

# Water



WINTER 2008

A Publication of the Water Supply Division of the Vermont Department of Environmental Conservation

## Adoption of Federal Exemption for Consecutive Water Systems in the Works

Contributed by Eric Blatt, *Engineering and Financial Services Section Chief*

In January of 2007, the Water Supply Division (WSD) convened what turned out to be the first in a series of public meetings on the subject of regulating consecutive water systems. That meeting was intended to focus on suggested changes to how we regulate newly forming consecutive water systems, which typically result from the extension of a municipal water line serving 10 or more residential units where the municipality does not take over the new water distribution piping. The Division believed the changes were significant enough to merit public comment before being implemented.

The changes that were proposed consisted of having the parent system (typically, a municipality) serve as a co-applicant for line extension projects and agree to acquire control of the new distribution piping, thereby avoiding formation of a new consecutive system. However, this would not have been required; we would have continued to accept construction permit applications as in the past, but we would have made the financial and managerial capacity review more stringent for the new consecutive system prior to issuing a permit. Following permit issuance, the permit would be filed in the municipal land records to provide notice to prospective purchasers of their potential responsibility for operating a public water system.

As the meeting progressed, questions and comments invariably focused on how existing consecutive water systems are regulated. By the end of the meeting, it was decided that two work groups should be formed, one to examine and make recommendations for regulation of new systems and the other to do the same for existing consecutive systems.

In early spring of this year, Secretary Crombie instructed the WSD to work with public water system representatives and develop recommendations by September 30, 2007 for his consideration. As part of our examination of the issue, he

asked that we contact other states in the region to find out how they are regulating consecutive systems.

Two meetings were held in June with representatives from a cross section of municipalities, public water systems, consulting engineers and consecutive systems. The WSD subsequently held a public meeting in July and solicited volunteers for the two workgroups, which met in August to develop the recommendations. An objective that evolved during the course of developing the recommendations was to arrive at an approach that simultaneously reduces the cost of operating consecutive public water systems without eroding public health protection and enabling a reduction in the number of individual systems regulated by the State.

### The Recommendations

#### *Existing Consecutive Water Systems*

The work group recommended adoption of the federal exemption and using the four federal criteria plus one additional Vermont-specific criterion that establishes certain wholesale system responsibilities. Qualifying as an exempt public water system does not mean that the system is no longer a public water system, but instead simply means that Federal Primary Drinking Water Regulations do not apply. The four Federal and proposed Vermont-specific criteria are summarized as follows:

1. The system consists only of distribution and storage facilities (and does not have any collection and treatment facilities).
2. The system obtains all of its water from, but is not owned or operated by, a public water system to which the Federal Primary Drinking Water Regulations apply.
3. The system does not sell water to any person.

*(continued on page 2)*

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## Adoption of Federal Exemption

(continued from page 1)

4. The system is not a carrier which conveys passengers in interstate commerce.
5. An agreement has been executed between the systems establishing the respective operational and maintenance responsibilities of the parties. The agreement is evidenced or documented by a letter issued by the wholesale water system to the WSD confirming that an agreement is in place that provides for the following:
  - The regulated wholesale water system will include the exempted PWS in its water quality sampling plans;
  - The wholesale water system will take responsibility for issuing public notice; and
  - The wholesale water system will take responsibility for issuing consumer confidence reports for the consecutive water system.

The WSD would not need to review nor approve the agreement itself. The contents of the agreement would be solely within the discretion of the parties.

Once all five criteria are met, the consecutive system would be exempt from complying with the State and Federal Drinking Water Regulations. However the wholesale and exempted consecutive systems would need to abide by their agreed upon responsibilities. Exempted water systems would be governed by the wholesale system's rules and regulations, like any other customer of that system. The wholesale system would be responsible for complying with directives of the Agency of Natural Resources Secretary to address deficiencies within the exempted consecutive system if the deficiencies posed a public health hazard or significant public health risk. Incidentally, this is the same standard used to determine whether a full operating permit can be legally issued to a public water system.

Absorbing existing consecutive systems is voluntary on the part of the wholesale system. Inclusion of the consecutive system into the overall wholesale system sampling plan does not necessarily mean that water quality samples must be taken within the exempted PWS, but rather, the regulated wholesale system must take that "part" of its system into consideration when developing/revising its sampling plans. If all five exemption criteria are met, the WSD would register the water system as an exempt public water system. The WSD would notify both the wholesale and consecutive systems of the changed status of the consecutive system and only maintain some minimal information about the consecutive in the WSD records.

In the future, if the consecutive system cannot meet one or more of the exemption criteria, the system would lose its exempt status. This would include a rescission of the wholesale and consecutive systems' agreement. If a consecutive system cannot meet all five criteria, the WSD will continue to regulate the existing consecutive system as a public water system in accordance with all applicable state statutes and regulations. However, we believe that the regulatory burden facing an exempted consecutive system for failure to abide by its agreement with the wholesale system is sufficient incentive to avoid such from happening.

### *Regulation of New Water Line Extension Projects*

The construction of a new waterline extension of 500 linear feet or more serving (more than one building and) 25 or more people on average per day would only be permitted if one of the following criteria is met.

1. The wholesale system supplying water takes ownership or full operational responsibility over the proposed distribution piping and components. The new users on the line extension would thus be considered customers of the wholesale system. The new line extension and connected infrastructure would not be independently regulated by the WSD and would be regarded as part of the parent water system.
2. The wholesale system supplying water does not take ownership or full operational responsibility of the distribution line, but instead the consecutive system meets the federal exemption criteria, plus enters into an agreement with the developer to establish respective operational and maintenance responsibilities. In this case, the consecutive system would be classified as an exempt public water system, with the parent system responsible for water quality sampling, public notice and consumer confidence reporting. As with the pre-existing exempt consecutive systems, the new exempt consecutive public water systems would be registered with the WSD.
3. The wholesale system supplying water does not take ownership or any operational responsibility of the line extension, in which case, the developer demonstrates to the WSD that the current and future owners of the new distribution line and public community water system will have the technical, managerial, and financial capability (Capacity) to operate the infrastructure as a regulated consecutive public water system. If the consecutive system is determined to have Capacity, the WSD would regulate it as a consecutive public water system. However, if it is determined that the proposed consecutive will not have Capacity, the WSD will not permit the project.

(continued on page 4)

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## A National Stage for Water Efficiency

Contributed by Eric Law, *DWSRF Project Development Specialist*

Over a year ago in the Winter 2006 Issue of *Waterline*, I wrote an article called [How About a "Water Star" Program](#) in which I explained EPA's efforts to form a non-profit national water efficiency organization. The Water Supply Division encouraged water systems to consider the impact of this organization whose primary purpose is to create a water efficiency ethic. The wait is now over, the Alliance for Water Efficiency is officially in business and the EPA's new labeling program **WaterSense**, will soon be seen on store shelves, if it isn't already.

An energized and coordinated effort from two national organizations to educate the public, create awareness, and promote consumer behavior change will undoubtedly have an effect on water system demand. It's now time to prepare for stagnating or even declining meter readings – despite inevitable population growth – in much the same way energy systems should have prepared for Energy Star. It may not seem apparent now, but your water system could save money just like your customers.

The Alliance for Water Efficiency and WaterSense have many goals and objectives, not the least of which is to reduce water and wastewater infrastructure costs. Most people will associate these two organizations with helping individual users to save water and energy (e.g., taking a shorter shower and purchasing high efficient toilets and showerheads will result in lower water and energy bills), however, water systems will also be natural beneficiaries. A water system which promotes

and implements water efficiency measures will ultimately reduce pumping, treatment, and wastewater effluent costs. Retrofit service connections with faucet aerators, toilet dams, etc. free of charge has happened quite frequently out West and in St. Johnsbury as long as 15 years ago.

Many in the water profession believe this is a win-win situation where individual users save money on their water and energy bills and the water service provider reduces the operating budget. The economic component is only one



half of the equation because obviously there are the environmental gains of water efficiency. We may live in "water-rich" Vermont but as commerce (e.g., manufacturing process and bottled water withdrawals) and population grows our water supplies and the environment will predictably become more sensitive to water shortages and droughts. Just look at our "water-rich" neighbors to the south, Massachusetts, which has had their fair share of water shortages and water bans in the past.

It makes sense for everybody, including water systems, to embrace these efforts, but before municipal and private water systems take the water efficiency

plunge (excuse the very poor pun) they first have to stabilize revenue.

With less purchased water per user and not enough savings in operating costs (resulting from serving less water), the water system might have to consider changing the user rate. Changing user rates to match the new water economy may be the only way to ensure a sustainable system for the future. The water user and the environment do not have to worry about a water supply revenue stream, but the water system does.

The water system that believes water efficiency is a threat rather than an opportunity probably focuses solely on the business model currently in place – we sell water and if we sell less, we will not continue to exist. This is certainly a business model, but not necessarily a business model that will satisfy the future water supply needs of Vermont.

There is increasing competition for water worldwide, not just Vermont, and water systems are tasked with providing water for all needs (residential to commercial) on a reliable and sustainable basis. Responsible water systems should recognize water supply limitations long before they are a problem and embrace water efficiency in a fiscally-responsible manner. This will take some planning, more specifically asset management planning. Fixing leaks prior to the service connection and incentivizing water efficiency measures via rates after the service connection are just two ways the water system can provide a safe and reliable supply of water at an affordable price.

**For more information on the Alliance for Water Efficiency and EPA's WaterSense program, please visit <http://www.allianceforwaterefficiency.org> and [watersense@epa.gov](mailto:watersense@epa.gov).**

## News from the Capacity Cubicle

Contributed by Ashley Lucht,  
*Capacity Development Specialist*

While writing this article, I did some research about what might be known about the world of Capacity. Turns out, there isn't too much. The standard definition of Capacity Development is the process by which water systems acquire, maintain and build upon their technical, managerial and financial capabilities to enable them to consistently provide safe drinking water to their customers in a reliable and cost-effective manner. The short and sweet is Capacity Development is the efforts water systems undertake to ensure long-term viability. Will you be able to provide safe drinking water thirty years down the road.

I'm relatively new to this position, and since starting I have been thinking about new ways to help water systems achieve that long-term viability. In the coming year, look for a change in the regulation of consecutive water systems (See article: Adoption of Federal Exemption for Consecutive Water Systems In the Works), more useful Capacity Development templates, a re-visit of the initial Capacity Initiatives and development of new ones, the CUPSS asset management tool, and energy and water efficiency initiatives (See article: A National Stage for Water Efficiency). Also, water systems can plan to see me out and about providing more of a hands-on approach helping water systems achieve Capacity.

In my brief tenure of working with water systems, a common theme has emerged – lack of long range planning and the funds associated with it. Many systems have been happily providing water for well over 40 years without fail, but recently they are starting to notice assets failing or lengthy sanitary survey letters outlining areas of concern. These letters with a laundry list of requirements often come as a shock to operators and board members.

The single most important thing a water system can do to start planning for the future is to revisit their water rates in relation to how much they are putting away for future expenses and equipment replacement, often referred to as a Capital Improvement Fund or Sinking Fund. If rates haven't been raised in 3 years, it's probably a good idea to reassess and consider raising them. But don't just raise them for the sake of raising them. Take a comprehensive look at where the money is going. You may be able to keep the rates stable by reducing wasted resources and putting that capital to work for you and your customers.

Keep your eyes peeled for more informative articles out of the Capacity Cubicle.

### Adoption of Federal Exemption

*(continued from page 2)*

The intent is to avoid the proliferation and permitting of new privately owned consecutive water systems (as opposed to municipal consecutive systems which might need to exist). To facilitate wholesale system takeover of new line extensions/distribution lines and components, a new design requirement would be added for projects. Design of new facilities would be required to conform to applicable municipal water use ordinance design standards in addition to the Vermont Water Supply Rule - Chapter 21, Appendix A. New line extensions permitted under criterion 3 above are considered new consecutive public water systems, and as such, will be assigned a Water System Identification number recorded in the Safe Drinking Water Information System.

#### *The Next Step*

We are currently working on statutory changes to enable implementation of the recommendations with the hope that the changes will be adopted this legislative session. Stay tuned...

### LT2 Dates to Remember...

Schedule	Systems Serving:	Submit LT2 Monitoring Plan By:	Begin Monitoring Source Water By:
3	10,000 – 49,999	January 1, 2008	April 1, 2008
4	< 10,000	July 1, 2008	October 1, 2008

### Stage 2 IDSE Dates to Remember...

Schedule	Systems Serving:	Submit 40/30 Certification, SM, SSS Plan, or receive VSS Waiver by:	Complete SM or SSS (Monitoring) by:	Submit IDSE Report (only systems conducting SM or SSS) by:
3	10,000 – 49,999	Oct. 1, 2007	Sept. 30, 2009	Jan. 1, 2010
4	< 10,000	Apr. 1, 2008	Mar. 31, 2010	July 1, 2010

# Transient Non-community Water System Corner

Contributed by Jim Siriano,  
*Transient Non-Community Program*

## Change in the Permitting Process for TNC Construction Activities

Landowners must get a construction permit before building a new transient non-community drinking water system (TNC) or modifying an existing system. Examples of modifications that require a construction permit include installing water treatment (e.g., an ultraviolet light disinfection unit) or developing a new drinking water source.

Historically, construction activities for TNCs were authorized in Wastewater System and Potable Water Supply Permits issued by the Wastewater Management Division (WMD). Starting on July 1, 2007, however, the responsibility to permit construction activities for TNCs was moved to the Water Supply Division (WSD). One reason for this change was to free up some WMD staff time so they can handle their increased workload associated with the new “on-site” rules. Thus, prior to building a new system or modifying an existing system, the landowner must submit an application for a construction permit to the WSD. The application can be printed from our website and paper copies are available by calling WSD (*contact information at end of article*).

**Reminder to Get an Operating Permit**  
Vermont Statute prohibits any public water system from serving water without an operating permit. If you do not have an operating permit, or if you are not sure if you do, please contact the TNC program (*contact information at end of article*).

**Got Coliform Contamination?**  
The table to the right, which was also in a previous edition of the *Waterline*, lists some of the likely causes of bacteria contamination at TNCs. Most of these situations could have been prevented. TNC owners and operators should consider these causes when evaluating their water system.

But do not fret. If coliform are detected in

a sample from your system and you need help finding out why, free assistance is available (*see below*).

## Get Free Technical Assistance!

The WSD has a contract with Aquaterra, a Vermont-based engineering and environmental services firm, to provide free technical assistance to TNCs. We have had a similar contract with Aquaterra in the past, during which they assisted more than 120 systems throughout the State.

Services offered by Aquaterra range from providing information on the phone to complete onsite assessments of water systems from the source to the tap. Assistance is available to all TNCs, not just those with contamination issues. Please contact the TNC Program if you need assistance or want more information.

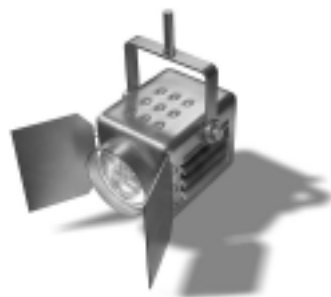
**The TNC Program staff can be reached at 800-823-6500 (toll free within Vermont) or 802-241-3400. The Water Supply Division website address is [www.vermontdrinkingwater.org](http://www.vermontdrinkingwater.org).**

**Table 1. Potential Causes of Contamination**  
(Most frequently identified causes are in bold)

<i>Drinking Water Sources (e.g., wells and springs)</i>
<ul style="list-style-type: none"> <li>• <b>Wells not shock-chlorinated after a new pump is installed or an existing pump is removed for repair and put back into service.</b></li> <li>• Loose vent screen on older style well caps.</li> <li>• <b>Poor seal between the well cap and casing, particularly on older style well caps.</b></li> <li>• <b>Electrical conduit not adequately secured to the well cap.</b></li> <li>• Well casing not at least 18" above ground and/or standing water gathers around the well casing.</li> <li>• <b>Difficulty in eliminating air gaps in springhouses or around well tile covers for dug wells.</b></li> <li>• Insufficient shock-chlorination following repairs or periods of discontinued water use (e.g., reopening of seasonal systems).</li> </ul>
<i>Treatment</i>
<ul style="list-style-type: none"> <li>• Inadequate maintenance of disinfection systems (e.g., chlorinators running out of solution).</li> <li>• Infrequent changing of sediment filters or inadequate cleaning of reusable sediment filters.</li> <li>• Inadequate backwashing of iron/manganese filters and water softeners.</li> </ul>
<i>Storage Tanks</i>
<ul style="list-style-type: none"> <li>• <b>Infrequent or lack of cleaning of atmospheric storage tanks.</b></li> <li>• Oversized storage tanks relative to actual water use (often for fire protection).</li> <li>• <b>Insecure tank hatches, openings, or covers.</b></li> <li>• Insecure electrical line penetration through underground tank access risers.</li> <li>• Gasket or seal failure in multi-section underground concrete tanks.</li> <li>• Cracks in underground concrete tank sidewalls.</li> <li>• Missing screens on tank overflow or vent pipes.</li> <li>• Water saturated pressure tanks. Most common in older style galvanized tanks without bladders.</li> </ul>
<i>Distribution Piping</i>
<ul style="list-style-type: none"> <li>• <b>Distribution system not shock chlorinated after repair work.</b></li> <li>• Dead-end portions within the distribution system.</li> <li>• Insufficient shock-chlorination following repairs or periods of discontinued water use (e.g., reopening of seasonal systems).</li> </ul>

## Security Spotlight:

### Does Your System Need a Security Checkup?



Contributed by Heather C. Young,  
*Water System Security Coordinator*

Does your system need security improvements? Is your emergency response plan outdated? In an effort to address water system security needs, the Water Supply Division is stepping up assistance to both large and smaller systems. Providing low cost, high impact security improvement solutions is our primary goal.

Ways to Improve the Water Security 'Health' of Your Water System:

- *Conduct a Vulnerability Assessment (VA):*  
VAs are a method to evaluate your system's susceptibility to potential threats and identify corrective actions to reduce or mitigate the risk of serious consequences from terrorism, vandalism, or natural disasters.
- *Emergency Response Plan (ERP):*  
ERPs address issues raised by the system's vulnerability assessment, as well as outline actions that a water system would take in response to a major event, such as natural disasters or man-made emergencies.
- *Pandemic Planning:*  
Integrate a pandemic plan in your system's ERP. During a pandemic emergency, it should be assumed that water systems could have severe shortages in staffing and disruptions in the supply chain. There is also potential for disruption of communications, transportation, services, utilities, and public safety.
- *Vermont Water/Wastewater Agency Response Network (VTWARN):*  
This program allows water, as well as, wastewater systems to receive mutual aid and assistance from other systems in Vermont to restore services damaged by nature or man-made accidents. To find additional information about how this program can help your system, please read the VTWARN update in this issue of Waterline.
- *Incident Command System (ICS) certification:*  
Water operators are now recognized as first responders. ICS is a standardized, on-scene all hazard incident management concept. ICS allows its users to adopt an integrated organizational structure to match the complexities and demands of a single or multiple incidents without being hindered by jurisdictional boundaries. For more information about on-line ICS classes, go to the Federal Emergency Management Agency (FEMA) website: <http://training.fema.gov>.
- *Emergency Planning Workshops:*  
Attendance and participation in emergency planning workshops/tabletop exercises are essential to learn up-to-date information in the water security field.

**You may contact Heather Young, Water System Security Coordinator at 802-241-3717 or [heather.young@state.vt.us](mailto:heather.young@state.vt.us), to schedule an on-site visit or for more information.**

## VTWARN Update

Contributed by  
Heather C. Young, *Water System Security Coordinator & VTWARN Leadership Team Member*

The Vermont Water/Wastewater Agency Response Network (WARN) is a new program currently under development with support from the Water Supply Division. This program will allow water and wastewater systems in Vermont to receive rapid mutual aid and assistance from other systems in the state to restore services damaged by natural or man-made incidents. Water and wastewater systems can sign the VTWARN standard agreement, which then allows them to share resources with any other system in Vermont that also has signed the standard agreement.

Advantages of joining VTWARN will include:

- No anticipated cost to join and assistance is provided on a voluntary basis.
- Eligibility for Federal Emergency Management Agency (FEMA) disaster reimbursement, in case of a federally declared emergency. The received services are contingent upon a pre-existing, signed mutual aid and assistance.
- Resources developed and managed by Vermont water and wastewater systems, so it is established to benefit you to the highest degree possible in terms of giving and receiving aid.
- No formal declaration requirement from local or state officials, which means systems can receive resources faster.
- Access to database of utilities and resources within the state, including a contact person's name and information, as well as the resources that the other system can provide.
- Both public and private water/wastewater systems may freely give and receive aid and assistance.

*(continued on page 10)*

# Issuing a Public Notice?

Contributed by Jeannine McCrumb,  
*Compliance Analyst*

Public notification of drinking water violations is seen as a daunting task for most water systems. Notification, however, provides systems with a means to protect public health and build trust through information sharing. Public notices and Consumer Confidence Reports (required for community systems) allow water system users to know what is in their drinking water and where it comes from before they turn on the tap. Public notices can also help consumers understand potential rate increases and support increased funding for drinking water protection and treatment.

Public notification regulations were first issued in 1976 and were last revised in 2000. The regulations specify who must give notice, what the notice must contain, and when and how the notice must be delivered. Administrative contacts or operators must provide notice to all persons served by a system when the system violates a national primary drinking water regulation or in other situations posing a public health risk. The Environmental Protection Agency (EPA) believes it is the obligation of a system to reach non-bill paying customers in addition to customers with a service connection on the system. This means that systems must take reasonable steps to inform users of a system who may not be reached via a primary method of delivery (e.g., inclusion of public notice with a water bill). These users may include renters or people who work in the area but live elsewhere. Public notices must describe the violation or situation and must address the ten elements highlighted in Figure 1.

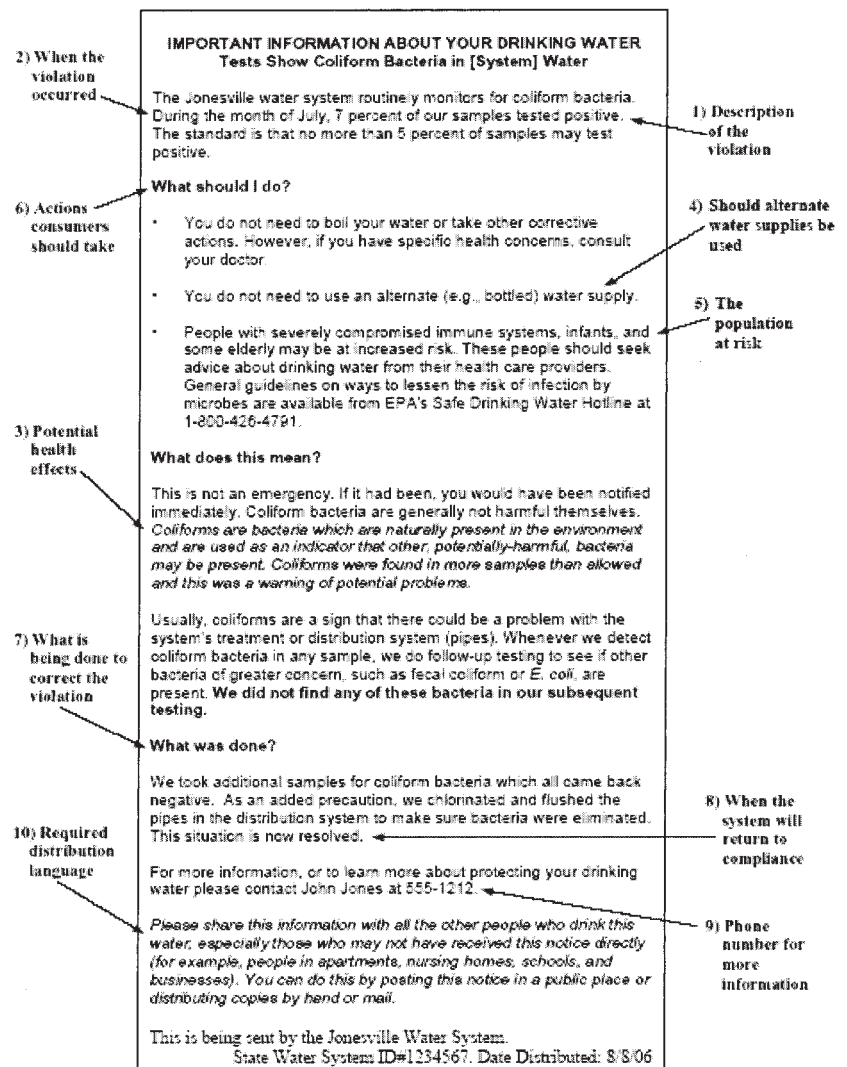
Notice templates provided by the Water Supply Division include mandatory health effects language for maximum contaminant level (MCL) and treatment technique violations and standard language for monitoring violations and distribution of the notice to all persons served. This information is denoted in italics on the templates and must not be removed. Templates also include space for the water system to explain what is being done to correct the situation and a timeline for returning to compliance. Inclusion of this information is not only required but is helpful in reducing inquiries regarding the violation. The system must also enter a contact name and number for consumers to call with further questions. Formatting of the notice should ensure readability and understanding of the notice by consumers. Notices must be displayed in a conspicuous manner (not

buried in a newspaper), must not contain overly technical language or very small print and must not contain language which invalidates the purpose of the notice.

Due dates for public notices are stated in the violation letter. With the exception of Tier 1 type violations and situations or violations and situations with significant potential health risks resulting from short-term exposure, the Water Supply Division will work with systems to consolidate required mailings.

A copy of the notice issued and a delivery certification form must be sent to the Water Supply Division. **Please contact Jeannine McCrumb at 1-800-823-6500 or jeannine.mccrumb@state.vt.us with any questions you have pertaining to the public notice regulations. Additional information can also be found at <http://www.epa.gov/safewater/publicnotification/compliancehelp.html>.**

Figure 1  
The Required Elements of a Public Notice



Environmental Protection Agency (2007). *Revised Public Notification Handbook*. EPA 816-R-07-003, p. 10.

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## Meet Our Staff: Elizabeth Hunt

Elizabeth Hunt, the Water Supply Division's (WSD) Support and Planning Chief, took employ with the Agency of Natural Resources in 1994 managing the Underground Injection Control program, regulating commercial and industrial groundwater discharges. Following this charge she managed the Groundwater Protection Program eventually becoming the supervisor for the, then new, Source Water Protection Section. Currently, as the Support and Planning Section Chief, Elizabeth supervises a steadfast staff of administrative assistants that serve as the glue which holds the WSD together. Also under her direct supervision are the Safe Drinking Water Information System Specialist, Water System Security Coordinator and Planning and Outreach Specialist, filling some of the non-operational holes in the Division. In addition to supervising her staff Elizabeth is responsible for managing emergency response efforts,



various grants and contracts, WSD information technology issues, Federal rules and regulations, and budgetary financial oversight.

Before Elizabeth came to Vermont she came from, like several folks now in Vermont, the "Flatlands" where she got her bachelor's degree in Geology from Carleton College in Minnesota and her master's in Environmental Pollution Control from Penn State University. Elizabeth also has completed course

work in Public Administration from the University of Vermont and is a Certified Vermont Public Manager through the State Public Managers Program.

Outside of work, Elizabeth is a mom, a wife and what she won't tell you is she is a closet baker. If you happen to be around the Water Supply Division during the Holidays, make sure to swing by her office because you might find a selection of seasonal cookies that you very likely won't be able to resist.

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## Best of Luck to Long Time VRWA employee Elizabeth Walker

Contributed by Shaun Fielder,  
*Executive Director VRWA*

Elizabeth Walker finished employment with Vermont Rural Water Association on August 31st. Many people in the water and wastewater industry across Vermont have been lucky to work with her. Elizabeth has been a key figure in the Vermont State Revolving Loan Fund Process as a VRWA water system specialist since 1998. For all parties involved in the program, including the Water Supply Division staff, she was the senior technician. She, like the other staff at VRWA, care deeply about the work they take on. I recently received a copy of a 'best of luck' note directed to her. "You know how impressed I've been, not just with the technical skill and knowledge, but the professionalism, down-to-earth honesty and compassion you bring to your working relationships." Elizabeth has been a great co-worker and she is lucky enough to be going back

to her former employer Sugarbush Mountain Resort. All of us at VRWA wish her the best!

We are pleased to report Ian Schrauf took on the position left by Elizabeth on September 3rd. Ian has extensive experience in water and wastewater operations. Most recently he held a water system specialist position with the Massachusetts Rural Water Association. His duties and responsibilities were very similar to those of the position he has taken with VRWA. His name may sound familiar; he held a water system specialist position with our former parent group, the Northeast Rural Water Association. Ian spent some time with Elizabeth prior to her completion of employment. Various planning meetings and State Revolving Loan Fund program and file reviews have well prepared him for the work to be completed. He has assisted many systems already and looks forward to assisting others as needed.

**Ian can be reached at [ischrauf@vtruralwater.org](mailto:ischrauf@vtruralwater.org) or by phone at 800-556-3792 extension 321. For additional information on Vermont Rural Water Association please visit [www.vtruralwater.org](http://www.vtruralwater.org)**

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## Waterville Fire District Wins National EPA SRF Award

Contributed by Kira Jacobs, *EPA*

On November 1, 2007, the Waterville Fire District #1 was presented with a national EPA Drinking Water State Revolving (DWSRF) award for Sustainable Health Protection. The award recognized the system “for showing exceptional creativity in designing projects that promote sustainability and protect public health.”



A \$425,000 Vermont DWSRF loan provided the Waterville Fire District #1 with a new control building to house disinfection and corrosion control equipment, meters, and control/alarm systems. The loan also funded two new 4,500-gal reservoirs, and replacement of water mains and service lines. Prior to the project, the system lacked adequate disinfection capacity, resulting in bacteriological contamination and discharge of chlorinated water from storage tank overflow.

The Waterville water system has come a long way since it began planning for the improvements in the spring of 2004. A major turning point for the system occurred when system ownership changed from private to municipal with the formation of the Fire District in 2004. The SRF loan provided Waterville with the technical, financial, and managerial capacity to provide safe and healthy drinking water to the 84 people it serves.



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## ANR Hosts Disinfection By-Product Symposium

Contributed by Gary Schultz, *Acting Director*

The Vermont Water Supply Division hosted a symposium in Montpelier on November 1st to educate water system officials and the interested public about disinfection options and risks. A panel of experts from all across the country, as far as California and as near as Waterbury, was on hand to provide the latest information on the subject matter.

Disinfectants are an essential element of drinking water treatment because of the barrier they provide against waterborne disease-causing microorganisms. However, disinfection byproducts (DBPs) form when disinfectants used to treat drinking water react with naturally occurring materials in the water (e.g., decomposing plant material).

The Stage 2 DBP rule is intended to reduce potential cancer and reproductive and developmental health risks from disinfection byproducts (DBPs) in drinking water, which form when disinfectants are used to control microbial pathogens. Over 260 million individuals are exposed to DBPs.

This final rule strengthens public health protection for customers of systems that deliver disinfected water by requiring such systems to meet maximum contaminant levels as an average at each compliance monitoring location (instead of as a system-wide average as in previous rules) for two groups of DBPs, trihalomethanes (THM) and five haloacetic acids (HAA5). The rule targets systems with the greatest risk and builds incrementally on existing rules. This regulation will reduce DBP exposure and related potential health risks as well as providing more equitable public health protection.

**For more information on DBPs and Power Point presentations from the Symposium visit <http://www.vermontdrinkingwater.org/wsyps.htm#train>.**

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## Who Says Summer Days are Lazy?

Contributed by Kira Jacobs, *EPA*

In July 2007 local and regional planners from throughout Vermont attended "How to Protect a Community's Drinking Water Source: A Workshop for Planners." The workshop was jointly presented by the Water Supply Division and the U.S. EPA's Drinking Water Program.

While some people were enjoying the beautiful summer weather, more than 25 dedicated planners descended upon (the now world famous!) Springfield to attend a workshop on July 17th at the Hartness House Inn. The second workshop was held the following day in South Burlington. The Chittenden County Regional Planning Commission graciously hosted more than 25 planners for an excellent day of learning and discussion.

Featured speakers at the workshops included Vermont State Geologist, Larry Becker; Milly Archer from the VT League of Cities and Towns; staff from the Water Supply Division; and Lee Krohn, Planning Director for the Town of Manchester.

Topics presented included:

- Approaches to protecting source water;
- Planning for municipal groundwater use and protection and protecting existing water supplies;
- Opportunities for groundwater mapping in a community; and
- How to develop a model groundwater ordinance

**For more information on the materials provided at the workshop or to request a workshop in your community, please contact Kira Jacobs at [jacobs.kira@epa.gov](mailto:jacobs.kira@epa.gov) or 617-918-1817.**



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## Talking to Customers about Chronic Contaminants

IEPA has just released a guide to help Public Water Systems communicate with the public about chronic contaminants in their drinking water. Talking to your Customers about Chronic Contaminants in Drinking Water is a best practices fact sheet that helps public water systems communicate with the public about drinking water risks. This fact sheet discusses the importance of communicating with the public about chronic contaminants – both regulated and unregulated – and describes effective strategies for getting the message out. EPA has posted the guide on its website in a number of locations where water systems and other users might go for information on communicating with the public through the CCR and Public Notice and with high profile contaminants like arsenic and radionuclides.

**One of the sites where you can access the new best practices guide is at <http://www.epa.gov/ogwdw/radionuclides/compliancehelp.html>.**

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## VTWARN Update

*(continued from page 6)*

The VTWARN collaboration has strengthened ties among state agencies, technical assistance providers, and water/wastewater operators. The VTWARN Leadership Team is meeting monthly and making great strides. Current activities include: mutual aid draft agreement under legal review, website development, outreach efforts at the Vermont League of Cities and Towns' Town Fair and the Green Mountain Water Environment Association workshop/conference.

**For more information, contact Elizabeth Hunt, VTWARN Leadership Team Chairperson at 802-241-3409 or [elizabeth.hunt@state.vt.us](mailto:elizabeth.hunt@state.vt.us). Also, check out the VTWARN website at <http://www.vermontdrinkingwater.org>.**

## OPERATOR TRAINING AND EXAMINATION SCHEDULE

DATE	TIME	CLASS NAME	CONTACT	TCHS	FEE	LOCATION & COMMENTS
January 14 – April 7	8:00 – 12:00	Vermont Long Course: Advanced Water Operator Certification	VRWA	45.5	\$455	St Leo's Hall, Waterbury
February	TBA	Rescuing and Rehabilitating Your Aging Water Mains	NEWWA	TBA	TBA	TBA
February 6	9:00 – 1:00	Lead and Copper Rule	VRWA	3.5	\$35	Springfield High School
February 13	8:00 – 1:00	Electrical Safety in the Workplace	VRWA	4.5	\$45	Emory Hebard State Office Bldg, Newport
February 19	8:00 – 3:00	Water System Rule Update and Sampling Seminar	VRWA	5	\$50	Holiday Inn Express, White River Junction
March	TBA	Excavation Safety: Are you a competent person?	NEWWA	TBA	TBA	TBA
March 5	8:00 – 1:00	Maintenance of Potable Water Tanks	VRWA	4.5	\$45	Champlain Water District, South Burlington
March 6	8:00 – 1:00	Maintenance of Potable Water Tanks	VRWA	4.5	\$45	Civic Center, Montpelier
March 7	8:00 – 12:30	Distribution Certification Course, Class D Operations	VRWA	28	\$280	St Leo's Hall, Waterbury
March 19	8:00 – 12:30	Hazardous Communications	VRWA	4	\$40	Holiday Inn Express, White River Junction
March 26	8:00 – 12:30	Total Coliform Rule	VRWA	4	\$40	Civic Center, Montpelier
March 31 – April 3	TBA	Cross Connection Control Surveyor's Course	NEWWA	TBA	TBA	TBA
April	TBA	Introduction to Cross Connection Control Surveying & Training and Certification of Cross Connection Control Surveyors	NEWWA	TBA	TBA	TBA

\*Fee is waived for any operator employed by any Vermont Public Community or Non-Transient Non-Community Water System who operates a water system serving a population of 3,300 or fewer.

\*\*Fee is reduced for any operator employed by any Vermont Public Community or Non-Transient Non-Community Water System who operates a water system serving a population of 3,300 or fewer.

\*\*\*Cost is reduced for GMWEA and NEWWA members.

NEWWA – New England Water Works Association  
125 Hopping Brook Road, Holliston, MA 01746  
Phone: 508-893-7979, Fax: 508-893-9898, [www.newwa.org](http://www.newwa.org)

VRWA – Vermont Rural Water Association  
20 Susie Wilson Road, Suite B, Essex Junction, VT 05452-2827  
Call: 800-556-3792 or 802-660-4988, Fax: 866-378-7213, [www.vtruralwater.org](http://www.vtruralwater.org)

GMWEA – Green Mountain Water and Environment Association  
VT League of Cities and Towns, 89 Main Street, Suite 4, Montpelier, VT 05602  
Contact: Jessica Hill at 802-229-9111, Fax: 802-229-2211, E-mail: [jhill@vlct.org](mailto:jhill@vlct.org), [www.gmwea.org](http://www.gmwea.org)

WSD – Water Supply Division  
DEC, Old Pantry Building, 103 South Main Street, Waterbury, VT 05671  
Toll Free in VT: 800-823-6500 or 802-241-3400, Fax: 802-241-3284, [www.vermontdrinkingwater.org](http://www.vermontdrinkingwater.org)

For Operator Certification – Contact: Matt Guerino at 802-241-3415 or 800 823-6500, E-mail: [matt.guerino@state.vt.us](mailto:matt.guerino@state.vt.us)

For Capacity Development – Contact: Ashley Lucht at 802-241-3424 or 800 823-6500, E-mail: [ashley.lucht@state.vt.us](mailto:ashley.lucht@state.vt.us)

For Operator Training – Contact: Phil Acebo at 802-660-4988 Ext. 337, E-mail: [pacebo@vtruralwater.org](mailto:pacebo@vtruralwater.org)



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**Visit us on the web at:  
[www.vermontdrinkingwater.org](http://www.vermontdrinkingwater.org)**

If you have any comments or suggestions about this newsletter, please contact the editor, Ryan McCall, at 802-241-3417 or [ryan.mccall@state.vt.us](mailto:ryan.mccall@state.vt.us).



Honorable Jim Douglas, Governor  
George Crombie, ANR Secretary    Laura Pelosi, Commissioner

#### **INSIDE THIS ISSUE:**

- **Adoption of Federal Exemption for Consecutive Water Systems in the Works**
- **A National Stage for Water Efficiency**
- **News from the Capacity Cubicle**
- **Transient Non-community Water System Corner**
- **Security Spotlight: Does Your System Need a Security Checkup?**
- **VTWARN Update**
- **Issuing a Public Notice?**
- **Meet Our Staff: Elizabeth Hunt**
- **Best of Luck to Long Time VRWA employee Elizabeth Walker**
- **Waterville Fire District Wins National EPA SRF Award**
- **ANR Hosts Disinfection By-Product Symposium**
- **Who Says Summer Days are Lazy?**
- **Talking to Customers about Chronic Contaminants**
- **Operator Training and Examination Schedule**