

## **Regulatory Priorities - 2012**



AMWA
2012 Water Policy Conference
March 19, 2012



Cynthia Dougherty, Director

Office of Ground Water and Drinking Water

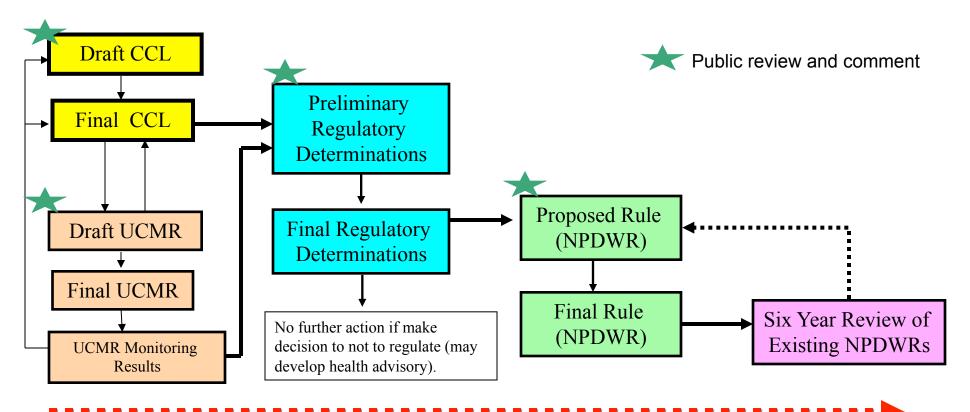
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## **Overview**

- Rules close to completion
- Retrospective Regulatory Review
- Other Actions and Initiatives

## **General Flow of SDWA Regulatory Processes**



At each stage, need increased specificity and confidence in the type of supporting data used (e.g. health, occurrence, treatment).



## **Rules Close to Completion**

 Unregulated Contaminant Monitoring Rule 3 ~ Spring 2012

• Revised Total Coliform Rule - 2012



## **UCMR 2: Final Results**

- Monitoring Jan. 2008 Dec. 2010; reporting concluded 2011, final data posted to web Feb 2012
- 25 contaminants, including brominated flame retardants; nitrosamines; explosives; insecticides, pesticides, degradates
- Results are posted on the Web (NCOD) at:
   <a href="http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/data.cfm">http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/data.cfm</a>
- 13 of 25 contaminants were not detected
- Detections above method reporting limits:
  - 5 of 6 nitrosamines (predominantly NDMA)
  - 6 of 11 insecticides/pesticides/degradates
  - 1 of 3 explosives



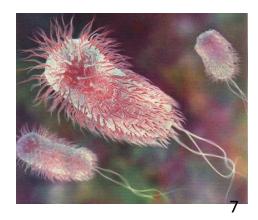
## UCMR 3

- Proposed Rule published March 3, 2011
- Final Rule expected soon
- Monitoring planned for 2013-2015
- Proposed monitoring for 28 chemicals and 2 pathogens
- Proposal includes hormones, perfluorinated compounds (e.g., PFOS/PFOA), VOCs, metals, 1,4-dioxane, chlorate and pathogens (see Appendix D); comments also invited on monitoring hexavalent and total chromium
- Comment period closed May 2, 2011
  - Comments submitted by 53 stakeholders



## **Revised Total Coliform Rule**

- EPA published the proposed revisions to the TCR in the Federal Register on July 14, 2010
  - A more proactive approach to public health protection
  - Monitoring results shift from informing public notification to informing investigation and corrective action
  - The proposal was based on the Agreement in Principle signed by the Federal Advisory Committee in September 2008
- Expect to promulgate final rule in 2012





## Retrospective Regulatory Review

- 1. Carcinogenic VOCs Group (cVOCs)
- Long Term 2 Enhanced Surface Water Treatment Rule (LT2)
- 3. Lead and Copper Rule (LCR)
- 4. Consumer Confidence Report Rule (CCR)

## Carcinogenic VOCs Group (cVOCs)

- EPA has initiated the process to develop a group cVOC standard and will:
  - Develop a group proposed rule for regulated and unregulated cVOCs that improves or maintains public health protection.
  - Assess potential cVOCs for the group based upon similar health effect endpoints; common analytical method(s); common treatment or control processes; and occurrence/co-occurrence in drinking water.
  - Evaluate options for setting a cVOC standard(s) and examine the feasibility of analytical methods & treatment technologies, and cost/ benefits for the group
- June December 2012: Consultations
  - Public Stakeholder meeting
  - Science Advisory Board
  - National Drinking Water Advisory Council
  - Small Business Regulatory Enforcement Fairness Act (SBREFA)
  - National Tribal Water Council
- Fall 2013: EPA expects to propose a regulation.



# Long Term 2 Enhanced Surface Water Treatment Rule (LT2)

- Aug 2011, EPA announced plans to initiate LT2 review in response to E.O. 13563
- Review will be part of the next cycle of the SDWA-mandated Six Year
   Review scheduled for completion no later than 2016
- Review involves assessment and analysis of data/information on occurrence, treatment, analytical methods, health effects, and public health risks
- In Dec. 2011, EPA held a public meeting to discuss Round 1 *Crypto* monitoring data and improvements to the *Crypto* analytical method
- April 24, 2012: EPA will hold a public meeting to solicit input and discuss available scientific data that may inform regulatory review of the uncovered finished water reservoir requirement



## **Lead and Copper Rule Revisions**

- Stakeholder meetings October 2008 and November 2010
- Environmental Justice Stakeholder meeting March 2011.
- Science Advisory Board 2011 review of partial lead service line replacement (PLSLR)
  - PLSLRs have not been shown to reliably reduce drinking water lead levels in the short term, ranging from days to months, and potentially even longer.
  - Additionally, PLSLR is frequently associated with short-term elevated drinking water lead levels for some period of time after replacement, suggesting the potential for harm, rather than benefit during that time period
- NDWAC was consulted (2011) on a range of LCR issues.
- Early 2013: EPA intends to publish the proposed long-term revisions.



## **Lead and Copper Rule Revisions**

Long-term Issues	
Partial lead service line replacement (LSLR)	<ul> <li>Engaged SAB (2011), and NDWAC (2011-12).</li> <li>Evaluating revisions to the LSLR requirements.</li> </ul>
Sample Site Selection	Evaluating revisions to the criteria to better address the latest information about lead sources
Tap sampling	Evaluating different protocols to for collecting tap samples for lead and copper
Measures to ensure optimal corrosion control (OCCT)	Evaluating OCCT requirements to better ensure optimal corrosion control and effective water quality parameters monitoring
Copper	Evaluating approaches to better address copper
Lead Reduction in Drinking Water Act of 2011	In corporate changes new definition of "Lead Free" from Lead Reduction in Drinking Water Act

## Consumer Confidence Report Rule (CCR)

- October 2011 began review of the CCR to explore ways to reduce burden on water systems and states and promote greater access to drinking water information, including electronic delivery options.
- To gather information from stakeholders, we've held a Listening Session and a web-based dialogue with about 700 participants – 500 from public water systems.
- Spring 2012 Gather additional electronic delivery pilot study information from an AWWA & ASDWA partnership
- Late Summer 2012 Draft alternative delivery guidance available for public comment
- Early Fall 2012 In-person public meeting, including discussion of draft guidance
- **Early 2013 -** Final findings
- Questions? CCRRetrospectiveReview@epa.gov



## **Other Actions and Initiatives**

- 1. Perchlorate
- 2. Hexavalent Chromium
- 3. Regulatory Determinations 3 (RD3)
- 4. Contaminant Candidate List 4
- 5. Coordinating with Other Programs to Protect Drinking Water



## **Perchlorate**

- EPA initiated the process to develop a perchlorate standard and will:
  - Continue to evaluate the science on perchlorate health effects and occurrence
  - Evaluate the feasibility of treatment technologies and examine costs and benefits
  - Seek guidance from SAB regarding how to best use new information for the derivation of a perchlorate MCLG. and
  - Consult with the National Drinking Water Advisory Council prior to proposing the perchlorate rule.
  - National Tribal Conduct a final tribal consultation on May 1, 2012. EPA has already briefed the Water Council and held two consultations with Tribes
  - Hold a public stakeholder meeting in the summer of 2012.
- The SDWA deadline to publish the proposed regulation is Feb. 2013.
- SDWA requires final regulation within 18 months of the proposal (unless the Administrator extends the deadline up to 9 more months).



## **Hexavalent Chromium**

#### Drinking Water Standard

- Total Chromium (Cr+3 & Cr+6) MCL is 0.1 mg/L (100 ppb) established in 1991
- When toxicological review is completed, EPA will consider all relevant information to determine whether the drinking water standard for total chromium needs to be revised.

#### Toxicological Review

- Sept 2010, peer review draft IRIS Toxicological Review of Cr+6, proposed to classify Cr
   +6 as likely to be carcinogenic to humans when ingested.
- Based on the recommendations of the external peer review panel, EPA will consider the results of recent research on Cr+6 before finalizing the IRIS assessment.
- EPA anticipates that a revised draft assessment for Cr+6 will be released for public comment and external peer review in 2013, and that a final assessment will be completed by 2015.

#### Monitoring

- January 2011, EPA guidance to water systems on enhanced monitoring and analysis for Cr+6.
- March 2011, EPA requested comment on requiring water systems to monitor for Cr+6 as part of the proposed UCMR 3.

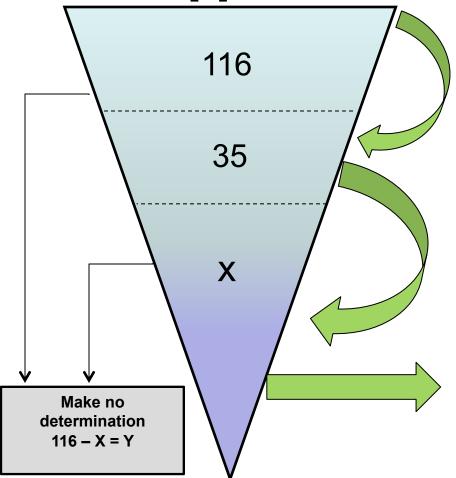


## **Three Regulatory Determination Criteria**

SDWA requires EPA to consider the following criteria in evaluating whether to regulate a contaminant:

- 1) The contaminant may have an <u>adverse effect</u> on the health of persons;
- 2) The contaminant is known to occur or there is substantial likelihood that the contaminant will occur in public water systems with a frequency and at levels of public health concern; and
- **3**) In the sole judgment of the Administrator, regulation of such contaminant presents a <u>meaningful opportunity</u> for health risk reduction for persons served by public water systems.

## **RD3 Approach – Three Main Phases**



<u>Phase 1 - Data Availability:</u> Evaluated 116 CCL contaminants and identified 35 that "appear" to have sufficient health and occurrence data to warrant further evaluation.

Phase 2 - Data Evaluation: Further evaluating health and occurrence data for 35 contaminants to identify "X" contaminants that have complete information in time for regulatory determinations; focusing on contaminants with known or likely occurrence at levels of health concern in water systems.

#### <u>Phase 3 - Regulatory Determination Assessment:</u>

Evaluate information for "X "contaminants against the three SDWA criteria – (1) adverse health, (2) known/ likely occurrence in PWSs and (3) meaningful opportunity (sole judgment of Administrator).

Based on the Drinking Water Strategy, some contaminants evaluated as a group for RD3 and some are on a separate track

## **RD3 - Status and Next Steps**

- Since CCL3 publication (Oct 2009), gathered & evaluated available health & occurrence information for 116 contaminants
- June 2011 Held Stakeholder meeting in DC to discuss health and occurrence information for a short list of contaminants; meeting materials can be found at: <a href="http://water.epa.gov/scitech/drinkingwater/dws/ccl/index.cfm">http://water.epa.gov/scitech/drinkingwater/dws/ccl/index.cfm</a>
- Oct 2011 Held Expert Review (per a commitment made by Deputy Administrator at a July 2011 hearing)
- 2012 Finish compiling/evaluating occurrence & health information
- 2012/2013 Expect to publish preliminary determinations
- 2013/2014 Expect to publish final determinations



# Contaminant Candidate List 4 (CCL 4)

- Spring 2012- Hold public nominations of contaminants to be considered for inclusion on CCL 4
  - Nominations would be submitted via the web or mail
- **Summer 2013** Expect to publish Draft CCL 4 for public review and comment
- October 2014- Expect to publish Final CCL 4



## **Coordination on Chemicals**

- To protect sources of drinking water, we are working with the Office of Chemical Safety and Pollution Prevention to identify opportunities within environmental laws that address new and existing chemicals.
  - Working together to identify and share preliminary information and data that may help identify pesticides and toxic chemicals of potential concern.
  - Aiming to identify existing authorities to gather/develop relevant health, occurrence, exposure and/or analytical methods data.
  - Developing Human Health Benchmarks for Pesticides (i.e., drinking water health screening values) for ~ 350 pesticides that do not have health advisories or drinking water standards
- Endocrine Disrupting Screening Program
  - Tier 1 data is being submitted; the latest due date is June 2012.
  - EPA is evaluating public comments to finalize EDSP List 2



- A doubling of nitrate MCL violations between 2001 and 2010.
   Even systems w/o exceedances are seeing increased levels.
- Non point sources are often predominant and there is no CWA authority to directly regulate these sources.
- Responding to source water contamination can be as much as 20 times as costly as prevention.
- EPA is encouraging States to work with partners to put in place
   State Nutrient Management Frameworks.
- EPA is improving our partnerships with USDA and working to integrate USDA efforts and funding with EPA 319 funding in priority watersheds.



# Sustainability (Last but not Least)

 EPA has recently published "Planning for Sustainability: A Handbook for Water and Wastewater Utilities"

http://water.epa.gov/infrastructure/sustain/upload/EPA-s-Planning-for-Sustainability-Handbook.pdf

- Describes steps utilities can undertake to enhance their existing planning processes to ensure that water infrastructure investments are cost-effective over their life-cycle, resource efficient, and support other relevant community goals.
- Developed after extensive consultation and input from utilities, states, and other stakeholders.



## **Thank You**





## **Appendix**

## **UCMR 3 – Contaminants Proposed**

- Pharmaceuticals (EPA Method 539)
  - 17-α-Ethynylestradiol
  - 17-β-Estradiol
  - Equilin
  - Estriol
  - Estrone
  - Testosterone
  - 4-Androstene-3,17-dione
- Metals (EPA Method 200.8)
  - Cobalt
  - Molybdenum
  - Strontium
  - Vanadium

Volatile Organic Compounds (EPA Method 524.3)

- 1,1-Dichloroethane
- 1,2,3-Trichloropropane
- 1,3-Butadiene

Bromochloromethane

Chlorodifluoromethane

Chloromethane

Methyl bromide

n-Propylbenzene

Sec-Butylbenzene

- EPA Method 522
  - 1,4-Dioxane
- EPA Method 300.1
  - Chlorate

# UCMR 3 – Contaminants Proposed (cont.)

- Microbials
  - 2 viruses
    - Enterovirus (qPCR & cell culture)
    - Norovirus (qPCR)
  - "Indicator organisms"
    - Total coliform
    - E. coli
    - Enterococci
    - Coliphage
    - Aerobic spores

- Perfluorinated Chemicals (EPA Method 537)
  - Perfluorooctane sulfonate (PFOS)
  - Perfluorooctanonic acid (PFOA)
  - Perfluoroheptanoic acid (PFHpA)
  - Perfluorononanoic acid (PFNA)
  - Perfluorobutane sulfonic acid (PFBS)
  - Perfluorohexane sulfonic acid (PFHxS)

# Short List of 35 Contaminants Evaluating Further for Regulatory Determinations 3

- 1,1,1,2-Tetrachloroethane
- 1,2,3-Trichloropropane (TCP)
- 1,3-Dinitrobenzene
- 1,4-Dioxane
- Methyl Tertiary Butyl Ether (MTBE)
- Methyl Bromide
- Nitrobenzene
- PFOS and PFOA
- RDX
- Cobalt
- Molybdenum
- Strontium
- Vanadium
- Acephate
- Dimethoate

- Disulfoton
- Diuron
- Molinate
- Terbufos and Terbufos Sulfone
- Acetochlor & ESA and OA Degradates
- Alachlor ESA & OA Degradates
- Metolachlor & ESA and OA Degradates
- Chlorate
- Nitrosamines (5)
  - N-nitrosodimethylamine (NDMA)
  - N-nitrosodiethylamine (NDEA),
  - N-nitrosodi-n-propylamine (NDPA)
  - N-nitrosopyrrolidine (NPYR)
  - N-nitrosodiphenylamine (NDPhA)