

Regulation of Water Systems in Vermont



NARUC Energy Regulatory Partnership Program

*The Georgian National Energy and Water Regulatory Commission
and
The Vermont Public Service Board*

*by
Eric Blatt*

Vermont Department of Environmental Conservation

Water Supply Division

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Public Drinking Water Program Overview

- v Vermont regulates about 1400 Public Water Systems
 - Includes both municipal and privately-owned systems
 - Primary objective is to ensure safe drinking water for customers



Public Water Systems

- v Vermont's Public Water Systems range in size from 25 users up to 63,000.
- v Largest system is Champlain Water District, which serves 12 towns and draws water from Lake Champlain



Water Sources

- ✓ Water source can be either surface water or groundwater
- ✓ Typically, the largest systems are served by surface water sources
- ✓ About 65 Public Water Systems in Vermont use surface water



Surface Water Systems

v Monitoring

- Continuous recording of filtered water turbidity and disinfection residuals
- Routine bacteriological and chemical sampling
- Disinfection residuals in distribution system – must be measurable free chlorine residual at all sampling points



Groundwater Systems

- ✓ About 1300+ systems are served by groundwater
- ✓ Less public health risk than surface water, therefore less treatment needed
- ✓ Some systems require special treatment to remove natural contaminants such as arsenic, uranium, radium, etc.
- ✓ Most large systems continuously disinfect to prevent potential bacteriological contamination in distribution system



Federal & State

- v Vermont implements and enforces federal requirements through what is referred to as “Primacy”
 - Federal funding is provided to partially support the state’s oversight programs
 - Each state must demonstrate to the federal Environmental Protection Agency (USEPA) that it has the legal authority to implement and enforce the federal regulations.



Federal Regulations

- ✓ Water quality standards and sampling frequency
- ✓ Treatment techniques for removal of a range of regulated contaminants
- ✓ Water system reporting and public notice requirements
- ✓ Operator training and certification
- ✓ Distribution of federal funds to water systems for technical and financial assistance, mostly in the form of low interest loans for system improvements



Water Supply Division

- v Full-time staff of 32 people
- v Financed by federal grants, permit fees, and state general funds
- v Annual budget of about \$3.9 million covers staff salaries, operating expenses, and contracts with technical service providers



WSD Programs

- v Three permit programs
 - New Source Permits – ensure that new sources are properly isolated, water meets standards, and quantity is adequate
 - Construction Permits – ensure that new and modified systems meet design and construction standards
 - Operating Permits – ensure operation, testing and reporting in compliance with rules



WSD Programs, *continued*

v Construction Loan Program

- Distributes about \$10 million annually to eligible water systems
- Low-interest, no-interest, even negative-interest loans, depending on community income levels
- Longer repayment periods than commercial loans – 20 years or more



Capacity Development Program

- ✓ Seeks to ensure viability of water systems by offering assistance with technical, financial, and managerial issues
- ✓ Goal is long-term compliance, system stability