

PFAS by the Numbers

by Liz Royer, Executive Director

- 6 PFAS trainings this summer
- 229 people trained to sample PFAS
- 370 cups of coffee consumed during trainings (estimated)
- 18 PFAS chemicals reported in lab results
- 20 parts per trillion of PFAS is the interim regulatory limit
- 590 systems required to monitor for PFAS by December 1st
- 8 public water systems currently treating for PFAS
- \$0 amount of money provided by the Legislature for PFAS monitoring and treatment

Your state representatives and senators need to hear from public water systems about the financial impact of Act 21 (An act relating to the regulation of polyfluoroalkyl substances in drinking and surface waters).

Vermont Rural Water will be sending more information about providing comments and feedback on PFAS legislation in coming weeks.

Additionally, ANR is seeking comments on water supply rule revisions related to PFAS. You can comment in person at one of the public hearings in November:

- Nov 6, 9 AM – ANR Annex Building, 190 Junction Road, Berlin
- Nov 7, 7 PM – Rutland Free Library, Fox Room, 10 Court Street, Rutland
- Nov 12, 7 PM – DEC Essex Regional Office, Act 250 Room, 111 West St, Essex Junction

Or send comments by email to ellen.parrdoering@vermont.gov with the subject line of “PFAS Water Supply Rule Revisions” by November 25. ●

Key Things to Know About PFAS Monitoring



Guest Article
by Ben Montross,
DEC DWGPD

Monitoring data is starting to come in and most systems are not showing detections of the 5 regulated per- and polyfluoroalkyl substances (PFAS). It is still early, however, and a lot of data has yet to be received.

If your water system has not sampled yet, there are some important things to realize when sampling. What follows is a general overview of some of the major points applicable to monitoring PFAS at public drinking water systems in Vermont.

Collect your sample at the entry point to distribution, where you regularly sample for VOCs, SOCs, IOCs, nitrates, and radionuclides. Monitoring schedules have been updated and are available at anrweb.vt.gov/DEC/DWGWP/SearchWS.aspx

Send your sample to a certified lab. The analysis must be performed by a lab certified by NELAP to perform EPA Method 537.1 for all 18 analytes under the method. As of time of writing, Vermont is acknowledging 8 labs who can do this. Unfortunately none of those labs are in Vermont,



Johanna Palmer of ATC demonstrates proper PFAS sampling. Photo credit: Laura Woodard, ATC (proud VRWA associate member).

but some are in neighboring states. Because of these certification guidelines, in most cases the state will not accept previous monitoring to count toward the new requirements.

Since labs are analyzing down to 2 parts per trillion (which is REALLY low), every precaution must be taken to **make sure you don't accidentally introduce PFAS into the samples.** While the sample collection procedure may seem intimidating, we have received more non-detect results than anything, so it is certainly

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Who We Are

Vermont Rural Water Association provides training and support to drinking water and wastewater systems to promote healthy communities, rivers, and lakes across Vermont.

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NewsLeaks is the official publication of the Vermont Rural Water Association. It is published three times each year for distribution to operators, owners, managers and board members of water and wastewater systems in Vermont, as well as to association members, water and wastewater service providers, regulators, and other friends. Opinions expressed in the newsletter do not necessarily reflect the views and policies of VRWA.

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Letters



Left to right: Liz Royer, Katherine Boyk, Paula Jackson, Elizabeth Walker, and Kirsten King (Executive Director, New England Water Works Association) at How to Handle the Media training course in September.

Letter from the Editor

This is approximately the 60th edition of NewsLeaks, but for me it is the first. I joined Vermont Rural Water this summer as Program Assistant and am pleased to be a part of the traditions of NewsLeaks. I recently moved from Montana, where I worked in watershed restoration, nonprofit communications, and environmental education.

Tim Russo, the previous NewsLeaks editor, is now a Water Systems Specialist working with non-municipal public water systems.

Vermont Rural Water also welcomes back Paula Jackson as Apprenticeship Program Coordinator. Read about her new project on page 5.

Best,
Katherine Boyk
NewsLeaks Editor



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How to Make the Most of a Service Provider's Visit



by Aaron Perez,
Water Systems Specialist

When a service provider is coming to help your system, take some time to prepare for their visit. Time you spend planning in advance will pay back in spades when the expert can focus their time on completing the project instead of doing prep work.

The first thing to do is locate and ensure access to main lines and hydrant valves. It may be a good idea to take a look at any current or historical mapping to see if there are any valves or access points that you may not be aware of.

Over the years I have found a lot of forgotten infrastructure when working with municipalities. Sometimes it pays to do some digging in old filing cabinets and boxes.

Once you have identified the points that the service provider will be working on or from, drive around and ensure that they can be accessed. As we all know, things can be paved over, removed, or otherwise damaged without anyone notifying you.

Also consider the traffic in the areas where you will be working. Will you need traffic control for any portion of the project?

If you are working in multiple sections of town over several days, identifying where you need traffic control may allow you to schedule those sections in a way that reduces extra workforce needs.

Whether the service provider coming to your system is VRWA, a subcontractor for the state of Vermont, or anyone else, it is important to be prepared for their visit so you can get the best possible results from their time and expertise. The more time they can spend concentrating on their specific job, the more cost savings and productivity you will get out of their visit. ●



Michael Bishop of New York Leak Detection exercising valves in Bethel, VT. Photo credit: Tim Mills, Chief Water and Sewer Operator for the Town of Bethel (proud VRWA system member).

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Introducing: Water & Wastewater Apprenticeships

Program to provide job training, new employees to systems

Like many industries in Vermont, water utilities are facing a worker shortage. Many operations specialists at drinking water and wastewater treatment plants across the state are approaching retirement age, and there are not currently enough trained professionals to fill their places.

The Vermont Rural Water Association is spearheading an apprenticeship program to train the next generation of water and wastewater operators in communities throughout Vermont.

This program will provide water utilities with the new employees they need as well as providing job training—and an alternative to an expensive college education—to Vermonters.

Operators of drinking water facilities provide safe drinking water to the public. Operators of wastewater treatment plants ensure that clean, treated water is released back into the state's rivers, lakes, and groundwater.

These water utilities are responsible for protecting the health and safety of Vermont's communities and environment. This is especially important now as the state begins new regulations of contaminants like PFAS and water resources are impacted by climate change.

Vermont Rural Water is currently recruiting qualified candidates for the apprenticeship program. Apprentices must have a minimum of a high school diploma or equivalent. The apprenticeship is a two-year, full-time position, during which apprentices will be paid a salary.

"It is important to find and recruit individuals who have passion and willingness to give their all to the profession," said Paula Jackson, Apprenticeship Program Coordinator at VRWA.

"The more educated water and wastewater professionals are, the more positive changes take place at each facility across Vermont and the better the water quality at the tap."

Apprentices will receive 288 hours of classroom instruction and 4,000 hours of on-the-job training.

In the classroom, they will learn the chemistry, microbiology, environmental science, and mechanics needed to operate a drinking water or wastewater treatment plant. The cost of this education is paid by the apprenticeship program.

At the treatment plant, apprentices will train under water quality professionals to learn the operations of the facility.

The shortage of water utility

employees is not unique to Vermont. Communities across the nation are having a hard time recruiting the next generation of water and wastewater operators. In the next five to ten years, more than half of the most skilled water professionals will retire, taking decades of institutional knowledge with them.

Similar apprenticeship programs, in partnership with the National Rural Water Association and the Department of Labor, have been established in other states. Vermont's program is the first in New England. ●

If you are a water or wastewater utility that is interested in hiring an apprentice, or an individual interested in becoming an apprentice, contact:



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802-660-4988 x332

pjackson@vtruralwater.org



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Getting to Know Vermont's Operators

A New Adventure for Corrina Parnapy

by Diana Butler, Source Water Specialist

Corrina Parnapy's previous career path has taken her spelunking to research bats and up in helicopters to survey moose. And now, she is an operator-in-training for Wastewater Class 2 and Drinking Water Class 3.

Parnapy is currently working at Bolton Valley ski area, which contracts operations to Vermont Utility Management Services (proud VRWA associate member). She was recruited to system operations by Jill Marsano, owner of VTUMS.

With many in the water and wastewater industry approaching retirement age, it is important to recruit and train new operators like Parnapy.

"The water and wastewater treatment profession has traditionally been a male-dominated field of work," said Paula Jackson, Apprenticeship Coordinator at VRWA (see *Water & Wastewater Apprenticeships*, page 4). "It is time to recruit more women into the field to provide a more diverse outlook on meeting the challenges we face now and in the future."

Parnapy enjoys the diversity of the tasks of a water operator. On any given day she could be a carpenter, plumber, mason, or mediator. Every day she is a problem solver. "The

most frustrating thing for me is dealing with never-ending mechanical issues," Parnapy said. "Pumps, pumps, pumps!"

She lives in Huntington with her 7-year-old son, William. "He loves

Growing up in the Adirondack Mountains lead Parnapy to a love of the outdoors and an interest in biology. She graduated from SUNY Cobleskill with an A.A.S in environmental studies and Skidmore College with a B.A. in biology.

Before joining the water profession, Parnapy worked for Vermont Fish and Wildlife Department, the Winooski Natural Resources Conservation District, and the FUND for Lake George, as well as substitute teaching. She has written many technical papers and scientific articles.

In addition to her impressive work history, Parnapy is a writer and artist. She enjoys hiking, fishing, and fly tying.

Talking with Parnapy, it is clear she has a spectacular attitude and fearless drive to tackle challenges. What a special addition to our industry! ●

The Water Cooler is a regular column in NewsLeaks highlighting the talented people working in Vermont's water industry.



Corrina Parnapy is an Operator-In-Training at VTUMS.

visiting me at work and has a particular fondness for the RBC," said Parnapy, referring to the rotating biological contactor.


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Lunenburg FD 1 Receives NRWA Loan

by Katherine Boyk, Program Assistant

When a water line broke and caused damage to a state highway, Lunenburg Fire District 1 needed funding for the repairs. They applied for a low-interest loan from the Rural Water Loan Fund. Their application was approved in October, making them the first system in Vermont to receive this loan.

The Rural Water Loan Fund is a program of the National Rural Water Association, affiliate of VRWA. The program provides loans at below-market interest rates of up to \$100,000 or 75 percent of the total project cost, whichever is less.

These loans are available to small water and wastewater utilities across the country for eligible projects. Applying for a loan is a simple process and the turn-around time is quicker than other options.

“We think [the loan is] great for us,” said Buddy Ball of Lunenburg Fire District 1. “We will have to float the \$7,000 or so difference if the project goes as expected from the estimates. Maybe we will come in under the projected costs, only time will tell.” ●

Any VRWA System Member may apply for a loan from the Rural Water Loan Fund. More information and applications are available at <https://nrwa.org/initiatives/revolving-loan-fund>





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PFAS Monitoring

Continued from page 1

possible to get a clean sample.

Review your results immediately when you get them from the lab. Systems with confirmed results that exceed 20 ppt for the 5 regulated compounds will be required to implement a “Do Not Drink” notice within 24 hours.

If you are just not comfortable collecting the sample(s) yourself, and your water system is eligible, you may hire one of the state-approved contractors to collect the sample, send it to the lab, and report to the state. Please note that the state is not paying for any work performed by these contractors.

Under Vermont Act 21 of 2019, all public community and non-transient non-community drinking water systems are required to **monitor for PFAS before December 1, 2019.**

Data for the 5 regulated compounds—PFHpA, PFHxS, PFNA, PFOS, and PFOA—will be compared against the interim standard of 20 ppt. ●

For more information, visit the DWGWP website at <https://dec.vermont.gov/water/drinking-water/water-quality-monitoring/pfas>

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More information and registration at <http://vtruralwater.org/training/schedule.php>

Date	Course	TCHs	Cost (Member/Non)	Location
11/7	Basic Excel	3 water & wastewater	\$24/\$30	Essex Junction
11/7	Keep your System Sustainable	4 water & wastewater	\$32/\$40	Rutland
11/13	VOSHA Safety	6 water & wastewater	\$48/\$60	Montpelier
12/4	Basic Excel	3 water & wastewater	\$24/\$30	Essex Junction
12/10	Surface Water Treatment	7 water	\$56/\$70	North Hero



Vermont Rural Water Visits Music City



by Paul Sestito,
Water Systems Specialist

In September, several members of the VRWA staff attended the National Rural Water Association's WaterPro Conference in Nashville, Tenn. Industry professionals come from around the nation for training, guest speakers, and a trade show.

This year's speakers included EPA Administrator Andrew Wheeler. He talked about how water and wastewater systems fit into the EPA's goals. This was the first time in the history of the conference that an EPA administrator addressed the gathering.

Many discussions at the conference centered on water-related emergencies. This is becoming a topic of concern nationally. I attended several trainings that discussed emergency response and preparedness.

I heard about hurricane response efforts in Florida and Georgia. Because they had planned and practiced in advance, responders were able to quickly restore water and wastewater systems in the affected areas.

Here in Vermont, we are not immune to weather events or other emergencies that could impact water utilities. It is important for systems to have plans in place should an emergency or unforeseen event occur. Emergencies to consider include heavy rain, ice and snow, high winds, and power outages.

With winter approaching, now is a good time to review and update your emergency response procedures. Contact VRWA circuit riders Aaron Perez or Paul Sestito with questions about your system's plan. ●

Visit the EPA's website for emergency response planning resources for water and wastewater systems at epa.gov/waterutilityresponse



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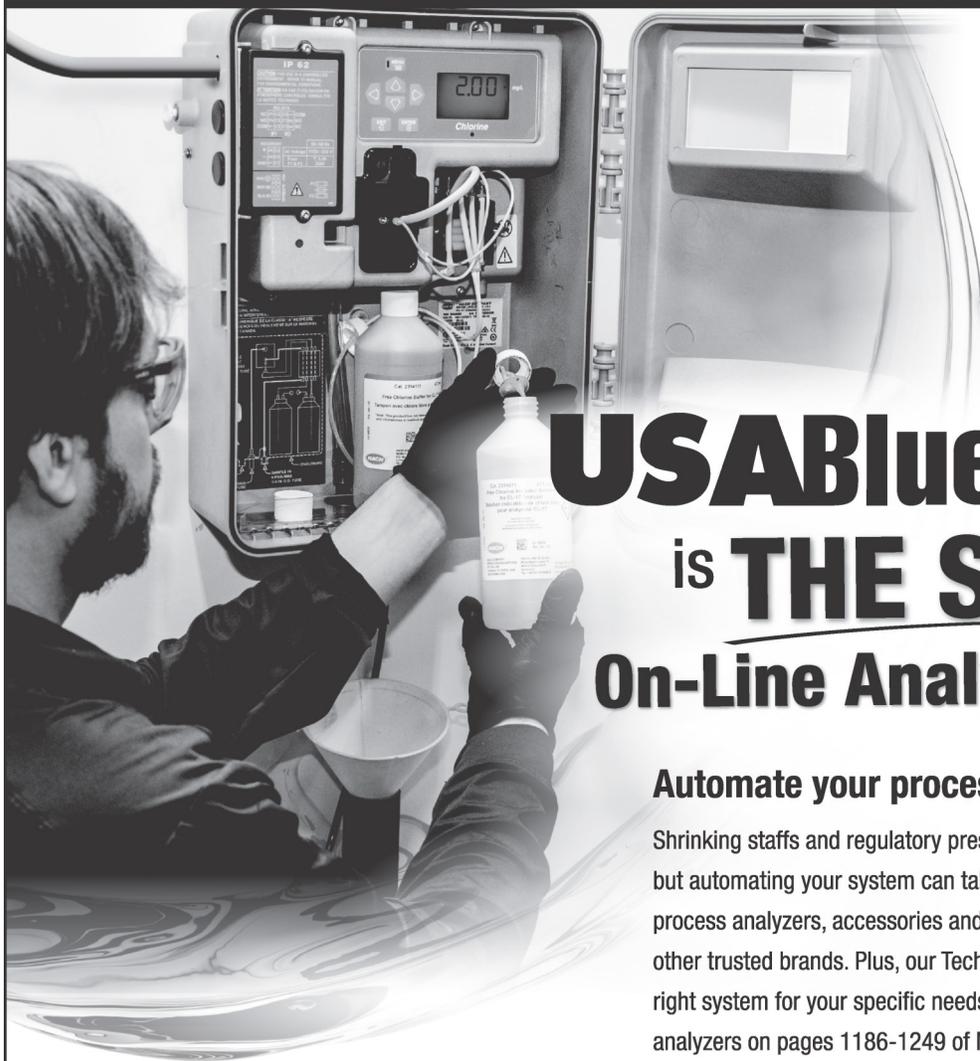
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