

# Wyoming Communities & the Safe Drinking Water Act

Region 8, US Environmental Protection Agency

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# Main Messages

- Who does what
- Overview of Safe Drinking Water Act requirements
- Finding trouble
- Avoiding trouble



# Safe Drinking Water Act

- Provides National standard for quality of drinking water
- You are a regulated public water system
  - If you have 15 or more taps or
  - Serve 25 or more people at least 60 days/year
- Wyoming is the only State that does not regulate its public water systems for drinking water quality
- Regulators & assistance providers
  - **EPA is the primacy agency**
  - Other federal agencies
  - State of Wyoming agencies
  - County & local departments
  - Non-governmental organizations



# Who Does What - EPA

- Monitoring & reporting
- Compliance determinations
- Technical assistance
- Sanitary surveys
- Formal enforcement
- Laboratory certification
- Water Security



# Who Does What – Other Feds

- Rural Utility Services
  - Funding for water projects
- US Forest Service
- Bureau of Land Management
- Bureau of Reclamation



# Who Does What - Wyoming

- State Agency Activities
  - **Operator Certification**
  - Capacity Development
  - Drinking Water State Revolving Fund
  - Source Water & Wellhead Protection Programs
  - Permit to Construct
  - Plan & spec review
  - Food & beverage inspections
  - Laboratory services
  - Water Rights
  - Well permits
  - General Public Health
  - Homeland security



# Who Does What - NGOs

- Who
  - Non-Profits
    - Wyoming Association of Rural Water Systems
    - Wyoming Water Quality Pollution Control Associations
    - Midwest Assistance Program
    - Environmental Finance Centers
    - Wyoming Water Agency Response Network
  - For profit
    - Engineering/Construction firms
    - Material & equipment suppliers
- Costs
  - Fees for services, materials & equipment
  - Membership Dues
  - Free



# Who Does What - NGOs

- Training
  - **Operator certification**
  - Governmental affairs
  - Financial
- Technical assistance
  - Water treatment & distribution
  - Leak detection
  - Management
- Source Water Protection
  - Assessments
  - Plans
- Water Security
  - Vulnerability Assessments
  - Emergency Response Plans

# Overview of SDWA Requirements – EPA Authorities

- Safe Drinking Water Act
- National Primary Drinking Water Regulations
  - EPA's enforceable requirements
- Guidance
  - EPA's view of what the regulations mean & how to apply them
- Toolboxes
  - EPA's gifts to assist public water systems with analyses, implementation & security
- [www.epa.gov/safewater/](http://www.epa.gov/safewater/)

# Overview of SDWA Requirements - NPDWRs

- Monitoring & reporting
  - Function of type of water source, treatment process, population served & classification
  - Every 15 minutes, 4 hrs, daily, monthly, quarterly, semi-annually, annually, triennially, quadrennially, & nonennially
- Contamination
  - 90+ chemical & microbiological contaminants
    - Total Coliform Rule
    - Ground Water Rule
    - Surface Water Treatment Rules
    - Phase II/V Chemical Contaminant Rule (organics/metals)
    - Lead & Copper Rule
    - Radionuclides Rule
    - Disinfectants/Disinfection By-Products Rule

# Overview of SDWA Requirements - NPDWRs

- Treatment techniques
  - Filtration
  - Disinfection/Inactivation
  - Removal of chemical contaminants
- Public involvement
  - Public Notice Rule
  - Consumer Confidence Rule
- Sanitary surveys
- Unregulated Contaminant Rule

# Overview of SDWA Requirements – Public Involvement

- Public Notice
  - Tier 1 – 24 hrs
  - Tier 2 – 30 days
  - Tier 3 – 1 yr
- Consumer Confidence Rule
  - July 1 Consumer Confidence Report
  - Distribute to every customer
    - $\leq 500$  provide notice of availability
    - 501-10,000 distribute or provide notice of availability & publish in whole
    - $\geq 10,001$  distribute & place on website
  - Content
    - All detects/violations
    - Corrective actions
    - Health effects
    - Public involvement

# Overview of Requirements – Sanitary Surveys

- On-site evaluation of system capacity to deliver safe drinking water
- Every 3 or 5 years by EPA staff or contractors
  - Reports reviewed by at least 3 EPA staff members
  - Cover letter & report addressed to administrative contact
- Recommendations
  - Non-enforceable
  - Enforceable significant deficiencies
    - Submit corrective action plan
      - GWR – 30 days to respond & 120 days to fix or submit plan
      - SWTR – 45 days to submit plan
    - Failure to act will result in trouble
    - State permit to construct may be required

# Overview of Requirements - Other

- Unregulated Contaminant Monitoring
  - Determine frequency of detects for future regulations
  - Community participation
    - EPA Headquarters selects small systems at random
    - EPA pays for postage & lab analyses
    - Community pays to take, package & verify sample results

# Overview of SDWA Requirements - Lab Certification

- Water samples taken by
  - Operators
  - Homeowners
- Certified laboratories must analyze & report on water samples
  - Utility must report results to EPA
  - Upon request labs will report directly to EPA
- Generally, utilities contract with & pay lab for all analyses
- Limited laboratory capacity in Wyoming
  - State labs – Cheyenne & Laramie
  - County labs – Teton, Lincoln, Sweetwater & Lander
  - Private labs – Gillette, Casper, Sheridan, Riverton & Pinedale
  - Not generally open on weekends or holidays

# Finding Trouble -Administrative Order

- Violation of a NPDWR
  - Failure to monitor or report
  - Exceed a Maximum Contaminant Level
  - Bust a treatment technique
  - Fail to issue public notice or publish Consumer Confidence Report
  - Ignore sanitary survey significant deficiencies
  - Failure to take unregulated contaminant samples
- Informal Notice of Violation
- Additional violation(s)
- Formal referral process
- Case screening
- Contents
  - Current violation(s)
  - All violations for past 5 yrs

# Finding Trouble –Administrative Order

- Mailing
  - County commissioners
  - Administrative contact
  - Press release
- Requirements
  - Comply with NPDWRs
  - Enforceable corrective action plan

# Finding Trouble –Administrative Order or Worse

- Violation of Administrative Order
  - Additional NPDWR violation since date of order
  - Failure to comply with enforceable schedule
- Penalties
  - Additional violation of Administrative Order
  - Penalty policy
  - This is when the utility gets to
    - See an Administrative Law Judge
    - Pay the US Treasury
- Close out
  - Perfect compliance for typically 12 mos
  - Could be much longer

# Finding Trouble - Boil Order

- 3 reasons
  - Fecal coliform and/or E.coli contamination
  - General loss of pressure
  - Turbidity above 5 ntu for 4 hours
- Players
  - EPA
  - State: DoH & DEQ
- Boil Order
  - Verbal & Tier 1 Public Notice
  - Emergency Administrative Order
- Recovery protocol
  - Utility provides alternate source(s) of water
  - EPA provides technical assistance
  - Extra sampling
  - Corrective action plan

# Finding Trouble - Do Not Use Order

- 2 reasons
  - Vandalism or terrorism
  - Acute levels of non-microbial contaminants
- Players
  - EPA
  - State: DoH, DEQ & DHS
  - Local: Law Enforcement, Fire Department & County Health Department
  - Feds: FBI
- Do Not Use Order
  - Verbal with Tier 1 Public Notice
  - Emergency Administrative Order
  - Do Not Drink
  - Boil Order

# Finding Trouble - Do Not Use Order

- Recovery protocols
  - Utility provides alternate source(s) of water
  - Vandalism/Terrorism
    - Emergency Operations Center
    - Investigative sampling
    - 96 hours for thorough analysis to declare “all clear”
  - Acute contamination
    - Technical assistance
    - Sampling protocol
    - Corrective action plan

# Avoiding Trouble - Technical Assistance

- Readily available – just ask EPA
  - Rule managers
  - Capacity Development Coordinator
    - Natalie Cannon 303-312-6625
- What
  - Training
  - Reminders
  - Interpretations
- Other Providers
  - State/Counties
    - DEQ District Engineers
  - NGOs

# Avoiding Trouble - Technical Assistance

- Types
  - Telephone consultations by EPA staff and/or contractors
  - Remote computer training
  - Field visits by EPA staff and/or contractors
- EPA limitations
  - Cannot perform, fund, or oversee operations & maintenance
  - While EPA encourages contact with the utility, it can only do so without compromising enforceability
- Other providers may not be so restricted

# Avoiding Trouble

- **Certified operator**
  - EPA requires Wyoming to require communities to have one
  - Trained & certified for
    - Sampling, monitoring & reporting
    - Treatment
    - Distribution
    - Public involvement
- Sustain a viable utility a/k/a Capacity Development
  - Financially
  - Managerially
  - Technically

# Avoiding Trouble – Source Water Protection

- Source Water Protection Program
  - Voluntary
  - Wellhead protection
  - Source water protection
  - DEQ/NGOs
- Source Water Assessment
  - Identify & delineate sources of water
  - Characterize threats
- Source Water Protection/Watershed Protection Plan
  - Written mitigation program
  - Execution
    - Physical improvements
    - Planning, zoning & ordinances
    - Partnerships



# Avoiding Trouble - Water Security

- Vulnerability Assessment
  - Characterizes where public water systems are weak to threats
    - Vandalism
    - Terrorism
    - Natural Disasters
  - Communities serving populations > 3300 have one
    - It may be 7 years old
- Emergency Response Plan
  - Provides procedures how to respond
  - Provides procedures how to restore service
  - Does your public water system have one?
    - Accessible?
    - Updated?
    - Exercised?



# Avoiding Trouble - Water Security

- Water Agency Response Network
  - EPA grants funds to DEQ
  - Thru WARWS DEQ provides financing to administer Wyo WARN
    - Network of members willing to help each other out in times of duress
    - Drinking Water & Wastewater
    - Reimbursement & risk management issues
- What you get
  - Parts & equipment
  - Supplemental manpower
- What you give
  - Parts & equipment
  - Manpower

# How Can I See My Water System's EPA Records?

- Drinking Water On-Line
  - Web-Based access to EPA records & training materials
  - <http://epa.region8.gov/waterops>
  - Limited access by user IDs & passwords
    - Water operators
    - Administrative contacts
  - User IDs provided by
    - Tsegaye Hailu 303-312-6273
    - Charles Weinberg 303-312-6557

# What You Will See

- Official records
  - System diagram
  - Site visits (sanitary surveys)
  - Inventory data
  - Monitoring & reporting data
  - Violations & enforcement actions
- Guides
  - Emergency procedures
  - Reporting forms
  - EPA guidance documents
  - List of certified labs
- Contacts
  - EPA staff
  - Links to third parties
- More stuff than you'll ever need



# Main Message Review

- Who does what
  - EPA
  - Feds
  - State
  - Counties
  - NGOs
- Overview of SDWA requirements
  - Monitoring & reporting
  - 90+ contaminants
  - Treatment techniques
  - Public involvement
  - Sanitary surveys
  - Unregulated contaminants



# Main Message Review

- Finding trouble
  - Violation of NPDWRs
    - Administrative Orders
    - Violations of Administrative Orders
    - Penalties
  - Emergencies
    - Boil Orders
    - Do Not Use Orders
- Avoiding trouble
  - Technical assistance
  - **Certified operators**
  - Sustain a viable utility
  - Source Water Protection
  - Emergency procedures
    - Wyo WARN

## Green Canyon Spring Collection Box Serving Star Valley Ranch, WY



7/14/2010