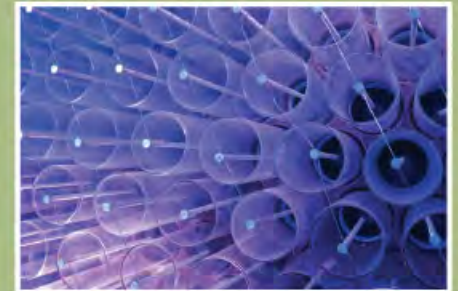




P E N N S Y L V A N I A
A M E R I C A N W A T E R

Are You Ready for UCMR (Unregulated Contaminant Monitoring Rule) 3?

Paul Zielinski, Sr. Director – Water Quality and
Environmental Compliance

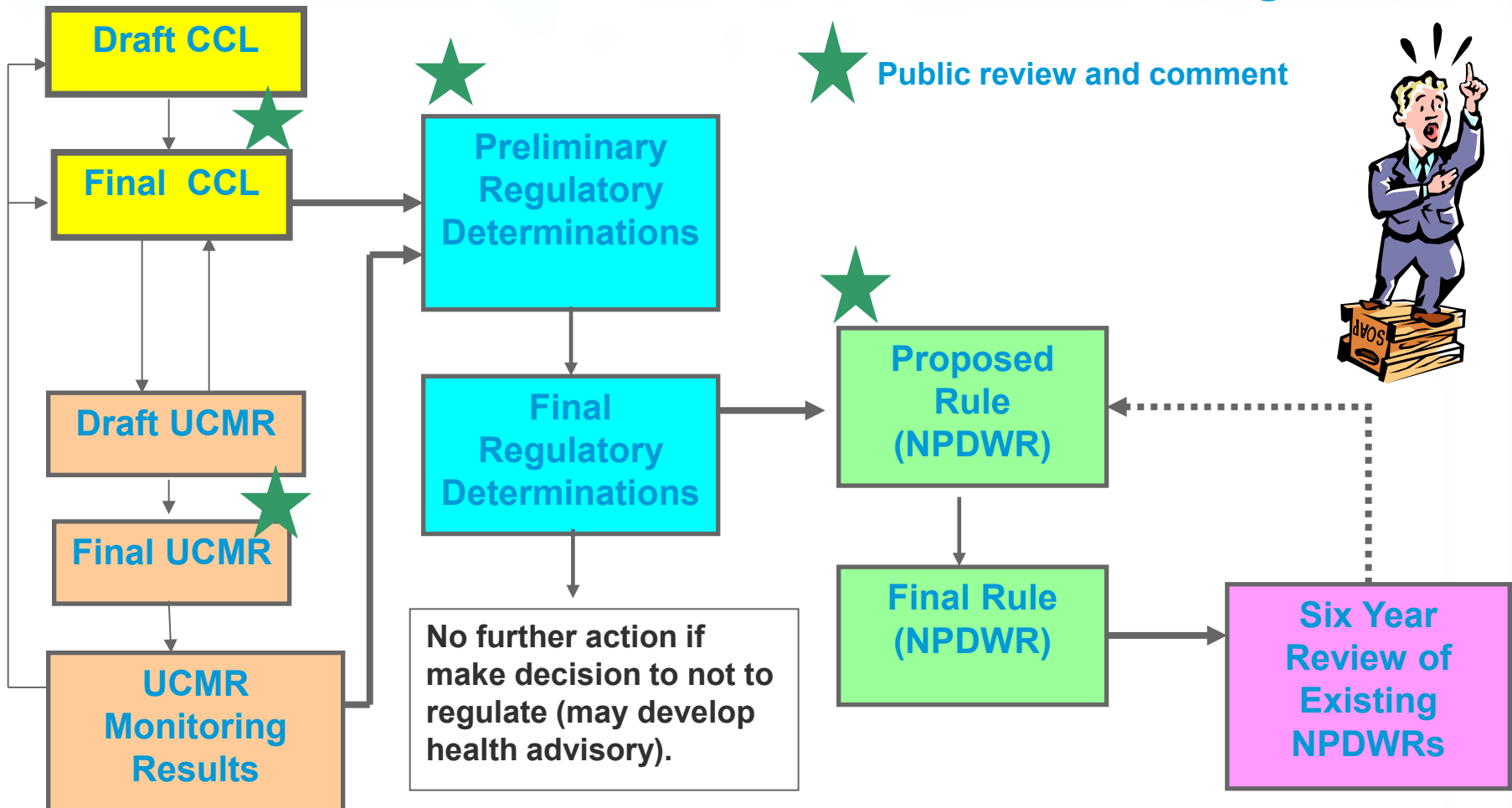


What is UCMR3?

1. The SDWA amendments in 1996 require EPA to issue a new list of unregulated contaminants every 5 years.
2. The 3rd Rule was finalized on May 2, 2012.
3. UCMR3 requires testing for **30** contaminants.
 - i. UCMR1 2001 – 2003 **25** contaminants
 - ii. UCMR2 2008 – 2010 **25** contaminants



How do Contaminants Become Regulated?



Program Goals – Determine Occurrence in the Environment, Concentration Levels, and Fate During Water Treatment.

Human Health Effects

Set Public Health Goal or Maximum Contaminant Level Goal (MCLG)

Analytical Test Methods

Treatment Technologies

UCMR

Occurrence

Set legally, enforceable Maximum Contaminant Level (MCL) or Treatment Technique (TT). List treatment technologies, specify methods to measure, monitoring frequencies and reporting requirements to the state and the public.

Economics and Costs/Benefits

Public and Expert Input

Readiness #1 - Who Is Affected by UCMR3?

Assessment Monitoring – List 1 Contaminants (21 Total)

- ✓ CWSs and NTNCWSs systems serving more than 10,000. This includes consecutive systems.
- ✓ 800 systems serving $\leq 10,000$ people.

Screening Survey – List 2 Contaminants (7 Total)

- * All systems serving more than 100,000.
Includes consecutive systems.
- * 320 systems serving 10,001 – 100,000
- * 480 systems serving $\leq 10,000$.

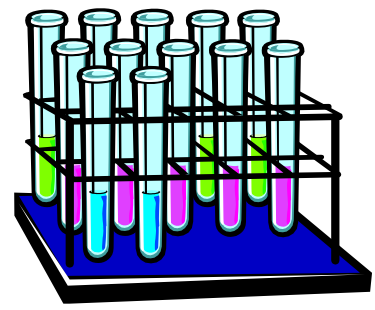
Pre-screen Testing - List 3 (2 Total)

(EPA coordinated and funded)

- Includes testing for indicator organisms
- 800 non-disinfecting GW systems serving $\leq 1,000$

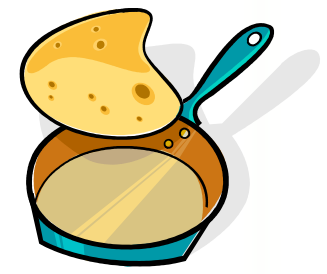
List 1 Assessment Monitoring - 21 Contaminants

1,2,3 Trichloropropane
Bromomethane
Chloromethane
Bromochloromethane
Chlorodifluoromethane
1,3-butadiene
1,1-dichloroethane
1,4-dioxane



Vanadium
Molybdenum
Chromium - total
Chromium 6
Cobalt
Chlorate
Strontium

Perfluorooctanesulfonic Acid (PFOS)
Perfluorooctanoic Acid (PFOA)
Perfluorobutanesulfonic Acid (PFBS)
Perfluorohexanesulfonic Acid (PFHxS)
Perfluoroheptanoic Acid (PFHpA)
Perfluorononanoic Acid (PFNA)



Review for List #1 - Who Must Sample?

- **All systems serving more than 10,000 people**
- **800 representative systems serving $\leq 10,000$**
- **EPA pays costs for systems serving $\leq 10,000$**





List 2 – Screening Survey – 7 Hormones

17- β -estradiol
17- α -ethynylestradiol
Estriol
4-androstene-3,17-dione

Estrone
Testosterone
Equilin



Applies to:

- All PWS serving more than 100,000 people
- Sample of 320 systems serving retail population of 10,001 to 100,000
- Sample of 480 systems serving $\leq 10,000$



List 3 – Pre Screen Testing

Enteroviruses

Noroviruses

Testing also required for total coliforms, *E.Coli*, bacteriophage, *Enterococci* and aerobic spores

Applies to:

- ✓ **Sample of 800 nondisinfected GW Systems serving 1,000 or fewer people.**
- ✓ **Sites for virus testing will be taken from “sensitive” hydrogeological areas (karst or fractured bedrock)**
- ✓ **Paid for and Coordinated by EPA.**



Readiness #2 – Sample Collection and Analysis

- ◆ EPA Letters Mailed to PWS Summer, 2012
- ◆ All samples must be taken from the entry point to the distribution system from treatment stations.
- ◆ Total chromium, chromium-6, cobalt, molybdenum, strontium, vanadium and chlorate must also be taken from the distribution system.
- ◆ Monitoring is required during a 12 month period from 2013 to 2015.
 - **Surface systems and GUDI – 4 consecutive quarters separated by 3 months**
 - **GW system – twice in one consecutive 12 month period separated by 5-7 months.**



Readiness #3 – Data Reporting

- ◆ **Data is entered into EPA SDWARS system by Lab. Lab has 120 days from sample collection date to upload result.**
- ◆ **PWS must review and validate the Lab data within 60 days of the Lab posting of the data. Data is auto approved if deadline is missed.**
- ◆ **Check samples for detections in samples without a detection in the field blank are not required.**
- ◆ **Any positive results must be shown in the CCR.**

Information for SDWARS Reporting

- 1) PWS ID Number
- 2) PWS Facility ID Code
- 3) Water Source Type
- 4) Sample Point ID Code
- 5) Sample Point Type Code
- 6) Disinfectant Type
- 7) Sample Collection Date
- 8) Sample ID Code
- 9) Contaminant
- 10) Analytical Method Code
- 11) Sample Analysis Type
- 12) Analytical Results - sign
- 13) Analytical Result – value
- 14) Lab ID Code
- 15) Sample Event Code





Past Activities Required

- ❖ Oct. 1, 2012 - System contact information must be entered into SDWARS.
- ❖ Oct. 1, 2012 - PWS check inventory information in SDWARS and correct if errors are present. †
- ❖ Oct. 1, 2012 - Deadline for systems to change their monitoring schedule. †
- ❖ Aug. 1, 2012 – Deadline for GW Systems to supply monitoring plan. †

† Contact EPA at UCMR_Sampling_Coordinator@EPA.gov

Readiness #4 – Key Points to Remember!

- A. Be careful with your sample collection. Repeat samples due to field blank contamination are costly!
3 types of field blanks required.
Inorgs – Open container, then reclose.
VOCs – Transport to site. DO NOT OPEN.
PFs and Hormones – Transfer Required.
No breathing on containers when open. Nitrile gloves must be worn for sampling (esp. hormones)
- B. There will be a lot of detections above the UCMR3 Reporting Limits (0.0001 to 20 µg/l ranges)
- C. Be thinking of communication strategies for detections. Focus from media and env. groups is sometimes more on detection than on health effects of detected substances.



Readiness #5 – Assistance

Safe Drinking Water Hotline
800/426-4791

CDX/SDWARS Help Desk
888/890-1995

To locate a certified UCMR 3 lab

**[http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/
ucmr3/laboratories.cfm](http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/laboratories.cfm)**

