



American Water Works  
Association



# New Drinking Water Quality Regulations

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# Overview

- Overview of 1996 SDWA Amendments
- EPA's Three Specific Regulatory Processes
- Specific Regulations
- Water Security
- Predictions for the Future



# 1996 SDWA Amendments

- Priority regulations (SDWA deadlines)
  - Arsenic, Radon, M/DBP Cluster
- New standard setting
  - Contaminant Candidate List
  - Six-year Review
- New state programs
- Public information



# Priority Regulations

- Arsenic
- Radon
- M/DBP Cluster
  - Stage 1 DBPR, IESWTR, and LT1ESWTR
  - Stage 2 DBPR and LT2ESWTR
  - Groundwater Rule
  - Filter Backwash



# Arsenic

- Standard lowered from 50 ppb to 10 ppb on the last day of the Clinton Administration (Jan. 2001)
  - Bush conducted a regulatory review in 2001
    - New standard stayed the same
- Significant compliance costs in the Southwest and some other areas
- Compliance just becoming an issue
  - Initial compliance date of January 2006
  - Time extensions by EPA momentarily help

# Radon

- Real risk from radon in indoor air
  - Drinking water a minor contributor
  - '96 SDWA allowed for AMCL with state MMM programs
- NAS report in October 1998
  - Confirmed inhalation risks
- EPA proposal in August 1999
  - HRRCA released earlier in February 1999
    - Costs and benefits for various MCLs compared
- Schedule for final not clear and a low priority

# First Set of M/DBP Cluster Regs

- Stage 1 DBPR and IESWTR—1998
  - Systems serving >10,000 people
  - 1979 TTHM Rule applied to >10,000 people
- LT1ESWTR—2000
  - Systems serving <10,000 people
  - Also comply with Stage 1 DBPR and this was the first time for DBP regs for these systems
- Compliance just now becoming an issue

# Stage 2 DBPR and LT2ESWTR

- Final Stage 2 Disinfectant and Disinfection Byproducts Rule (DBPR) and Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) published in January 2006
- Lengthy, complex rules for utilities
  - Initial monitoring prior to any treatment changes
    - 1<sup>st</sup> two deadlines this year for large systems
    - Compliance deadlines of 2012 and beyond
  - EPA struggled with release of web-based tool
- Serious resource challenge for state regulators

# Groundwater Rule (GWR)

- Published on November 8, 2006
  - Very complicated regulatory framework
- EPA has very limited health effects data – is there actually a problem?
  - March Notice of Data Availability (NODA)
- Systems conduct source monitoring for pathogen indicators when triggered by certain conditions
  - Many will disinfect or take other actions
- If disinfecting, simultaneous compliance with Stage 2 DBPR and LCR and all other regs

# Filter Backwash Recycling Rule

- Focused on surface water systems that return filter backwash water to the head of the treatment plan
- Finalized in August 1999
- Shortest regulation in EPA history

# Contaminant Candidate List (CCL)

- CCL is the foundation of EPA's regulatory development process
  - Developed on a five year cycle
    - CCL1 in 1998 and CCL2 in 2005
- CCL contaminants are classified
  - Needs more research
  - Potential regulatory determinations
    - Must make at least five determinations every 5 years
  - 1<sup>st</sup> round of regulatory determinations in 2003
    - Determined not to regulate 9 priority contaminants

# Contaminant Candidate List (CCL) and Unregulated Contaminant Monitoring Rule (UCMR)

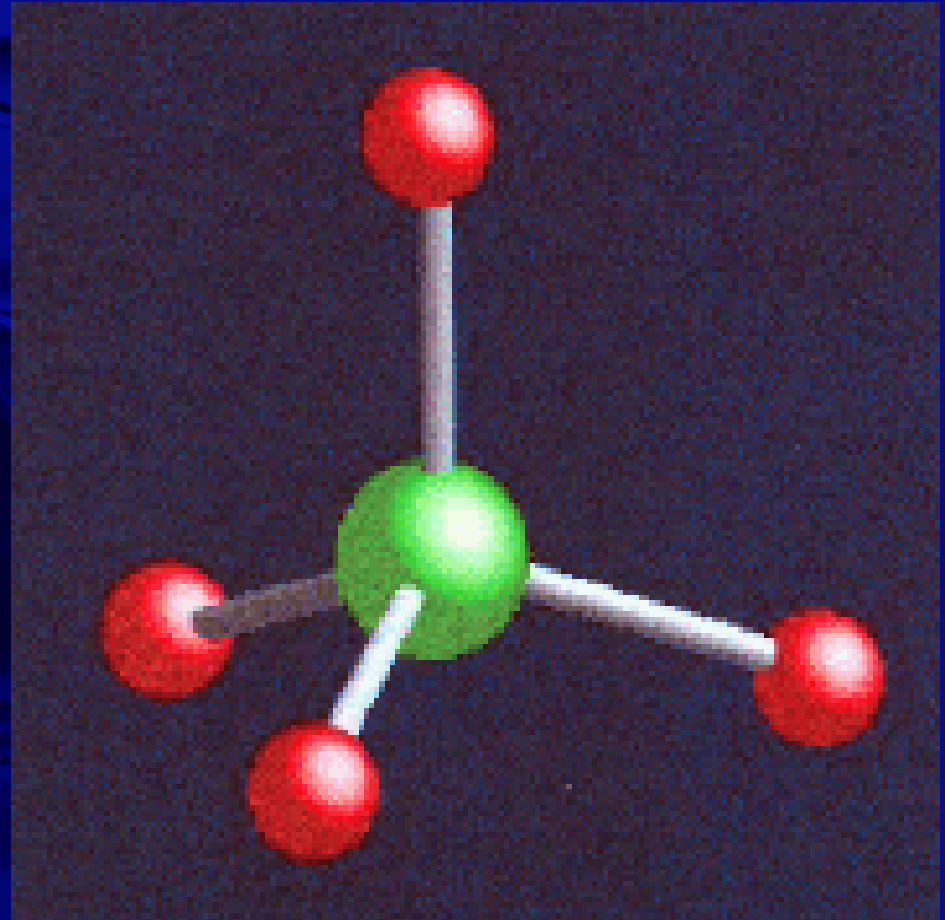
- CCL “Second Round” draft regulatory determinations in early 2007 (after many delays)
- Perchlorate is the sticky issue
- CCL “Third Round” request for candidates open until December 15th
- UCMR 2 final rule expected late 2006 or early 2007
- Again, perchlorate monitoring is sticky issue

# Second Round of Regulatory Determinations from CCL

- CCL “Second Round” draft regulatory determinations in early 2007 (after many delays)
- March 2005 *JAWWA* paper
  - 5 contaminants had zero occurrence in UCMR1
    - 1,1-dichloro-2,2-bis(*p*-chlorophenyl)ethylene
    - 1,3-dichloropropene
    - 2,6-dinitrotoluene (1 detect for 2,4...)
    - *s*-ethyl-dipropythiocarbamate
    - terbacil

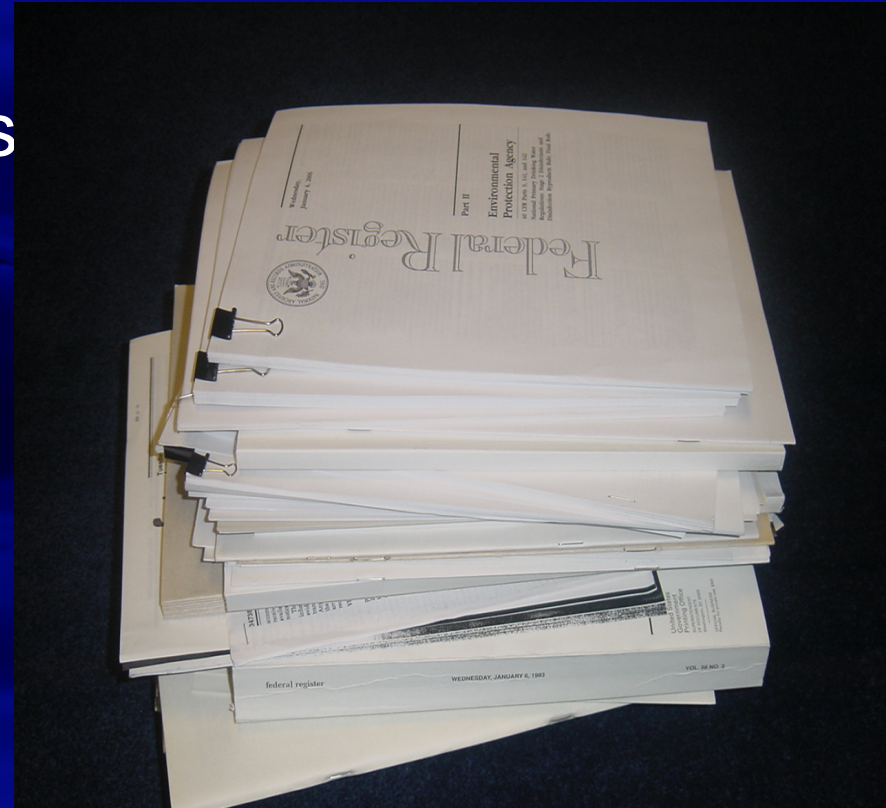
# Perchlorate

- Relative Source Contribution is the sticky issue
- Waiting on results from FDA Food Basket Survey
- Political pressure from both sides



# Six-Year Review

- 1<sup>st</sup> six-year review in 2003
  - Only revise the Total Coliform Rule (TCR)
- Reregistration of triazines & arsenic thru Office of Pesticides Programs
  - Other pesticides
- Fluoride
  - Recent NAS report



# Revisions to Total Coliform Rule and/or Distribution System Rule

- Revisions to the Total Coliform Rule (TCR) and/or Distribution System Rule resulting from first 6-year review
- Potential for the first direct federal regulations over the distribution system
- Expert workshop on issue papers in June 2006
- Final NAS report published this summer
- Potential advisory group process starting in 2007
- Likely proposal in 2008 or 2009

# Lead and Copper Rule

- “Minor Revisions” proposed this summer
  - Clarify monitoring requirements
  - More aggressive public notice and education
  - Consult with state before change in treatment
- Major revisions could be in play in a few years

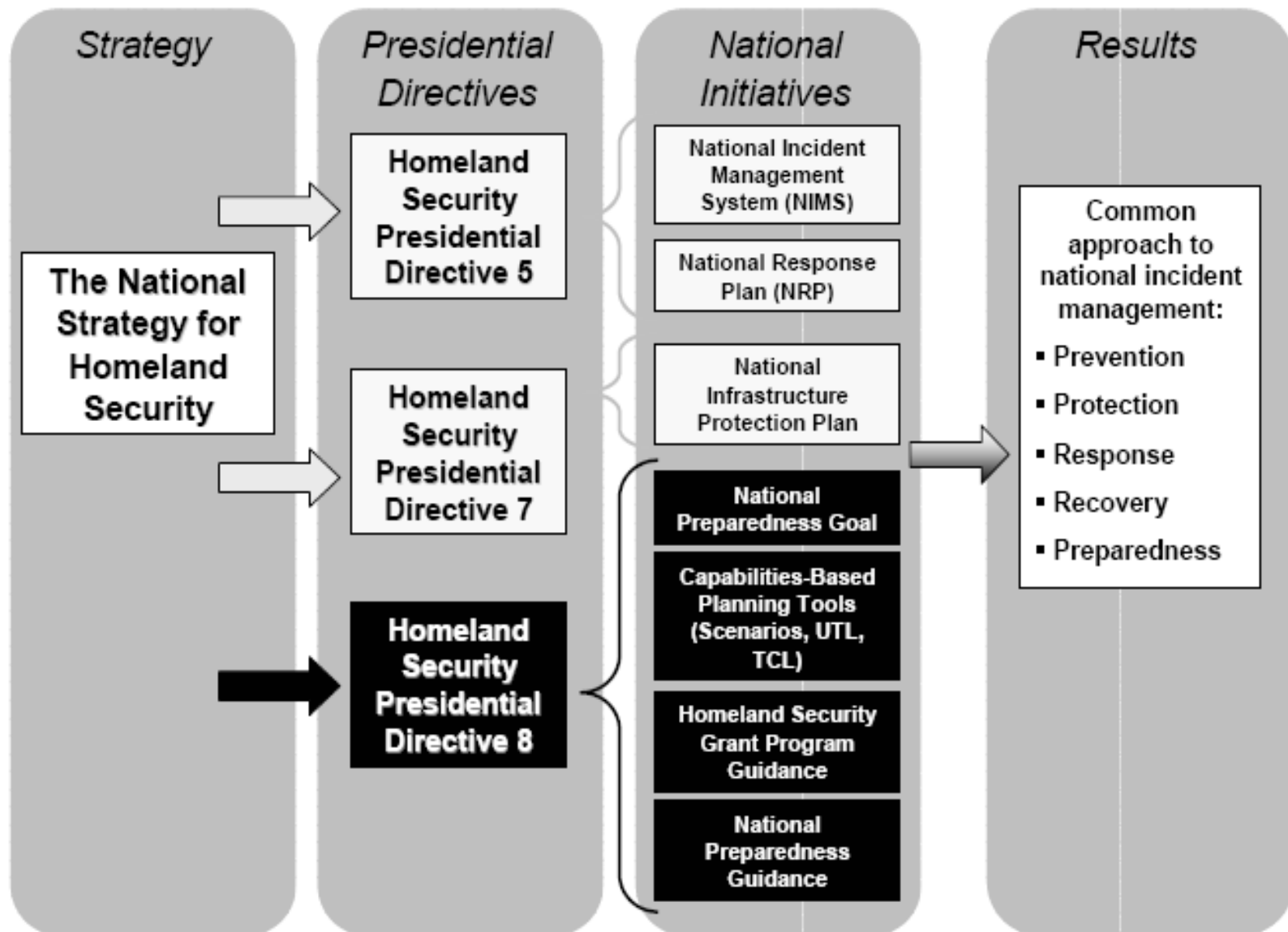
# Contaminant “Du Jour”

- NDMA and other nitrosamines
- PFOA and PFOS
- Brominated flame retardants
- 1,2-dioxane
- EDCs, PPCPs, etc.
- How do we stop the alphabet soup madness?
  - How do we develop a reasonable and logical process for determining the “contaminants of concern”?

# The Latest and Greatest on Water Security

- Department of Homeland Security (DHS) working on a structured all-hazards response
  - National Incident Mgmt. System (NIMS)
  - National Response Plan (NRP)
  - National Preparedness Goal (NPG)
- Strategic direction for critical infrastructures
  - National Infrastructure Protection Plan (NIPP)
    - Sector-Specific Plan (SSP) for each sector
      - EPA the lead federal agency for water

# The Federal Strategy



# Water Sector Coordinating Council

- Purpose is to provide policy input to DHS and EPA on water security issues
  - Established in 2004
  - Getting the word out
- Working to provide input on ongoing DHS & EPA activities
  - NIPP, SPP, & metrics
- 8 water and wastewater organizations
  - AWWA and AMWA
  - WEF and NACWA
  - AwwaRF and WERF
  - NRWA
  - NAWC
- 2 from each organization plus DC staff

# The “New” Regulations

- Nine new regulations in eight years
  - Stage 1 DBPR & IESWTR—1998
  - Radionuclides—2000
  - Arsenic—2001
  - Filter Backwash Rule—2001
  - LT1ESWTR—2002
  - Stage 2 DBPR & LT2ESWTR—2006
  - Groundwater Rule—2006
- Radon Rule—final (?)

# Trends in “New” Regulations

- More complex rules, even though the number of regulated contaminants will increase just a little
- More emphasis on treatment techniques
  - More complex treatment and more complex methods of determining compliance
- Greater number of systems affected, particularly small groundwater systems
- More health effects data will become available on reproductive & development endpoints

# The Future of EPA Rulemaking

- Continuing shift in regulatory focus / health endpoints
  - Microbes...cancer...reproductive health...?
  - Acute...chronic...subchronic health effects?
- What is a health effect, anyway?
- More opportunity for rule-to-rule interference
  - Simultaneous compliance
- Potential to get into the details of management of water and wastewater operations

# Only Tap Water Delivers!

- A grassroots and media campaign to help utilities and public officials communicate about the value of water service
- Only Tap Water Delivers
  - Public Health Protection
  - Fire Protection
  - Support for the Economy
  - Quality of Life

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# Questions?

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