

EPA Drinking Water Update

Mariana Islands Water Operator
Association Workshop
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Preview

- I. Regulatory Reviews and Upcoming Rule Changes
- II. EPA Priorities
 - A. National - Drinking Water Action Plan
 - B. Regional - Small System Action Plan
- III. ETT List

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What's New?

- Done
 - Unregulated Contaminant Monitoring Rule (UCMR) 3
- Just recently published
 - UCMR4
 - 6-Year Review Determinations
 - Contaminant Candidate List 4
- In development
 - Perchlorate Rule
 - Lead and Copper Rule Revisions

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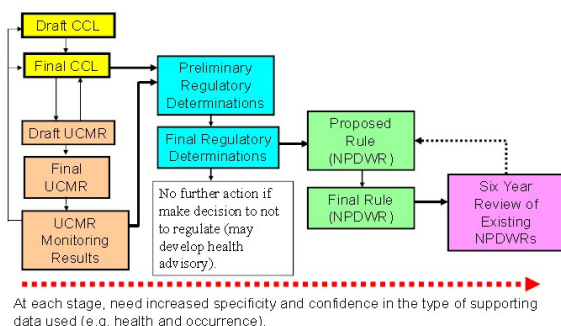
UCMR4

- Final Rule Published Dec 20, 2016
 - 81 FR 92666
 - Effective date: January 19, 2017
- Monitoring from January 2018 through December 2020
- 30 constituents
- Basically same process as UCMR 3
- Public stakeholder meeting: Washington DC, April 12, 2017

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EPA Regulatory Process



EPA Priorities in Drinking Water

Our priorities are documented:

- Drinking Water Action Plan
- Region 9 Small System Action Plan

<https://www.epa.gov/ground-water-and-drinking-water/drinking-water-action-plan>

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Drinking Water Action Plan

- "...serves as a national call to action, urging all levels of government, utilities, community organizations, and other stakeholders to work together to increase the safety and reliability of drinking water."
- Reflects input from stakeholders (listening sessions):
 - state, tribal, and local government officials; drinking water utilities; community groups; and environmental organizations



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Drinking Water Action Plan – Priority Areas

- I. Build Capacity for Infrastructure in Disadvantaged, Small, and EJ Communities
- II. Advance Next Generation Oversight for SDWA
- III. Strengthen Source Water Protection
- IV. Take Action to Address Unregulated Contaminants
- V. Improve Transparency, Public Education, and Risk Communication on Drinking Water Safety
- VI. Reduce Lead Risks through the Lead and Copper Rule



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I. Build Capacity for Infrastructure

- Applies to disadvantaged, small, and EJ communities.
- Summary of proposed actions:
 - Promote regional partnerships
 - Focus on the importance of drinking water operators
 - Taking steps for best use and management of SRF funds to help these communities.



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I. Build Capacity for Infrastructure (cont.)

- Update the Operator Certification guidelines to help modernize requirements.
 - Drinking water regulatory requirements may evolve for emerging challenges such as Legionella in premise plumbing.
- Invest in workforce development programs to recruit and train drinking water system operators of the future



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Region 9's Small System Action Plan

- Total of 4200 CWSs
 - serving 52.3 million people
- ~ 94% of those are small systems (serving ≤ 10,000 customers)
 - serving 3.8 million people
- Contaminant focus is on lead and arsenic



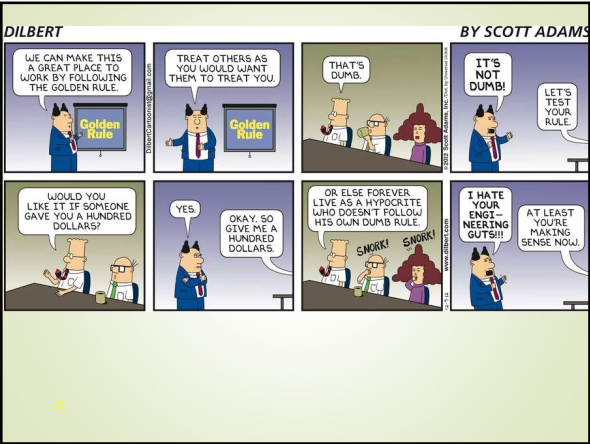
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Region 9's Small System Action Plan - Objectives

- 4 objectives:
 - I. Ensure Small Systems Comply with EPA's Arsenic Standard
 - II. Reduce Exposure to Lead in Small Systems' Drinking Water Supply
 - III. Improve Access to Safe Drinking Water in Schools
 - IV. Improve Access to Safe Drinking Water in Tribal Communities



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ETT List

PWS Type (e.g., CWS, NTNCWS, TNCWS)	PWS Population	Baseline MCL ETT Level (e.g., 0.10 TDSM)	Current January 2017 ETT	October 2016 ETT	July 2016 ETT (baseline)	April 2016 ETT	Var
CWS	60	24	23	20	19		
CWS	173	13	13	13	13		
NTNCWS	100	12	21	21	21		
CWS	175	10	10	9	10		
CWS	393	10	10	9	9		
NTNCWS	210	9	9				
TNCWS	30	9	14	14	14		
TNCWS	32	8	20	20	20		

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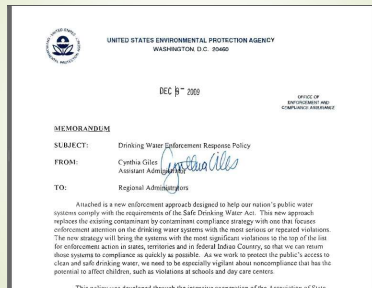
.016 ETT	Violation Type MCL (Maximum Contaminant Level)	Violation Type MR (Monitoring/Reporting)	Violation Type TT (Treatment Technique)	Violation Type MRO (Maximum Residual Disinfectant Level)	Violation Type Other	Contaminant(s) if MCL	Sp has Tier 1 viol?	Priority Sign
							N	12/31/2014
							N	12/31/2013
	MR				Other		N	3/31/2012
							N	
							N	
	MR				Other		N	

NOV	4/25/2013	y	N	41060		
NOV	4/24/2013	y	N	41388		

Type of Solution (e.g., Infrastructure new sources, consolidation of PWSs, POU, MR)	If Infrastructure is project On Track for funding plan Use Y (Y/N)	Does this water system need 3rd Party Assistance? (Y/N)	Baseline Compliance Issue (underlying problem does not need update)
		N	
		N	
		N	

Current Status (updated each qtr as needed)	Current Status Update Date (Read-Only)	County, if PWS is in a delegated county

Enforcement Response Policy (ERP) Signed on Dec. 8, 2009



https://www.epa.gov/sites/production/files/documents/drinking_water_erp_2009.pdf

ETT Score Formula

- System-based approach that prioritizes public water systems by assigning a point score based on the threat to public health.

$$\text{Sum } (S1+S2+S3 + \dots) + n$$

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The Formula, in detail

- Sum of: $(S1 + S2 + S3 \dots) + n$
- S = Severity of the violation
 - 10 points
 - For each acute health based violation
 - 5 points
 - For other health-based violations and Total Coliform Rule (TCR) repeat monitoring violation,
 - For each nitrate monitoring and reporting violation
 - 1 point
 - For each other monitoring and reporting or any other violation
- n = number of years that the system's oldest violations have been unaddressed (0-5)

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Examples of Priority PWSs per the ERP

PWS	Violations - # and Severity (S)	Years (n)	Score $(\sum S) + n$	
ABC Town	2 E. coli MCL violations.	0 (both in current year)	$(10+10)+0$	20
DEF MHP	2 Arsenic MCL violations.	1 (1 in previous year)	$(5+5) + 1$	11

Enforcement Response Policy

- "Timely" response = an appropriate formal action or return to compliance within 6 months of a PWS appearing as a **priority system**
- EPA and States may take formal enforcement actions within 6 months of a PWS appearing on the ETT list
- EPA has enforcement discretion

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How do you get off the Enforcement Radar?

- Return to Compliance
- Formal Enforcement Action(s)

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UCMR4 Analytes

- Two metals using Method 200.8
 - Germanium, manganese
- Nine pesticides using Method 525.3
- Three brominated HAA groups using Method 552.3 or 557
- Three alcohols using Method 541
- Three SVOCs using Method 530
- Seven cyanotoxins using Method 544*
- Two cyanotoxins using Method 545*
- Total microcystins using ELISA*

* Only surface water systems

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6-Year Review of Regs

- Eight are candidates for revision
 - *Cryptosporidium*, *Giardia*, viruses
 - *Legionella*
 - Heterotrophic bacteria
 - Total THMs, haloacetic acids (HAA5)
 - Chlorite
- Will also address nitrosamines, chlorate
- FR notice was published Jan. 11, 2017
 - 82 FR 3518

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Contaminant Candidate List 4

- Final CCL 4 published Nov. 17, 2016
 - 81 FR 81099
- 97 chemicals, 12 microbials
 - The leftover CCL 3 members
 - Manganese and nonylphenol
- CCL4 Regulatory Determinations workgroup will start soon

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Arsenic Risk Review

- EPA IRIS program is revising our arsenic risk assessment
- Using human data exclusively
- Bad news
 - Current 10 ug/L MCL cancer risk is 1/1000
 - Circulatory system disease risk 1/35
 - Diabetes and IQ decrement, too

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Lead & Copper Rule Long-Term Revisions

- EPA workgroup initially evaluated all aspects of the current rule
 - Got nowhere after a lot of effort
- Asked the National Drinking Water Advisory Council for help
 - Draft report recently released
- EPA Workgroup just released a white paper on key principles and approaches
 - Basically, how NDWAC ideas could be done

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NDWAC LCR Recommendations

- Focus on total removal of lead contact
 - Require proactive lead service line replacement
- Improve public education via CCR and targeted outreach
- Strengthen corrosion control
- Modify monitoring and reporting requirements
- Establish a lead Household Action Level
- Separate requirements for copper

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Region 9's Small System Action Plan - Schools

- ~ 630 small school PWSs in Region 9
 - 22 in CA and on tribal lands have Arsenic exceedances
 - 12 in AZ, CA, NV have current Lead action level exceedances (ALEs)

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