and local partners to develop new and emerging wastewater monitoring technologies that can provide an early indication of COVID-19 infections at the community-level to help inform state and local public health decisions.

EPA Guidance – Maintaining or Restoring Water Quality in Buildings with Low or No Use



Checklist for reopening

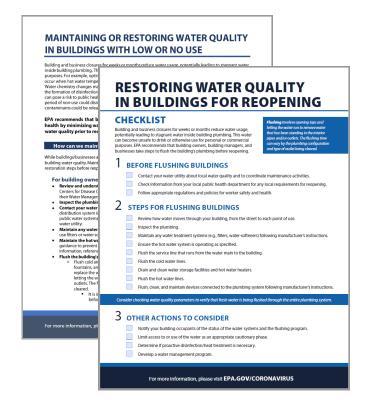
Steps to maintain water quality while closed

Steps for reopening buildings

Audience: building owners, managers, occupants

E.g., Schools

Actions in coordination with local water utility and using information from local health departments





National Drinking Water Advisory Council Public Meeting

December 2, 2020, 1 - 5 p.m. Eastern Time

If you need online technical assistance: Send an email with "NDWAC Meeting" in the email subject line to:

<u>audio-teleconf@epa.gov</u>









Overview of EPA Pandemic Actions



-1000

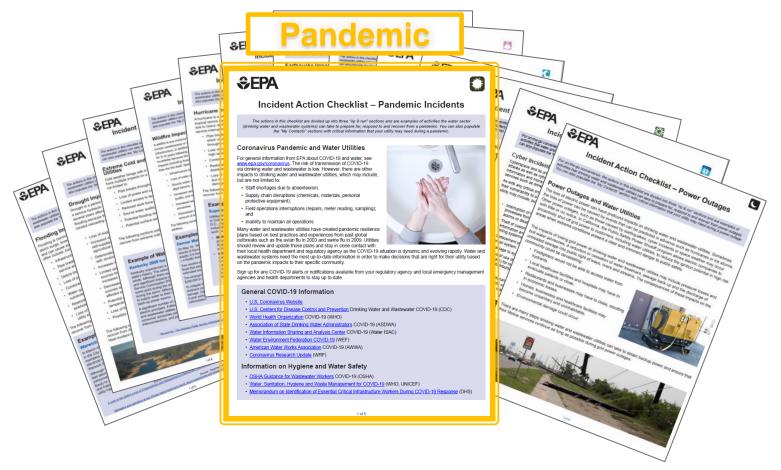
- 1. Pandemic Incident Action Checklist
 - Get actionable information quickly into the hands of water utilities
- 2. Essential Workforce Access
 - Make sure utility workers can keep water systems running
- 3. Water Sector Supply Chain Issues
 - Analyze and remedy systemic supply chain gaps
- 4. Workforce Protection
 - Work with Federal, state and water sector partners on protective equipment for water sector critical infrastructure workers
- 5. COVID-19 Water Sector Survey
 - Identify the operational and financial challenges facing the water sector to help ensure sustained operations and public health protection
- 6. Other Ongoing COVID-19 Efforts





1. Incident Action Checklists Overview

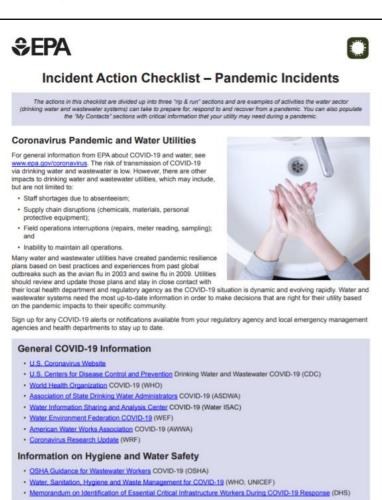
Drought, Earthquake, Extreme Cold and Winter Storms, Extreme Heat, Flooding, Hurricane, Tornado, Tsunami, Volcanic Activity, Wildfire, Cyber, HABs, Power Outages





1. Pandemic Incident Action Checklist

- Provides water utilities with actions to:
 - Plan for a pandemic
 - Protect worker health and safety
 - Maintain essential operations
 - Maintain essential facilities, equipment, and supplies
 - Communicate with key partners





2. Essential Workforce Access

- Issues
 - Denied access to facilities; supply trucks stopped at state borders; water systems not prioritized for supplies

- DHS Guidance on the Essential Critical Infrastructure Workforce
 - Issued to state, local, tribal, and territorial jurisdictions and the private sector
 - Defined and listed essential critical infrastructure workers, including the water sector
- EPA Actions
 - Ensured the guidance included water sector workers
 - Relayed the guidance to water sector and response partners
 - Sent letter from EPA Administrator Wheeler to State Governors and Tribal Leaders on the importance for the water sector
 - Published fillable Access Template



3. Water Sector Supply Chain Issues

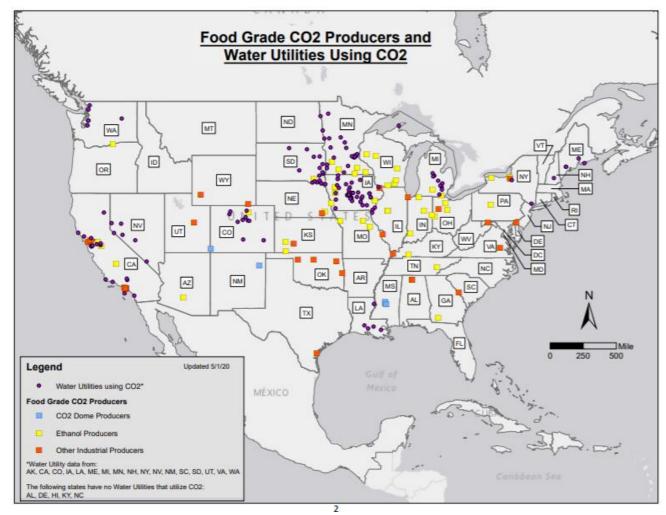
- Carbon dioxide (CO2)
 - Reduction in ethanol production
 - Surcharges
- Oxygen (O2)
- Biosolids (transportation/access)
- Construction materials
- Personal Protective Equipment (PPE)





3. Water Sector Supply Chain Issues

Food Grade CO₂ Suppliers and Producers



1000 000000

Available:

https://www.epa.gov/sites/production/files/2020-05/documents/co2_map_050120.pdf



3. Water Sector Supply Chain Issues

- Defense Production Act
- Safe Drinking Water Act, Section 1441

Assurance of Availability of Adequate Supplies of Chemicals Necessary for Treatment of Water

- 10 to 10 t

(a) If any person who uses chlorine ... or other <u>chemical or substance for the purpose of treating water</u> in any <u>public water system or in any public treatment works</u> determines that the amount of such chemical or substance necessary to effectively treat such water is <u>not reasonably available</u> to him or will not be so available to him when required for the effective treatment of such water, such person may apply to the Administrator for a certification (hereinafter in this section referred to as a "<u>certification of need</u>") ...

SDWA §1441(a). Underline added.





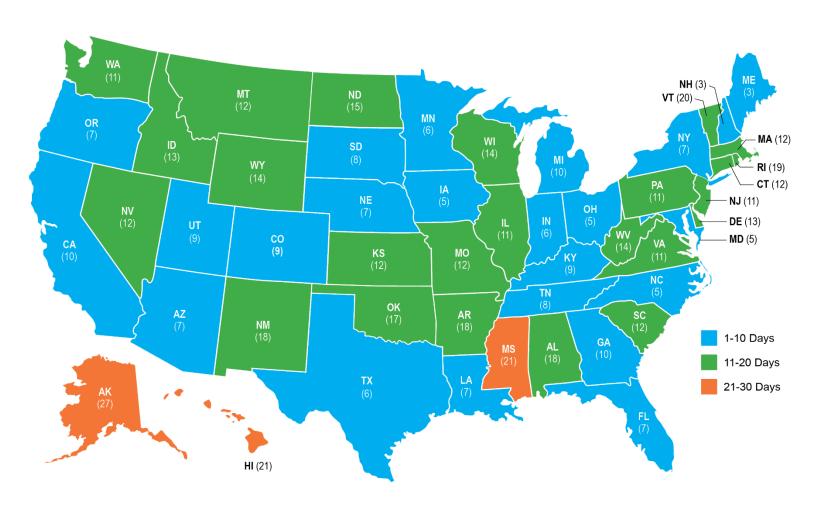


- PPE
 - Convened a workgroup with associations to develop a list of PPE used by the sector, current inventories, burn rates, and depletion time horizons
- Cloth Masks
 - April 15, 2020 request from DHS offering cloth masks based on the PPE list submitted
 - As of Friday, May 15, 2020, EPA submitted requests for 3,446,500 cloth masks to utilities in 50 states, DC, Puerto Rico, Guam and the Navajo Nation
 - All masks have been received except the Guam shipment, which never arrived
 - Huge success for the water sector and all those involved:
 EPA, FEMA, Hanes, the USPS, water sector associations, states, WARNs, and water utility Points of Distribution



Total Office of the State of th

Time of Request to Initial Delivery of Cloth Masks to States (Days)





5. COVID-19 Water Sector Survey



- Voluntary survey administered under an approved Emergency Information Collection Request (ICR)
- Objective: Learn how drinking water and wastewater utilities across the country have been affected, both operationally and financially, by COVID-19
- Target Audience: Community water systems and publiclyowned wastewater treatment facilities of all sizes, including tribal utilities
- Release: EPA began administering the survey October 1, 2020
- Results: EPA will use the data to guide development of technical assistance and will publish aggregated results



6. Other Ongoing COVID-19 Efforts

- Prioritization of COVID-19 vaccine for Water Sector employees
- Supply Chain for Water Utilities
- State-focused COVID-19 Lessons Learned Workshops
 - Help prepare utilities and their response partners for possible future COVID-19 resurgence

- Three states will participate: Indiana, New York and California
- Lessons learned from each state workshop will be consolidated and shared broadly with water sector utilities nationwide



Questions?

David Travers
Director, Water Security Division
US Environmental Protection Agency

Drinking Water Protection Program Update

National Drinking Water Advisory Council | December 2, 2020
Anita Maria Thompkins, Director
Drinking Water Protection Division



DWPD's FY20 Updates

- Water Funding Updates
- Agency Priority Goals
- AWIA Updates
- Looking Ahead









System Compliance

Capacity Development
Operator Certification
Partnerships

Technical Assistance SDWA Implementation

Infrastructure
Asset Management

DWSRF Set-Asides

DWSRF
Infrastructure
Loans

PWSS Grants State Program Funding



WIIN Grant Program FY2020

epa.gov/safewater/grants



Voluntary Lead Testing in Schools and Child Care Facilities

All 50 states, DC, American Samoa, Puerto Rico & Virgin Islands

Total funding of more than \$69M

Tribal allotment of funding totaling \$4.3M

Assistance for Small and Disadvantaged Communities

State application deadline extended – June 30, 2021

Total funding for states of more than \$42M

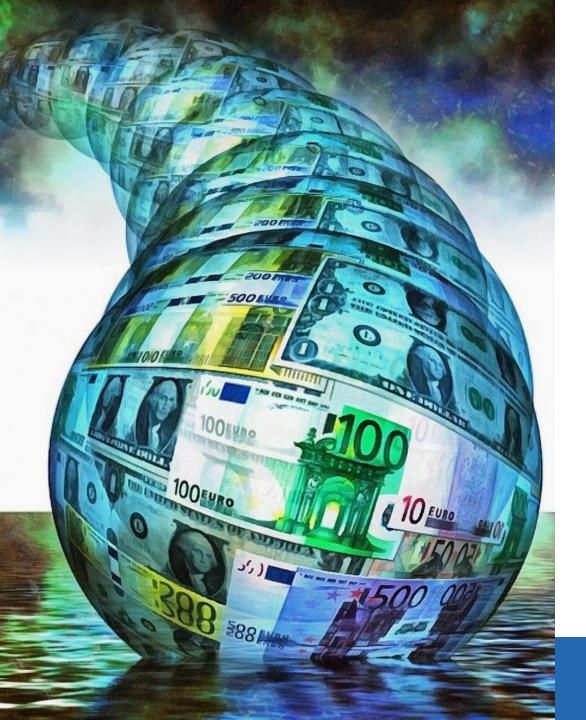
Establishing program for increasing access in tribal communities – \$20M

Reduction in Lead Exposure

\$40M funding for lead service line replacement and remediation in schools and childcares

Announced the first-ever set of selected projects on Oct. 24

Tribal allotment of \$3M



DWSRF - SFY 2020



New Record (excluding 2009 ARRA)

- \$3.6 B New Projects Funded
 - 28% Increase
 - Largest in a decade
- \$3.1 B Disbursed
 - 16% Increase
 - All-time record
- \$253 M invested in the set-asides

WIFTA and ASADRA



Additional Supplemental Appropriations for Disaster Relief Act (ASADRA)

- \approx \$300M awarded in supplemental DWSRF capitalization grants
 - 7 states and territories: AL, CA, GA, FL, NC, SC, NMI
 - Funds must be used for resiliency projects

Water Infrastructure Fund Transfer Act (WIFTA)

- \$549M moved from CWSRF to DWSRF
 - 9 states: IL, MA, MI, NJ, OH, PA, RI, VT, WI
 - Funds transferred must be used as additional subsidy in the form of principal forgiveness, negative interest loans, or grants (or any combination of these)
 - One-time authority to move funds from the CWSRF to the DWSRF
 - Funds must be used to address lead in drinking water

Source Water Protection



Recognized by the Congress through several legislative actions

2018 Farm Bill

- Represents 12%
 of funding,
 exceeding the
 10% mandate

AWIA Provisions

- Source water protection
- Communication between emergency response commissions and water systems

DWSRF Set-asides

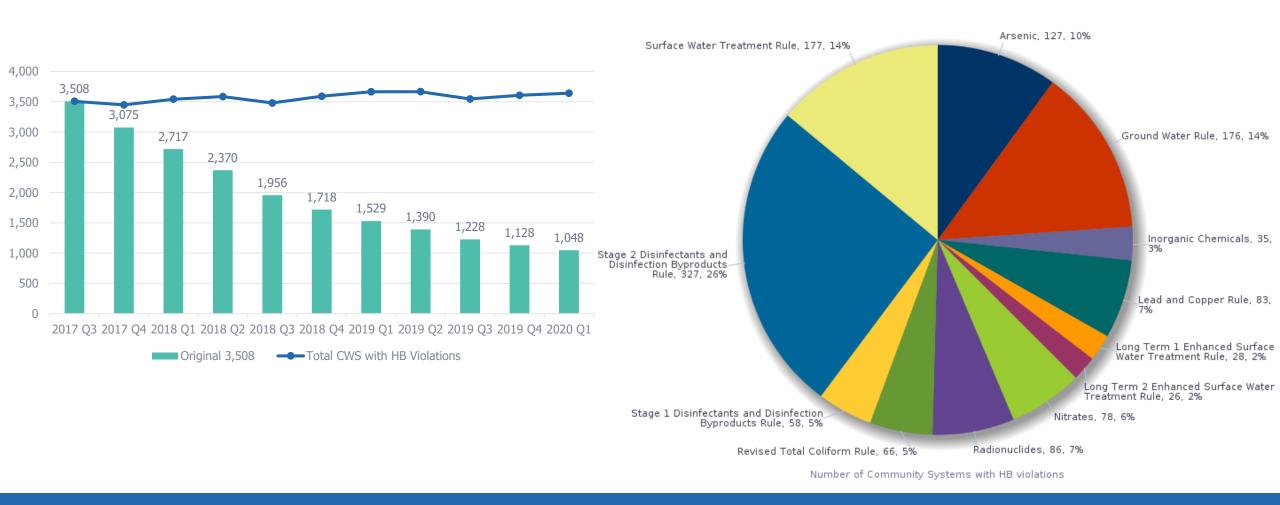
- States can fund source-water protection activities, as expanded by AWIA
- 50 states and Puerto Rico



Community Water Systems in non-compliance with health-based standards



Number of Community Systems with HB violations



UIC Class II Direct Implementation Permitting Kaizen



Average processing time

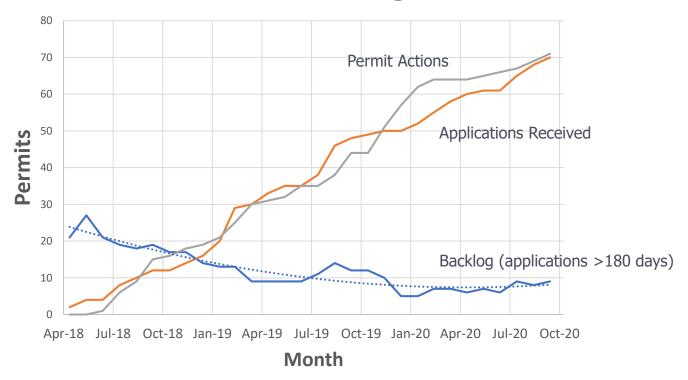
Calculation Date	Average (days)	Median (days)
Historic Avg	513	
Dec-19	170	174
Jun-20	148	139
Oct-20	170	152

The backlog declined even while new applications were steadily received.

- Standard processes
- New tools

Result: thorough, efficient review and approval process

Permit Backlog





America's Water Infrastructure Act (AWIA)



- Signed into law on October 23, 2018
- Major amendment to SDWA widest scope since 1996 Amendments
- Supports EPA's Strategic Measure goals and expands WIIN provisions
- EPA is actively implementing its provisions



Water Sector Workforce Initiative



- Announced in October 2020 <u>epa.gov/sustainable-water-infrastructure/water-sector-workforce</u>
- Three interrelated action areas planned collaborative actions in each area:
 - Action Area 1: Provide federal leadership to create national momentum and coordinate efforts
 - Action Area 2: Partner to build the water workforce of the future
 - Action Area 3: Bolster education and outreach to make water a career of choice



Looking Ahead



- Drinking Water Infrastructure Needs Survey
- Implementation Lead and Copper Rule Revisions
- Water System Restructuring Assessment Rule
- Evidence-Based Policymaking Act of 2018
 - Under the Evidence Act, Congress directed all federal agencies to build and use evidence to improve policy, program, operational, budget and management decision-making.

National Drinking Water Advisory Council Public Meeting

December 2, 2020, 1 - 5 p.m. Eastern Time

If you need online technical assistance: Send an email with "NDWAC Meeting" in the email subject line to:

<u>audio-teleconf@epa.gov</u>





Standards and Risk Management Division Update

National Drinking Water Advisory Council



December 2, 2020

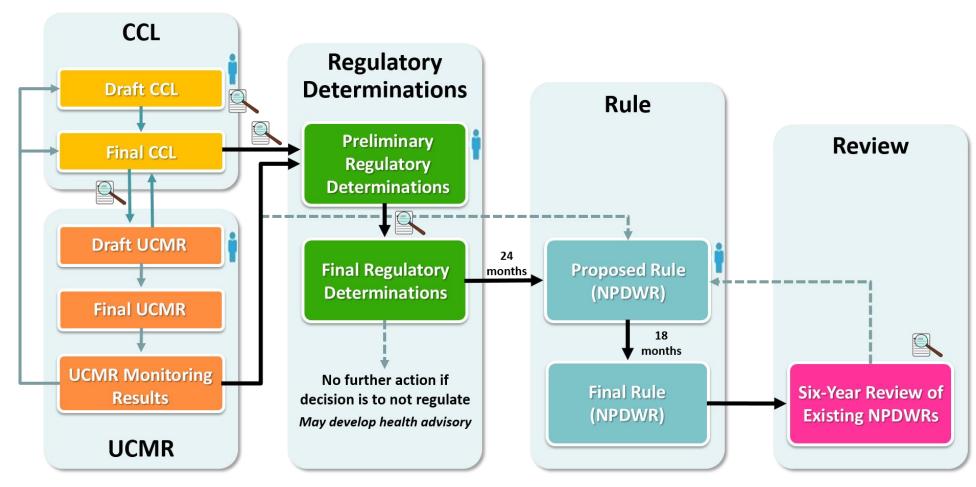


Eric Burneson
Director

Standards and Risk Management Division Office of Ground Water and Drinking Water



SDWA-Process for developing drinking water standards





Contaminant Candidate List (CCL)

- Published Final Fourth CCL (CCL 4) November 2016
 - Lists 97 chemicals or chemical groups and 12 microbial contaminants
 - CCL 4 info at- http://www2.epa.gov/cct/draft-contaminant-candidate-list-4-ccl-4
- Development of Fifth CCL (CCL 5)
 - Published Federal Register Notice requesting public nominations for contaminants for the EPA to consider including on CCL 5.
 - Comment period closed December 4, 2018
 - Received 28 comment letters
 - 42 chemical contaminants/groups nominated and 18 microbial contaminants
 - Plan to publish Draft CCL 5 in FR for public comment in early 2021



Unregulated Contaminant Monitoring Rule (UCMR 4)

- EPA is engaging with states, public water systems, and laboratories to collect and report the UCMR 4 (2018 -2020) data.
- Reporting concludes 2021.
- Data are posted to the web quarterly (https://www.epa.gov/dwucmr/ occurrence-data-unregulatedcontaminant-monitoring-rule).





Unregulated Contaminant Monitoring Rule (UCMR 5)

- EPA held two public meetings and committed in the PFAS Action Plan to monitoring for more PFAS at lower levels.
- America's Water Infrastructure Act of 2018 (AWIA)
 - Subject to the availability of appropriations and laboratory capacity
 - All systems serving >3,300 people must monitor and
 - a representative set of systems serving <3,300
- The National Defense Authorization Act (NDAA FY 20)
 - include each PFAS with a validated drinking water method that is not subject to regulation
- EPA Methods 537.1 and 533 enable monitoring for 29 PFAS.
- EPA expects to publish a UCMR 5 proposal and invite public comment soon.



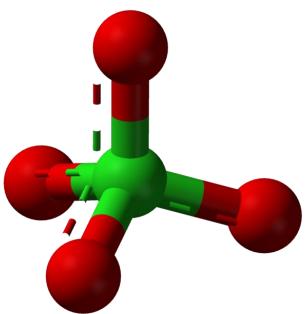
Regulatory Determinations

- EPA is currently evaluating contaminants on the CCL4 for the fourth regulatory determinations (Reg Det 4) considering whether:
 - The contaminant may have adverse effects
 - The contaminant occurs or is substantially likely to occur with frequency at levels of public health concern, and
 - There is a meaningful opportunity for health risk reduction for persons served by water systems
- On February 20, 2020, EPA published proposed regulatory determinations for eight contaminants on CCL4 for public comment:
 - To regulate PFOA and PFOS
 - To not regulate six contaminants (i.e., 1,1-dichloroethane, acetochlor, methyl bromide (bromomethane), metolachlor, nitrobenzene, and RDX)
- EPA received over 11,600 comments
- EPA expects to publish final determinations in early 2021



Perchlorate

- On July 21, 2020, EPA published a final action regarding the regulation of perchlorate under SDWA
- Perchlorate does not meet the criteria for regulation as a drinking water contaminant under the SDWA
- Considering the best available science and the proactive steps that EPA, states and public water systems have taken to reduce perchlorate levels:
 - perchlorate is not found in drinking water with a frequency and at levels of public health concern to support a meaningful opportunity for health risk reduction through a national perchlorate drinking water regulation





Lead Free Rule

- On September 1, 2020, EPA published the final rule on the Use of Lead Free Pipes, Fittings, Fixtures, Solder and Flux for Drinking Water
- Limits the lead content allowed in plumbing used in new construction and replacement of existing plumbing
- Reduces the percentage of lead content allowed in these materials from 8% to 0.25% in accordance with the Reduction of Lead in Drinking Water Act
- Requires certification of products using a consistent verification process
 - Reduces a source of lead in drinking water and
 - Assures that states, manufacturers, inspectors, and consumers have a common understanding of "Lead Free" plumbing



Proposed Lead and Copper Rule Revisions

- On November 13, 2019 EPA published proposed Revisions to the Lead and Copper Rule for public comment
- Takes a proactive and holistic approach to improving the current rule—from testing to treatment to telling the public about the levels and risks of lead in drinking water
- Requires earlier action to reduce risks and better protect families
- Includes efforts to improve transparency and communication to help protect children from lead exposure where they live, learn and play



Proposed Lead and Coppper Rule Revisions

- Key Revisions
 - 1. Identifying areas most impacted
 - 2. Strengthening treatment requirements
 - 3. Replacing lead service lines
 - 4. Increasing sampling reliability
 - 5. Improving risk communication
 - 6. Protecting children in schools
- Almost 80,000 public comments received
- Expect promulgation soon



Six-Year Review 4

- EPA is preparing for initiating analysis of contaminant occurrence and health effects data
 - October 5, 2018—EPA published Information Collection Request (ICR) for Six-Year Review 4 in a Federal Register notice
 - October 31, 2019—EPA announced submission of the ICR to OMB for review and approval in a FR notice
 - June 2020—EPA sent a data call letter to primary agencies requesting voluntary submission of contaminant occurrence data by September 30, 2020
 - To date, EPA received data submissions from 45 states,
 DC and 6 direct implementation tribal programs
 - EPA is conducting quality assurance of the extensive data collected for analysis under Six-Year Review 4
 - EPA is also evaluating new health effects data for regulated contaminants
- Six-Year Review 4 is anticipated to be completed in 2023



National Drinking Water Advisory Council Public Meeting

December 2, 2020, 1 - 5 p.m. Eastern Time

If you need online technical assistance: Send an email with "NDWAC Meeting" in the email subject line to: audio-teleconf@epa.gov



Public Engagement to Inform Potential Revisions to Microbial and Disinfection Byproduct Rules

National Drinking Water Advisory Council



Presentation Overview



- Public Engagement Process
- Overall Schedule
- Background
- Six-Year Review 3
- Oct. 14-15, 2020 Public Meeting
- Q & A

Public Engagement Process



- EPA is holding public engagement meetings.
 - An October 14-15, 2020 meeting was held to seek public input, perspectives, and information related to EPA's potential regulatory MDBP rule revisions.
- EPA will consider the data and/or information discussed at this meeting, as well as future stakeholder engagements, in its determination on whether a rulemaking to revise any MDBP regulations should be initiated.
- Public can provide written input via public docket.
 - Docket ID Number: EPA-HQ-OW-2020-0486
 - www.regulations.gov

Overall Schedule



- EPA is targeting the following deadlines:
 - Public Meetings: Fall 2020 end of 2021
 - Rule proposal or a formal decision not to propose amended rules:
 NLT July 31, 2024*

Final Agency Action: Final rule or withdraw proposal by September

30, 2027*



^{*} Source: <u>Waterkeepers Alliance, Inc. et al v. U.S. et al, EPA Settlement Agreement</u>, filed June 1, 2020 (19 Civ. 899 (LJL)).

Background



- MDBP contaminants potentially affect a large number of public water systems (PWSs) and a significant portion of the U.S. population.
 - Surface water systems serve 60% of the population.
 - 63% of PWSs are disinfecting and serve 90% of the population.
- <u>Microbial rules:</u> Protect the public from waterborne diseases caused by pathogens.
- <u>DBP rules:</u> Reduce potential risks from short- and long-term DBP exposure.
- Rules were developed based on the best available science with consideration of costs and benefits and risk/risk tradeoff.

MDBP Rule Timeline

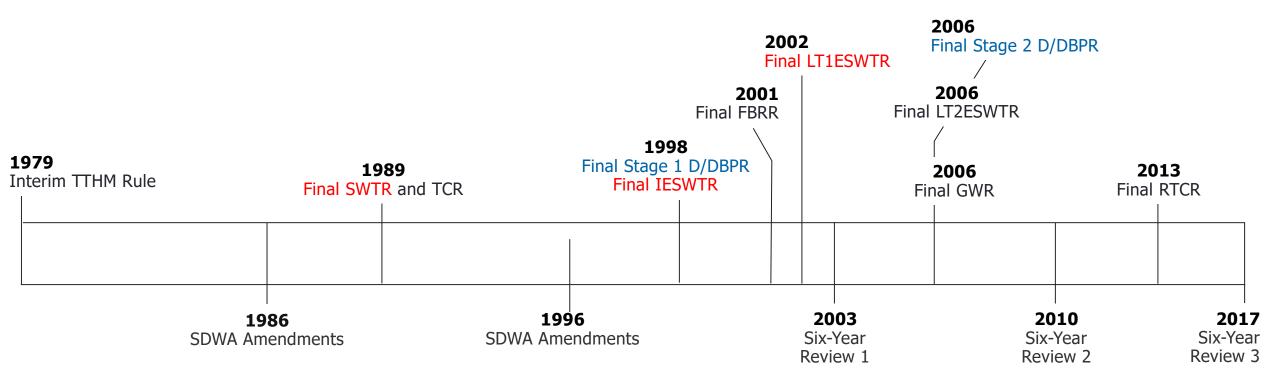


- ◆ 1979: Interim Total Trihalomethanes (TTHM) Rule
- **▶ 1989: Surface Water Treatment Rule (SWTR)**
- 1989: Total Coliform Rule (TCR)
- ◆ 1998: Interim Enhanced Surface Water Treatment Rule (IESWTR)
- ◆ 1998: Stage 1 Disinfectants and Disinfection Byproducts Rule (D/DBPR)
- ♦ 2001: Filter Backwash Recycling Rule (FBRR)
- **♦ 2002: Long Term 1 Enhanced Surface Water Treatment Rule (LT1)**
- ◆ 2006: Long Term 2 Enhanced Surface Water Treatment Rule (LT2)
- 2006: Stage 2 Disinfectants and Disinfection Byproducts Rule (D/DBPR)
- ♦ 2006: Final Ground Water Rule (GWR)
- ◆ 2013: Final Revised Total Coliform Rule (RTCR)

*Bolded text indicates rules identified under the Six-Year Review 3 as candidates for revision

MDBP Rule Timeline





DBP rules under consideration
Microbial rules under consideration

Six-Year Review 3



- The 1996 SDWA Amendments require EPA to review existing NPDWRs at least every six years and revise, if appropriate. Each revision shall maintain, or provide for greater, protection of the health of persons.
- A determination to potentially revise a regulation initiates a process that will involve more detailed analyses of health effects, analytical and treatment feasibility, occurrence, benefits, costs and other regulatory matters.
- EPA completed the Six-Year Review 3 (SYR 3) process and published the results in January 2017 (FR 82(7): 3518)
 - Assessed relevant new information up to year of 2015
 - https://www.epa.gov/dwsixyearreview/six-year-review-3-drinking-water-standards

Six-Year Review 3 Results



- EPA determined that multiple microbial-focused NPDWRs are candidates for revision:
 - Giardia lamblia, heterotrophic bacteria, Legionella, viruses, and Cryptosporidium
 - These NPDWRs fall under:
 - Surface Water Treatment Rule (SWTR)
 - Interim Enhanced SWTR (IESWTR)
 - Long-Term 1 Enhanced SWTR (LT1)
- EPA determined that multiple DBP-focused NPDWRs are candidates for revision:
 - Chlorite, five haloacetic acids (HAA5), and total trihalomethanes (TTHM)
 - These NPDWRs fall under:
 - Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1 DBPR)
 - Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR)

Six-Year Review 3 Public Comments



- Summary of public comments includes the consideration of:
 - Additional pathogen risks, especially related to Legionella, by addressing the entire water system, including the distribution system.
 - Risks from the water system as a whole, including distribution system water quality - with several commenters suggesting refining the minimal disinfectant residual requirements.
 - Viewpoints on revising DBP rules, ranging from "the scope of additional risk reduction potential through additional DBP risk management is not clear" to "revisions will offer enhanced protection from both regulated and unregulated DBPs."
 - Continued assessment of the risk/risk trade-off between microbial pathogens and DBPs in any future rule revisions.
 - Assessments of source water contamination and impacts on MDBP rules.



"Tee-up": Potential Areas for Public Discussion



Precursors

DI

Precursors, Water Age,

Temperature

SOURCE WATER: BROMIDE, ORGANIC MATTER

Organic Nutrients



Disinfection Byproducts:

HAAs, TTHMs, Bromate, Chlorite, and NDMA, Nitrosamines

 Health Outcomes: Bladder cancer, colorectal cancer, reproductive and developmental effects



Cryptosporidium

Mischaracterized GWUDI

Chlorate, TOC levels

TREATMENT

No CT Values for High pH

Precursors, Water Age, Temperature,



Giardia

DISTRIBUTION SYSTEM AND STORAGE

PREMISE PLUMBING AND CONSECUTIVE SYSTEMS

·

Opportunistic Pathogens:

Legionella, NTM (MAC), Pseudomonas aeruginosa, others

 Health Outcomes: Legionnaires' Disease, Pontiac Fever, respiratory infections, septicemia, meningitis

Amplification, Nutrients, Water Age, Temperature, Inadequate Residual

Contaminants, Nutrients, Water Age, Temperature,

DI, Inadequate Residual

OVERARCHING TOPICS

Inadequate Tools to Address Localized Hazards; Sanitary Survey; Consecutive System; Implementation Issues

Acronyms

ı	ACTORYMS				
	CT:	Disinfectant Concentration x Contact Time	HAAs:	Haloacetic Acids	
			HPC:	Heterotrophic Plate Count	
	DI:	Deteriorating Infrastructure	MAC:	Mycobacterium Avium Complex	
	GWUDI:	Ground Water Under the Direct Influence of Surface Water	NDMA:	N-Nitrosodimethylamine	
			TOC:	Total Organic Carbon	
			TTHMs:	Total Trihalomethanes	

For More Information



- Email: MDBPRevisions@epa.gov
- MDBP potential revisions website: <u>www.epa.gov/dwsixyearreview/revisions-microbial-and-disinfection-byproducts-rules</u>
- Docket ID Number: EPA-HQ-OW-2020-0486 at <u>www.regulations.gov</u>

National Drinking Water Advisory Council Public Meeting

December 2, 2020, 1 - 5 p.m. Eastern Time

If you need online technical assistance: Send an email with "NDWAC Meeting" in the email subject line to:

<u>audio-teleconf@epa.gov</u>

