

NonCom Scoop

Newsletter for Minnesota's Noncommunity Public Water Systems

Spring/Summer 2018

Success Story: Lac Qui Parle Valley School

Lac qui Parle Valley School is located in a rural area near Madison, Minnesota. It has approximately 800 students in grades K through 12 and is a vital part of the community. In addition to school activities, it serves as a meeting place for community partners such as Minnesota West Community and Technical College and Southwest Minnesota State University, and hosts events including area teacher conferences, business, and community meetings.

The school was constructed in the late 1990's and is considered a nontransient noncommunity public water system (NTNC PWS) under the federal Safe Drinking Water Act (SDWA). Since its opening, the school's drinking water has been supplied by several wells and struggled with optimizing corrosion control to maintain compliance with the copper action level of the SDWA Lead and Copper Rule. Many factors, including source water quality, plumbing system complexity, and simultaneous compliance with multiple SDWA rules presented challenges in meeting the copper action level requirement. Further, the Lac qui Parle School has a complex treatment system, one of the most, if not the most complex treatment systems of all NTNC PWSs in Minnesota. Therefore, identifying and optimizing a successful water treatment approach has been a top priority of the school.

Additionally, in 2014, the primary well serving the school failed, resulting in the need to use of their backup well. At that time, the Minnesota Department of Health (MDH) drinking water



David Beck, Water Operator with greensand filters (rear) and vertical turbine pumps (foreground)

program, in consultation with the school, decided to use a compliance approach which focused on identifying a "significant deficiency" in the water system (failure to maintain treatment). MDH determined the use of a significant deficiency would be helpful, as it would move the school from a reactive to a proactive approach in managing water quality in the water distribution system, for both the short term and long term. The significant deficiency was an

enforcement category that would allow the school to apply for funds from the Minnesota Department of Education (MDE) to remediate the copper corrosion issues.

The school board determined it would best serve the students, staff, and community members who consume the water, to replace the well and renovate the existing water treatment system. The school board, in partnership with an engineering consultant, MDH, and MDE began evaluating the existing system, identifying and proposing treatment and associated system improvements, and determining a funding source. Actions taken by the school to reduce copper levels included cleaning and partitioning the existing below ground storage tank to reduce the amount of stored water and replacement of outdated treatment system components. These actions resulted in a sequence of treatments consisting of the following:

- Pre-chlorination injection;
- Greensand iron filter;
- Water softener;
- Clearwell storage;
- Post-chlorination injection; and
- Orthophosphate injection (corrosion control).

Lac qui Parle Valley School, like many other smaller public water systems in Minnesota, has limited resources to turn to when faced with these types of challenges. MDE allowed Lac qui Parle Valley School to use Health & Safety funds for portions of this work project. Under 2015 legislation, Long Term Facilities Maintenance levy funding became available for projects like this.

The school was able to go forward with the treatment system renovation project. The total project cost was \$529,000 for the treatment renovations, plus engineering, and \$42,053 to drill the new well.



Chemical injection system : Chlorine (left) and Phosphate (right)

In late 2016, the work on the water supply at Lac qui Parle Valley School was completed. The school has since optimized their treatment and have successfully completed one year of lead and copper monitoring with no action level exceedances. This has been a long journey for the school. However, with their hard work and continued efforts, they have made some major advances in protecting the health of all who use the school's water supply.



Reminder to Owners and Operators of Seasonal Systems

Seasonal public water systems are those that do not operate on a year-round basis, and start up and shut down at the beginning and end of each season. Seasonal systems are required to start up each spring with an approved start-up procedure, and notify MDH of its completion.

If you are the owner/operator of a seasonal water system, you should have received a reminder/certification form that was sent in mid to late April. After starting up your water system, be sure to complete the certification form, include the date the procedure was completed, and return it to MDH. Last year we received notice from 100% of the seasonal systems, verifying their startup procedure was completed. We thank you for your cooperation!

Although providing certification of the start-up procedure is only required for the water systems that fully depressurize all their water system(s) in the off-season, water systems that depressurize a portion of their system should also be following the approved start-up procedure. This will help to ensure these systems are maintained in a sanitary condition.

Please note that seasonal systems that do not complete the approved start-up procedure will be in violation of the Revised Total Coliform Rule and placed on a monthly coliform bacteria sample schedule. The owner/operator of the system will then become responsible for collecting water samples as well as overnight shipping costs. For reference, the approved procedure is located at [Start-up Procedure for Seasonal Public Water Systems](http://www.health.state.mn.us/divs/eh/water/factsheet/ncom/startup.pdf) (<http://www.health.state.mn.us/divs/eh/water/factsheet/ncom/startup.pdf>)

Additional information relating to the Seasonal Start-up Procedure and other water system related information is available at: [Restaurants, Resorts, Campgrounds - Transient](http://www.health.state.mn.us/divs/eh/water/ncom/transient.html) (<http://www.health.state.mn.us/divs/eh/water/ncom/transient.html>)

Please contact your MDH designated sanitarian if you have questions. The link will connect you to our MDH contact page, or call 651-201-4700 or 888-345-0823 [DWP Contacts](http://www.health.state.mn.us/divs/eh/water/org/index.cfm) (<http://www.health.state.mn.us/divs/eh/water/org/index.cfm>). If your water system is inspected and tested by a delegated local health department rather than MDH, please contact the delegated local health department office.

Noncom Scoop Survey – Thanks!

Thanks go out to all of you who responded to our request for input on the **Noncom Scoop**. Overall, the response was positive. We strive to make this newsletter pertinent to you.



Fact Sheet at a Glance

Warning Notice for High Chlorine Levels in Water

When a water system is shock disinfecting to resolve a bacteria problem or as part of a seasonal opening procedure, it is important to make sure that water users are not exposed to high levels of chlorine. MDH has developed a simple warning notice that water systems can use during shock disinfection to alert individuals on site NOT to use the water. This warning notice can be found on the MDH website at:

[Warning Notice for High Chlorine Levels in Water](http://www.health.state.mn.us/divs/eh/water/factsheet/ncom/extchlorine.pdf)
(<http://www.health.state.mn.us/divs/eh/water/factsheet/ncom/extchlorine.pdf>)

Request for Emails – Thanks!!

The Minnesota Department of Health is in the process of gathering email addresses so we can communicate more efficiently with you and keep you better informed in areas that relate to your public water supply. If you have an email address, we would appreciate you sharing it with us. You can do this by sending your email address and public water system ID (PWSID) or system name to health.noncommunitycompliance@state.mn.us.

Plan Review

Did you know?

If you are making changes to your water system, (other than replacing a part with an identical part), adding new water service lines or installing treatment, plan review is likely required. If you have any questions regarding plan review, call 651-201-4700. For additional information see:

[Plan Review for Noncommunity Systems](http://www.health.state.mn.us/divs/eh/water/planreview/noncommunity.html)
(<http://www.health.state.mn.us/divs/eh/water/planreview/noncommunity.html>)



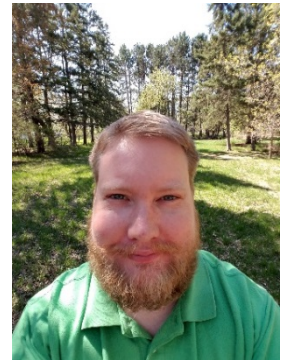
Profile: New Staff

We have recently hired three new staff! Two new field sanitarians joined the Noncommunity Unit in late winter. **Ty Riihiluoma** and **Scott Gullicksrud** are both working out of the Bemidji District Office.



Ty is a native of Hibbing, and attended Vermilion Community College in Ely. He was a student worker for MDH during that time, running pilot studies for surface water treatment in Ely. He then went to Bemidji State University (BSU) for his 4-year degree in Aquatic Biology and has been working for the Department of Natural Resources.

Scott also attended BSU and has a degree in Environmental Studies. He has been working in the food and service industries and is looking forward to returning to the environmental field.



Alex Bartley joined the Noncommunity Public Water Supply Unit on May 2 as our new compliance plan review engineer. Alex brings a variety of valuable experiences and expertise to the Unit. He holds a Bachelor of Science degree in Chemical Engineering from the University of Iowa, has experience as a field process engineer with a consulting firm, and has been a certified operator working at the University of Iowa Water Treatment Plant.

Upcoming Training

Sponsored by the University of Minnesota and MDH

The University of Minnesota Onsite Sewage Treatment Program and the Minnesota Department of Health are offering [FREE septic system and private well homeowner education classes](#) across Minnesota. The classes will cover the basics of how septic systems function, well water testing, and how to help protect your well from contamination sources. It will also provide property owners with information on chemicals of emerging concern (CEC), including pharmaceuticals, personal care products, and the potential impact on ground and surface water. Information on proper maintenance of both septic systems and private drinking water systems will be covered to help property owners protect their investments and the environment. A representative from the county will be present to answer any questions you may have related to the local ordinance and related programs. While these training sessions are being advertised for homeowners, they will also have content that will be useful for the owners and operators of noncommunity public water systems.

Below is the list of locations and local contacts for more information:

Date	Location	Time	Contact
June 5, 2018	Two Harbors	6:00 pm	Emily Nelson emily.nelson@co.lake.mn.us 651-249-5868
			Christine McCarthy christinem.mccarthy@co.lake.mn.us 218-834-8322 www.lakecountyswcd.org
June 6, 2018	Grand Marais	9:00 am	Irene Mullen lmullen001@msn.com cookcountycola.mnlakesanddrivers.org/
June 6, 2018	Grand Marais	6:00 pm	Irene Mullen lmullen001@msn.com cookcountycola.mnlakesanddrivers.org/
June 14, 2018	Willmar	5:30 pm	Eric VanDyken eric_v@co.kandiyohi.mn.us 320-905-4489; 320-231-6229, ext. 5257
June 28, 2018	Grand Rapids	6:00 pm	Patty Gould St. Aubin pgs@mchsi.com 218-259-1603 itascawaters.org/
October 2, 2018	Stillwater	5:30 pm	Stephanie Souter Stephanie.Souter@co.washington.mn.us
			Katie Hallerman Kati.Hallermann@co.washington.mn.us

Date	Location	Time	Contact
			651-430-6655 www.co.washington.mn.us/septic
November 6, 2018	Farmington	6:00 pm	Emily Gable emily.gable@co.dakota.mn.us 952-891-7008 www.co.dakota.mn.us/Environment/WaterQuality/SepticSystem
March 7, 2019	Mankato	5:30 pm	Pete Otterness Pete.Otterness@co.nicollet.mn.us 507-934-7076

Minnesota Rural Water Association Training

For more information on the courses and other events, visit Minnesota Rural Water Association at **Minnesota Rural Water Association** (<http://www.mrwa.com/>)

Class D Training

Date	Location
August 21, 2018	Jordan
September 25, 2018	Ramsey

Class E Training

Date	Location
July 11, 2018	St. Cloud
August 28, 2018	Rochester
October 8, 2018	Cloquet

The Noncommunity Public Water Supply Unit, Minnesota Department of Health publishes *The Noncom Scoop*. Contact: Leslie.Winter@state.mn.us

Minnesota Department of Health
Drinking Water Protection – Noncommunity Public Water Supply Unit
651-201-4700
www.health.state.mn.us

05/21/2018

To obtain this information in a different format, call: 651-201-4700. Printed on recycled paper.