

Minnesota Well Management News



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Minnesota Well Management News

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Governor Dayton Appoints Jan Malcolm to Serve as Health Commissioner



Jan Malcolm, new Commissioner of Minnesota Department of Health.

On January 30, 2018, Minnesota Governor Mark Dayton appointed Ms. Jan Malcolm to serve as Commissioner of the Minnesota Department of Health (MDH). Ms. Malcolm fills the position vacated by Dr. Ed Ehlinger who resigned on December 19, 2017. Ms. Malcolm is a public health expert with significant management experience in both the public and nonprofit sectors. She previously served as Minnesota Health Commissioner from 1999 to 2003.

In her opening remarks, Commissioner Malcolm reflected, “The Minnesota Department of Health plays an essential role in protecting and improving the health of all Minnesotans, from assuring the safety of the water we drink to the care we receive. Public health serves everyone in our state in some way, literally every day. I am honored to once again serve the people of Minnesota as Health Commissioner. I will work hard to earn the trust of Minnesotans that their health, and that of their loved ones, is in good hands.” Commissioner Malcolm

emphasized that addressing allegations of elder abuse will be among her top priorities.

Commissioner Malcolm is currently an adjunct faculty member at the University of Minnesota, School of Public Health, where she co-directs a national research and leadership development program funded by the Robert Wood Johnson Foundation. Previously, she helped develop initiatives to strengthen the nation’s public health system as a senior program officer at the Robert Wood Johnson Foundation. In addition, Commissioner Malcolm has also served as CEO of the Courage Center and as President of the Courage Kenny Foundation following the merger of Courage Center and the Sister Kenny Rehabilitation Institute. She has worked as Vice President of Public Affairs and Philanthropy at Allina Health and has been active in state and national health care and public health associations. She has also served on numerous government commissions on health care access and quality.

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Lost Municipal Wells in St. Anthony Village, Minnesota Found and Sealed

In June 2016, a consultant for the city of St. Anthony Village, Minnesota, contacted the Minnesota Department of Health (MDH), Well Management Section, looking for information on the location of St. Anthony Village Municipal Well Numbers 1 and 2, which had been taken off-line decades ago. The city was planning an addition to their water treatment plant and wanted to make sure the wells were not in the area of the proposed plant. Former staff in the water department at the city had retired long ago and were not reachable for information and current staff did not know where the wells were located, or if they had been properly sealed when they were taken out of service. MDH did not have well sealing records for either well, so it appeared that they had not been properly sealed by a licensed well contractor, as required by Minnesota statutes and rules.

The wells were constructed in the early 1950s by Layne-Minnesota Company, who went out of business several years ago. Available drilling records and notes from well contractor files indicated that both wells were constructed with 12-inch diameter outer casings and 10-inch diameter liner casings, and were approximately 500 feet deep. Completely filling the annular space between liner casings with neat-cement grout was not a common practice in the 1950s. Of concern was the fact that the wells were located within the contamination plume for the Twin Cities Army Ammunition Plant Special Well and Boring Construction Area, and might be allowing movement of contaminants down to deeper aquifers.

MDH metro district field hydrologist, Mr. Patrick Sarafolean, began an investigation to locate the wells and determine their condition and status. An old MDH Public Water Supply report from December 10, 1954, indicated that the wells were located in the same well house, somewhere northeast of 33rd Avenue and Silver Lake Road in St. Anthony Village. Mr. Sarafolean inspected this area in fall 2016 and found a city water tower and a small building next to it that was labelled "Booster Pump Building." Neither well



St. Anthony Village Booster Pump building/former well house for Municipal Well Numbers 1 and 2.

was visible inside the building; however, Mr. Sarafolean noticed a concrete patch in the floor, and also noticed what appeared to be a concrete pump base for a vertical turbine pump motor 10 feet away. He also identified two access hatches in the roof of the building, one was directly over the patch in the floor, and the other was directly over the concrete pump motor base. Mr. Sarafolean suspected the wells had been cut off and buried under the booster pump building and relayed his findings to the city's consultant. The consultant reported that the building would be demolished in 2017 to make room for the new water treatment plant addition and that if the wells were located under the building, they could be investigated at that time.

Over the winter of 2016/2017, Mr. Sarafolean obtained additional drilling contractor records which indicated that Well Number 1 may have been filled by a well contractor in 1961 with 10 cubic yards of concrete and 2 cubic yards of gravel. He also found records indicating that Well Number 2 may have

been filled by a different well contractor in 1984 with 29 cubic yards of cement grout and 3 cubic yards of pea rock. There was no mention of liner casing perforation or removal, before sealing, for either well. MDH Well Management Section determined that additional investigative work would be necessary to determine if the wells were properly sealed. If not, then corrective work would be required to assure that the wells would be properly sealed. In spring 2017, the booster pump building was demolished and two 12-inch diameter well casings were found under the building. One was plugged with concrete mix and the other was plugged with a hard white “grout-like” material. MDH required that investigative drilling be done to verify materials in the wells and to determine if liner casings were present in the wells.

The city hired Mark J. Traut Wells, Inc. (Traut) to do the investigative drilling on both wells. Concrete, neat cement, and pea rock were drilled out of Well Number 1 to the depth of 283 feet. A 10-inch diameter liner casing was discovered in the well from 11-267 feet. Neat cement and pea rock were drilled out of Well Number 2 to the depth of 200 feet. A 10-inch diameter liner casing was present in the well from 22 feet to beyond 200 feet. The wells were gamma-logged by the



Mark J. Traut Well Company cleaning out old St. Anthony Village Municipal Well Numbers 1 and 2 for permanent sealing.

Minnesota Geological Survey. The gamma-log results, coupled with original drilling records revealed that the wells penetrated the glacial drift from 0-142 feet, the Platteville limestone from 142-161 feet, the Glenwood shale from 161-170 feet, the St. Peter sandstone from 170-331 feet, the Prairie du Chien dolomite from 331-454 feet, and the Jordan sandstone from 454-500 feet. Traut then subcontracted with another well company, Bergerson-Caswell Inc., to perforate the liner casings in both wells with a hydraulic perforator. After the casings were perforated, Traut resealed Well Number 1 with 22 cubic yards of neat-cement grout and Well Number 2 with 7 cubic yards of neat-cement grout.

Prior to beginning the remedial work, the city of St. Anthony Village applied for, and was awarded, a \$10,000 MDH Source Water Protection Implementation Grant for well sealing. The money was used to pay part of the cost to investigate and properly seal both wells.

This work was necessary because neither well had been properly sealed in the past. Both wells were located in a Special Well and Boring Construction Area and had ungrouted liner casings that allowed the downward movement of water, and potentially contaminants, across protective confining layers to deeper aquifers. Both wells were also located in the Drinking Water Supply Management Areas for other active St. Anthony Village municipal wells nearby. Cleaning these wells out, perforating the liner casings, and resealing them with approved grout assures that these wells are properly sealed. It eliminates the potential spread of groundwater contamination to deeper aquifers and other wells in use in the area, protects public health, and protects our groundwater aquifers.

Safety Reminder – Call 811 Before you Drill or Excavate

Recent drilling, excavation, and construction accidents involving damage to buried petroleum and natural gas pipes should serve as a reminder to contractors to always employ safe work practices on your drilling and excavation sites. Minnesota's excavation safety law, Minnesota Statutes, chapter 216D, requires that anyone doing excavation must contact Gopher State One Call (GSOC) center before doing so. Whether you call 811 or file online at [GSOC \(www.gopherstateonecall.com\)](http://www.gopherstateonecall.com), GSOC notifies the utilities in your excavation area and they will locate and mark any public facilities they have within the area of excavation.

Private facilities (customer owned facilities) are not owned by the utilities and generally include anything "after the meter" or main line. Private facilities may include yard lights, secondary electric lines, communication lines, water, gas, sewer, video and fiber optic networks. These facilities are typically not part of the GSOC network and will not be marked with a call to 811. Private facilities must be located by either the owner of the property or the party conducting the excavation. Private facility locating companies may be contacted for assistance in locating private utilities. Please visit [Gopher State One Call's Industry Directory \(www.gopherstateonecall.org/index.php/about-gsoc/industry-directory\)](http://www.gopherstateonecall.org/index.php/about-gsoc/industry-directory) for a list of private locators in your area. Remember that private locating companies will charge a fee for their services.

Summary of Recent Accidents Involving Buried Utilities in Minnesota:

September 2017 Mahtomedi, Minnesota – An excavation contractor severed a natural gas main line while excavating an old well pit to search for an unsealed, buried water-supply well. Nearby residents had to be evacuated while the gas line was being repaired. The excavation contractor had not called GSOC to have utilities located before digging.

September 2017 Little Canada, Minnesota – An environmental drilling company drilled through a natural gas line while drilling soil borings for road construction work. GSOC had been called and utilities had been located; however, the drilling location may have been changed after utilities had been located. The adjacent road and a restaurant had to be closed while repairs were made.

January 2018 Eagan, Minnesota – While constructing geotechnical borings, an environmental drilling company drilled through a 12-inch diameter petroleum pipeline, causing the release of 21,000 gallons of petroleum in a fitness club parking lot. Local streets were closed and nearby businesses, including the fitness club, had to be evacuated while the pipeline was shut off and during initial clean-up activities.



An environmental drilling company drilled through natural gas line in Little Canada, Minnesota, September 2017.

CONTINUING EDUCATION CALENDAR

The Internet link to the Minnesota Department of Health (MDH), Well Management Section's, [Continuing Education Programs](http://www.health.state.mn.us/divs/eh/wells/lwcinfo/training.html) (www.health.state.mn.us/divs/eh/wells/lwcinfo/training.html).

This calendar lists the upcoming continuing education courses that have been approved for renewal of certification for representatives of Minnesota licensed well and boring contractors. The calendar also lists the number of credits available for each course. The calendar is updated monthly and, if you subscribe, you will be notified by email when this page changes (new classes added, changes to existing classes).

For additional information about any of these training opportunities, call the contact person listed for the program of interest. For general information about continuing education, more current CEU listings, or to request approval for other continuing education activities not listed, contact Norm Mofjeld, MDH, Well Management Section at 651-201-4593, or norman.mofjeld@state.mn.us.

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To request this document in another format, call 651-201-4600.

Reprinting of articles in this newsletter is encouraged.

Please give credit to the Minnesota Department of Health or noted source.

New Well Management Section Employees

Mike Freeman, Well Inspector, Duluth District

Office: Mike Freeman was hired as a well inspector and started his new job with the Minnesota Department of Health (MDH) Well Management Section on February 1, 2017. Mike has been assigned to work from the Duluth District Office. Mike previously worked for Freeman Well Drilling in Walker, Minnesota, and Antonsen Well Drilling in Dent, Minnesota. Mike comes to the Well Management Section with over 25 years of well construction, well sealing, and well repair experience. Mike is a full well contractor certified representative.



New Well Management Section employees – (left to right) Mike Freeman, Jennifer Weier, and Erik Widmark.

Jennifer Weier, Supervisor, Metro District: Jennifer Weier was hired as metro region supervisor and started with MDH Well Management Section on August 9, 2017. Jennifer previously worked for the North Dakota Office of the State Engineer/State Water Commission in Bismarck as a groundwater hydrologist and supervisor for the past six and a half years. In her role, she worked in water appropriations, reviewing and managing permits and applications for groundwater appropriations, and working with the state drilling crew on field work and aquifer studies. Jennifer previously worked as an environmental consultant and worked on remedial investigations in New York. Jennifer has a Bachelor of Science degree in Environmental Engineering from Tufts University in Massachusetts and a Master of Science degree in Civil Engineering from the University of Colorado at Boulder.

Erik Widmark, Well Inspector, Metro District: Erik Widmark was hired as a well inspector and started in his new position with MDH Well Management Section on December 20, 2017. Erik will be working from the Metro District Office. He has worked for 17 years in the field of environmental drilling. Most recently he worked with Dakota Technologies, doing auger and direct push drilling to construct piezometers, monitoring wells, and remedial wells.

Well Management Section Retirements

Steve Bennett, former Well Standards Representative with the Well Management Section, retired from state service on August 8, 2017. Steve joined MDH as a well inspector back in 1992 and was promoted to Well Standards Representative in 1996. Steve worked in the MDH Metro District for the past 25 years. He worked closely with the public and well contractors on many well construction and well sealing projects over the years. Steve provided much insight and guidance in the well code rule revisions in 1993 and 2008, and most recently for the proposed rules for Bored Geothermal Heat Exchangers. Steve always tried to use on-site visits as a learning opportunity for well contractors and the public. Steve said that he will truly miss the friendship and camaraderie with his coworkers at MDH and the drilling community. He is looking forward to working on his hobby farm, pursuing hobbies, and spending more time with his family.

Ed Schneider, most recently Well Management Section Operations Unit Supervisor since 2015 and former hydrologist, retired from state service on January 5, 2018. Ed worked for MDH for the past 32 years. Ed began his career as a field hydrologist, later served as a regional supervisor in the Duluth District Office from 1990-1994, and then returned to the twin cities to take on responsibility for coordination of variance reviews, review of municipal well construction plans, and product and material reviews and approvals, before accepting the operations unit supervisor role in 2014.

Minnesotans will benefit from Steve and Ed's many positive contributions to the protection of public health, safety, groundwater quality, and the environment for many years to come.

Obituaries

James E. Stevens, "Jim," age 79, from Delano, Minnesota, passed away on September 16, 2017. Jim was a former well inspector with the Minnesota Department of Health (MDH) Well Management Section from 1990 to 2008. Prior to Jim's employment with MDH he worked as a well drilling contractor.



Jim Stevens.

Jim was one of the first well inspectors hired by the state of Minnesota in 1990 in response to the passage of the 1989 Groundwater Protection Act. Jim and his fellow well inspectors brought many years of well drilling experience with them to MDH and helped bridge the gap between the well drilling industry and Minnesota's well and boring regulatory program. Their knowledge and perspectives helped to form Minnesota's well code as it exists today.

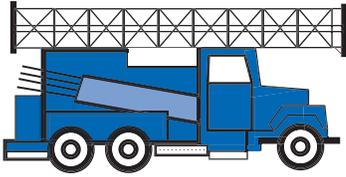
Jim was well known and well-liked by his coworkers and the well contractors he worked with on a daily basis. Jim was awarded the Minnesota Water Well Association's Honorary Lifetime Member award in 2008. Jim's kindness and friendship will truly be missed.

[Jim Stevens](http://blog.startribune.com/obituaries/detail/217226/?fullname=james-e-stevens) (<http://blog.startribune.com/obituaries/detail/217226/?fullname=james-e-stevens>).

George Keys, Age 88, died peacefully on November 19, 2017. George was the former owner of Keys Well Drilling Company, St. Paul, Minnesota.

George was an active member of the Minnesota Water Well Association and served as president of that association from 1963-1964 and again in 1989. George also served on the Minnesota Department of Health's Advisory Council on Wells and Borings from 1971-1979.

[George Keys](http://www.legacy.com/obituaries/twincities/obituary.aspx?n=george-h-keys&pid=187299910&fhid=4255) (<http://www.legacy.com/obituaries/twincities/obituary.aspx?n=george-h-keys&pid=187299910&fhid=4255>).



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New Contractor Certifications

Environmental Well Contractor

William Olson
Terracon Consultants, Inc.
Grand Forks, North Dakota

New Well Management Section Operations Unit Supervisor Hired

Well Management Section employee, Alex Martell was promoted to Operations Unit Supervisor on February 14, 2018. Alex assumes the position that was vacated by Ed Schneider's retirement. Alex previously worked in the operations unit as a hydrologist since August 2015. Alex has a Bachelor of Science Degree from the South Dakota School of Mines and Technology, and 8 years of experience in the environmental consulting and water treatment industries.