Your Standby Disinfection Is Installed; What’s the Next Step in the Process?
by Paula Jackson, VRWA

Standby Chlorination was first a requirement for community water systems, and then for non-transient non-community systems. The purpose of standby disinfection is to have the capability of turning on your chlorinator, or UV disinfection in the event of a positive coliform hit, a loss of pressure in your water system or other situations where contamination may have occurred. If your water system is classified as a community or non-transient non-community water system, you should have your standby chlorination in place at this time.

So, what is the next step in the process? The next step for water operators is to learn about your disinfection system. What if the state notified you tomorrow of a positive coliform hit, would you be able to turn on your chlorination system and know what concentration your chlorine mixture should be? What settings your chemical feed pump should be set at? You could potentially over chlorinate your water system without knowing the answers to these questions. The most precise way to figure out the answers to these questions is to

News from the Field
by Shaun Fielder, Executive Director, VRWA

VRWA co-sponsored a Collection System Workshop with Green Mountain Water Environment Association (GMWEA) this September at VTC’s Northern New England On-site Demonstration facility. Wayne Graham (VRWA) worked collaboratively with a number of GMWEA representatives including Dick Perez and Bob Wood on planning as well as presentations for this event. There were over 60 individuals taking part in the full day event. It started with classroom based trainings on various topics followed by a working lunch and afternoon on-site demonstrations by a number of vendors. By all accounts the event was very successful and we were pleased to be involved. We look forward to similar future events with GMWEA.

While hands-on operation topics were discussed, commentary regularly came back to infrastructure assessment. A good record system was noted as the foundation for any systems future success. Determining life expectancy and vulnerable components that need repair is required. Furthermore, developing a sound fiscal plan that insures adequate capital for maintenance and improvements is imperative. In a nutshell, asset management is becoming more and more significant regardless of type of system you are talking about; whether collection, water or wastewater based. In this time of economic downturn, understanding and being able to objectively and clearly demonstrate systems needs is imperative to your systems future survival.

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Wayne Graham leads a training session at the Collection System Workshop.
Shaun Fielder, Executive Director
Vermont Rural Water Association
20 Susie Wilson Rd., Suite B
Essex Jct., VT 05452

Dear Mr. Fielder,

I am writing to express my appreciation for the work done by Vermont Rural Water and Water Systems Specialist Ian Schrauf in Pownal this last year.

Vermont Rural Water’s expertise and assistance were essential to successfully completing a water upgrade at Burdick Mobile Home Park in Pownal. Residents were faced with a health order to boil their water because of low or no water pressure and the owner was under an environmental court order to correct the problem brought by the Agency of Natural Resources. The project was especially challenging due to several factors that needed careful and patient work with many parties including tenants who had not received adequate safe water for an extended period, the supplying Pownal fire district, a local Pownal Housing Group and the park owner who had very limited resources. The project required extensive services throughout its duration including assisting in legal and financial matters, coordinating necessary permissions and communicating with the numerous involved parties at the state and local level.

Today, after many years of frustration, the residents finally have safe water they can rely on. Vermont Rural Water was absolutely critical to this project.

This letter conveys my appreciation for Vermont Rural Water’s good work.

Sincerely,

Rep. Bill Botzow
1225 South Stream Road
Bennington, Vermont 05201
Nominations Sought
The Tony Torchia VRWA Special Recognition Award honors a person affiliated with the water-wastewater industry for extraordinary effort or accomplishment during the previous year or over the course of a career. All members are invited to submit nominations.

VRWA will also have two seats on the Board of Directors up for election this spring. Our all-volunteer board meets quarterly to direct and oversee the association.

Directors are representatives of VRWA-member water/wastewater systems and they are elected to the board for three-year terms by the membership. Self nominations are common.

Nominations for the 2009 Tony Torchia Award or a board seat must be received by January 31, 2009. For a nomination form, visit www.vtruralwater.org or call the office at 802-660-4988.

Keep Forwarding Your Letters of Support
We regularly receive letters of support from many communities and systems we serve (see sample at left). Given the economic challenges all of us are facing these days the letters truly illustrate the need for the services and support offered by our association. These are presented to our elected officials, particularly at the National level. This gives those individuals the grassroots background to make a decision that funding for rural water programs at the national (and state) level needs to be a priority. Any detail you can provide on monies saved at the local level and how your customers’ health or the environment were protected would be appreciated. The letters and notes can be directed to Shaun Fielder, Executive Director.

Federal Trade Commission Red Flag Rule Effective May 1, 2009
All utilities are required to comply with the FTC's "Identity Theft Red Flag Rule" even if only nominal information such as name, phone number and address are collected. However, the true risk established through the risk assessment activity may not require any changes to existing policies or procedures.

The primary purpose of the rule is to protect against the establishment of false accounts and ensure existing accounts are not being manipulated. This regulation does not address or require utilities to adopt measures that will protect consumer information and prevent unauthorized access. However, implementation of good management practices to protect personal consumer data can prevent identity theft.

Rural water has produced a template for given utilities to use to conduct an internal assessment and insure sound procedures to meet the goals of this regulation. The template can be found in the news section of our web site, vtruralwater.org.

Save the Date
VRWA Annual Conference
Lake Morey Resort, Fairlee, VT
May 6-7, 2009
By Wayne Graham, VRWA

In this series of articles, I will discuss cost effective ways of reducing inflow and infiltration to our wastewater facilities. Inflow and infiltration are defined below.

Manholes are access points to wastewater collection systems. Unfortunately these access points can also allow unwanted surface and ground water to enter. This unwanted water has to be handled by the collection system and treated by the wastewater facility.

This treatment of unwanted ground/surface water takes up valuable facility capacity, restricts the amount of future hookups and the growth of a community. Wastewater facility upgrades, due to lack of capacity that has been taken up by inflow and infiltration sources, are a huge waste of money and resources. This extra flow can also cause WWTFs to use extra electricity, chemicals and can affect the efficiency of the treatment process. The inflow and infiltration contribution from manholes is detailed in an interesting quote from an EPA research paper, by Vermont’s own Dick Perez: “30 to 50 percent of inflow and infiltration is due to defects and conditions in or near manholes.” Source: R. Perez, Advantages of Manhole Rehabilitation

There are quick and easy ways to identify manholes that are under the influence of inflow or infiltration:

- Smoke Testing, using a blower to inject smoke into a collection system quickly shows manhole defects such as poorly sealed covers, leaking rings/risers. Note: Public notification and safety procedures need to be followed prior to smoke testing.

- Manhole inspection programs can be very beneficial to eliminating inflow and infiltration. Documenting your observations will allow for later prioritization of repairs. Inspections should include an observation of the surface around the manhole cover and frame. Look for tell-tale signs of accumulated sand being carried by water. If the cover/frame is below grade, they should be raised to avoid surface water from entering. A quick fix is to use an inflow cover to prevent water from entering into the manhole.

Inspections also need to include risers, joints, walls and stubs. Water staining can show past inflow and infiltration points, but it’s hard to beat putting on a rain coat and inspecting manholes during rain events or times of high ground water levels. Inspecting the inside of a manhole can be done using pole mirrors, zoom cameras and actual entries. Note: Be sure to follow confined space entry procedures.
See illustration above for possible entry points of surface and ground water.

Once your inspections are done, it is very important to prioritize your repairs to get the biggest return for your time and money. Manholes can be brought up to grade by town crews or local contractors. There are several Vermont companies that do a great job of internal repairs and sealing, or this can be done by collection system personnel using a variety of new products that are on the market.

For assistance with inflow and infiltration in your community, contact VRWA Wastewater Specialist Wayne Graham at 802-660-4988 ext. 319.
Last month I attempted to thank all those who have added their expertise to our classes. Unfortunately, due to limits on space, we were unable to put everyone in our last issue, so here we go again.

I work in concert with a lot of professionals from the Water Supply Division: Ellen Parr Doering, Matt Guerino, Jeannine McCrumb, and Heather Young. These folks are so helpful bringing operators and systems up to speed on the Water Supply Rule. Their efforts simplify the complex federal code on topics ranging from Disinfectant Byproducts, to the Total Coliform Rule assuring that your system is secure from accidental or intentional contamination.

Can you stress safety enough? No. Safety should always be a critical concern for all our systems. And when it comes to this topic we are very fortunate to have Dan Whipple, VOSHA Compliance Assistance Specialist help advocate for maintaining a safe work environment. Dan has taught Confined Space, Trench Safety, Electrical Safety, and MSDS just to name a few. Dan’s passion for what he does is obvious and he continually stresses that short cuts can lead to tragedy. Dan’s philosophy is that a safe work environment for all will help guarantee that we each return home at night to our homes, our families, and our friends.

Another source of safety training for operators was Bob Moody of E.J. Prescott, Inc. Bob is the Safety and Training Manager for EJP and came to Vermont to reinforce training on Trenching and Traffic Hazards. Bob is also an advocate for a safe work environment, and like Dan, presents in a witty and anecdotal fashion that instructs and entertains.
“We are pleased to announce we have 13 systems as VTWARN members.”

Another success of the event was all the networking, most notably between system personnel. Many in the water and wastewater industry work with skeleton crews. Of particular note when emergencies occur, the tasks can be overwhelming. A solution to this situation is to consider joining the VTWARN network. Phil Acebo (VRWA) and I have been serving on the VTWARN Steering Committee with a number of operators and state personnel from various departments. We are pleased to announce we have 13 systems as VTWARN members. They have signed the mutual aid and assistance agreement and are prepared to assist another member in the future.

The VTWARN steering committee has a good plan to insure additional members come on board and a sound mutual aid system is developed. In addition, the committee will insure other resources are available for a given emergency situation. These emergencies, whether big or small, are a regular occurrence in our industry and they are handled well by given systems. I am sure many of you would agree having other resources to call upon would definitely be beneficial. Becoming a member of VTWARN will insure you have options for additional resources during that time of need. Currently the Water Supply Division has information on its website listing a number of VTWARN items and other security related resources. In addition there is a copy of the previously noted mutual aid and assistance agreement. Please visit the following link for this data, [www.vermontdrinkingwater.org/counter-terrorism-info.htm](http://www.vermontdrinkingwater.org/counter-terrorism-info.htm) Please note the steering committee will have its own dedicated website up and running in the near future. For additional information on VTWARN you can contact me or Phil Acebo (VRWA).

As we approach the holiday season let’s hope those emergencies for all of us are far and few between. On behalf of VRWA, best wishes for you and yours.

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**Standby Disinfection from page 1.**

actually start up your chlorination system and find the answers to these questions and document your findings. It is much easier to plan this during a non emergency situation, when convenient for you and your consumers, than during an emergency situation. After you have figured out your chlorine concentration and pump settings, you can write an emergency standby chlorination standard operating procedure. This “SOP” should include step by step procedures from mixing the chlorine in the chemical vat, to adjusting your pump settings, to checking your chlorine residuals daily and documentation required by the Water Supply Division. This document should be part of your operations and maintenance manual and emergency response plan. You can also post this document by your chlorination system for reference during an emergency situation.

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If you would like assistance with this process please contact Paula Jackson, VRWA.

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