

Water and Wastewater

March 2022

General Update by Jaclyn Bates

Overall, 2021 was a busy year for us. Last year we issued 464 sewage permits, 540 well permits, and reviewed 1,160 TOS reports. We have 218 Type II water supply facilities and 231 facilities in the Operation & Maintenance program. Our certification programs include 43 Time of Sale Inspectors, 10 Operation & Maintenance Providers, and 155 Sewage System Installation and Repair Contractors.

Denise Bernbeck (Senior Sanitarian) and Kim Gebhard (TOS Sanitarian) have been enjoying their retirements for months now. Jonathan Pelukas moved to Senior Sanitarian from Sanitarian. Noelle Bowman and Marissa DiCicco are the newest Sanitarians. Sanitarian area assignments are updated on a routine basis. (<https://www.washtenaw.org/DocumentCenter/View/4549/Your-Area-Sanitarian-PDF>)

The Zeeb Rd building construction project is mostly complete. The front office is planning to reopen to the public March 14, 2022.

Sadly, Steve Winkler, a certified septic installer for many years, of Winkler Excavating passed away earlier in 2021 while enjoying retirement. He is greatly missed.

Certified Septic Installer Renewal

If you are a Washtenaw County Certified Sewage Installation & Repair Contractor, you may need to renew your certification for 2022. The renewal fee is \$123, and the due date is April 15, 2022. You can submit the application and fee via fax, mail, and/or drop box. The certification is good for two years. Contact Randy Spaller at 734-222-3938 with questions.

TOS Inspector Renewal

If you are a current Washtenaw County Time of Sale Inspector, you may still need to renew your certification for 2022. The renewal fee is \$138, and the due date is April 15, 2022. You can submit the application and fee via fax, mail, and/or drop box. The certification is good for one year. Contact Marissa DiCicco at 734-222-6846 with questions.

COMP Renewal

If you are a current Washtenaw County Certified Operation and Maintenance Provider, you may still need to renew your certification for 2022. The renewal fee is \$123, and the due date is April 15, 2022. You can submit the application and fee via fax, mail, and/or drop box. The certification is good for two years. Contact Jonathan Pelukas at 734-222-6861 with questions.

Meetings and Trainings

We do not intend to hold annual meetings for certified septic installers, OMC providers, or TOS inspectors. We do intend to hold a training for new TOS inspectors on April 27th and April 28th, 2022. Space is extremely limited as we already have many applications.



INSIDE THIS ISSUE

- 1** General Update / Renewal Information
- 2** 2021 Training Recap / Operating Permits
- 3** Dioxane Update / Guidance Documents / New Sans
- 4** Old Wells / Pollution Prevention Update
- 5** Type II Wells Lead & Copper / Various Sites
- 6** Renewal Application

2021 Training Recap by Randy Spaller

In 2021, Washtenaw County trained 7 new Washtenaw County Certified Sewage Installation & Repair Contractors. We also trained 3 homeowners to install their own septic systems. Homeowners are not listed on the certified installer list. (Under the Wastewater Regulation, homeowners are allowed to install a permitted septic system for their own home. But they need to have the skill set to be able to complete the task. The intent is not that they then hire a landscaping crew to do it.)

Certified septic installer training classes are generally held the third Thursday of the month. Classes are cancelled if there is no interest at least 1 week ahead of the scheduled training. The training fee is \$84 and the exam fee is \$62. The class takes up the entire morning and concludes with the exam.

<https://www.washtenaw.org/2501/Certified-Sewage-Installation-Repair-Con>



Operating Permits for Specialized Onsite Sewage Systems by Jonathan Pelukas

As most of you probably know by now, Denise Bernbeck retired on July 31, 2021. I have taken over the task of reviewing the O&M reports among other things. For those of you that do not know me, I have been a Sanitarian for Washtenaw County since March 1999. I have primarily worked on the Rural team involved with residential well and septic systems. As I get more familiar with the O&M program, I will be looking to make some minor changes. If there are any suggestions that you would like to bring up, please do not hesitate to contact me.

This is a renewal year for all O&M COMP certifications. The current certifications carry an expiration date of April 22nd, 2022. The 2022 registration renewal fee is \$123. Speaking of fees, the O&M report submittal fee is now \$61 and the late fee for annual reports submitted after December 31st is \$117. The certification renewal form, program templates and other information about the O&M program can be found on our website: <https://www.washtenaw.org/1656/Operating-Permits-for-Onsite-Sewage-Syst> Or you can go to Washtenaw.org and enter "Operation Permits" in the top right search bar.

With the department-wide implementation of a new software system called EnerGov last June, we have gained the ability to add new features and capabilities to our permit issuance and data entry activities. One capability we are currently working on is allowing COMPs to enter and submit their inspection reports electronically. We hope the COMPs find this to be a more convenient and efficient option for submitting their inspection reports. I will let everyone know when this function is operational.

Starting this year, I will be reaching out to every COMP to schedule my presence at one of your annual inspections. You get to decide the location and I will make every effort to accommodate your preferred date and time. This will be an opportunity for me to see your inspection process and a chance for you to bring forth any questions you may have. I look forward to meeting each of you personally!

I have had a couple conversations with some of the COMPs regarding inspections that are taking place towards the end of the calendar year (Nov-Dec). I have noticed some notes referencing inspections that have taken place shortly after heavy rain events. As you know, a heavy rainfall event just prior to inspecting a system could have a detrimental effect on how that system appears to be performing. This is especially true during the colder months of the year. This situation could be alleviated by conducting your inspection earlier in the year. Some of you have mentioned an effort to do just that – which I fully support. Shifting some of the annual inspections prior to November for more sensitive systems may better reflect overall system performance as well.

Having completed my first year of O&M report reviews, I am very pleased with the professional work that you are providing. When it comes to your report generation and comments, if there are any site nuances or minor issues you are considering on including, I just have one thing to say about that: when in doubt, write it out! I truly appreciate all the information provided in your reports. The site-specific insight you include gives me a better picture of overall system performance and conditions.

Roots in pipes



State Laboratory Has Lower Reporting Limit for 1,4-Dioxane by Jennifer Conn

1,4-Dioxane, a manmade compound that is considered likely to be carcinogenic to humans, was used at Gelman Sciences, Inc. on Wagner Road in Scio Township from the mid-1960s to the mid-1980s. Gelman's wastewater, containing 1,4-dioxane, was disposed on site during that time, ultimately creating multiple groundwater contamination plumes spreading west in Scio Township and northeast then east into Ann Arbor.

Washtenaw County Environmental Health is contracted by the Michigan Department of Environment, Great Lakes and Energy (EGLE) to collect 1,4-dioxane samples from drinking water wells within 1,000 feet of the estimated plume boundary. There are currently 218 wells in the program that are sampled twice per year, once per year or every-other year. The samples are analyzed at the EGLE Drinking Water Laboratory, which uses a method to detect 1,4-dioxane with a reporting limit of 1.0 parts per billion (ppb). The reporting limit is the smallest amount of a substance that can be measured by the laboratory tools. 1,4-dioxane may be present at a level lower than 1.0 ppb but cannot be measured by the laboratory tools.

In 2021 Scio Township conducted their own sampling of residential wells north of M-14 using a new laboratory method, Method 522, with a reporting limit of 0.12 ppb. The Method 522 testing resulted in new detections of 1,4-dioxane that were less than 1.0 ppb. The new method is done by a laboratory in Florida and is not available at the EGLE drinking water laboratory. In response to residents wanting their water tested with a lower reporting limit, the EGLE laboratory reviewed their method and are confident they can offer a lower reporting limit of 0.5 ppb with their current equipment.

Starting this spring, residents wanting to test their water for 1,4-dioxane can submit samples to the EGLE laboratory and will receive results with a reporting limit of 0.5 ppb. While this reporting limit is not as low as that of Method 522, it is a welcome improvement over the previous 1.0 ppb reporting limit and well below the Michigan residential criteria for 1,4-dioxane of 7.2 ppb. Test kits can be ordered from the EGLE laboratory by calling 517-335-8184 for a fee of \$115.

New Sanitarian Marissa DiCicco

Marissa DiCicco is a new sanitarian on the Rural Team with Washtenaw County Environmental Health. Prior to working for Washtenaw County, they were an intern with the Oakland County Health Department in the Communicable Diseases unit. They have a Master's in public health and a BS in health sciences from Oakland University. They are excited to be a part of the Rural Team as well as working in the Time of Sale program.

Updated Guidance Documents:

The Processing Procedures and Guidelines for Subdivision and Condominiums from 2000 was revised in 2021. The document was revised to remove outdated language, make sections clearer and more concise, and include new test well water quality parameters. The revised document can be viewed at <http://www.washtenaw.org/1617/Septic-Systems>.

WCEH plans to begin updating the Engineering Guidelines for On-Site Sewage Systems and Guidelines for Sand Filter Systems (alternative septic systems) in 2022. If you are interested in providing feedback on those document revisions, please contact Jennifer Conn.



Condominium/Subdivision Drainfield Approvals:

WCEH condominium and subdivision approvals for homes with onsite sewage systems include primary and reserve drainfield areas for a 4-bedroom home. If your clients want to build a home with more than 4 bedrooms, a conversation should be started as early as possible with your sanitarian to see if installing a larger drainfield is feasible on that unit.

It is not always possible to allow a home with more than 4 bedrooms. Limited suitable soils may restrict drainfield expansion; and some units are so small that larger drainfields would encroach on minimum isolations to wells, surface water or other utilities. Deviations to decrease minimum isolation distances are not allowed.

Additionally, if the unit has a drainfield that was pre-excavated and backfilled, as is required for deep excavations over 10 feet deep, the drainfield will need to be expanded. Early conversations with your sanitarian can help navigate these situations.

New Sanitarian Noelle Bowman

Noelle is excited to join the Washtenaw County Environmental Health Rural Team working with on-site well and septic systems in the community. She comes from the WCEH Urban Team, where she inspected food establishments, pools, childcare centers, and campgrounds since 2019. Before that, she served as a Solid Waste Specialist for the Water Resources Commissioner Office focusing on waste diversion, product stewardship program, and policy development. She earned a B.S. degree from the University of Michigan, specializing in environmental law & policy.

Identifying and Abandoning Old Wells

By Todd Alcock

Whether you are a well driller replacing an existing well, a time of sale inspector performing an inspection of an existing water supply, or a septic installer constructing a drainfield, it is necessary to search for existing wells that may not have been abandoned. These wells may pose a threat to one's safety or can threaten the nearby groundwater resources. Wells left unabandoned are a direct conduit for contaminants to enter the aquifers below.

When an existing well is replaced, the previous well(s) are required to be abandoned per State and County regulations. The purpose of abandoning a well is to eliminate the above-mentioned threats.

Large diameter wells or dug wells can be difficult to locate. These wells are often found on older farms, under windmills, handpumps, adjacent to basements, or inside small sheds. They are often brick or stone lined, potentially covered by deteriorated wood, or have no lid at all. These types of wells were constructed in areas where groundwater was scarce and surface water was the only water access option. Dug wells are typically less than 50 ft deep. Unabandoned large diameter wells or dug wells not only can impact groundwater quality, but also present a large risk to a human and animal safety.

Wells that were drilled via a machine or hand driven typically range in diameter from 1.25 inches up to 12 inches. These types of wells are typically identified by a steel or galvanized pipe sticking out of the ground, through basement floors, or in well pits. However, many of these older wells were constructed with buried well heads, to avoid freezing. In this situation, it might be necessary to look for metal pipes exiting basements to locate wells that were left buried and unabandoned. Often piping to these buried wells was either cut off or capped when the well was no longer in use.

It is important to note that vent pipes for home heating fuel oil tanks are often confused with an old well, as these vent pipes are often also constructed of galvanized piping and stick out of the ground.

A Michigan Registered Well Driller is required to abandon or plug any well in Washtenaw County that has been found to be nonoperational or deemed a threat to groundwater resources. By ensuring wells are being plugged when required, we are all doing our part to preserve Michigan's groundwater.

Pollution Prevention Program Updates

by James Glide

Many of you have heard of or are directly involved in the Washtenaw County Pollution Prevention Program that's been around since 1994, basically unchanged. We are opening the books and looking to update the regulation and its procedures to create a more modern take on the program. We plan to put the reporting sheets, annual fee, and inspection program on hold for 2022 so we can better focus on the changes we hope to make. We will continue to investigate all complaints received, answer questions from facilities and the public, review site plans / spill plans, and update emergency contacts. We are currently waiting for Board of Commissioners approval to begin the change process. We want to create a modern program beneficial to businesses and easier to enforce while still protecting the environment. For those that have been involved in the program, we would like to hear your thoughts on meaningful changes to help improve the program, or ideas that could be implemented to better protect the community around us. Feel free to email or call and we would be happy to talk more in depth about the program and any possible changes in the future! P2program@washtenaw.org

Pictures of wells that needed to be abandoned:



Type II Wells Lead & Copper Update by Lizzie Rock

Lead can enter the water system via corrosion or wear and tear of lead containing components. Lead can occur in two forms: dissolved lead and particulate lead. The consumption of lead in drinking water has been shown to have adverse health effects, especially in children. Elevated blood lead levels can cause multiple health concerns including lower IQ, hyperactivity, slowed growth, and anemia. At present, there is no universal lead-free logo or seal for drinking water fixtures. Third party certification entities are used to provide product approval (ANSI).

For drinking water, the EPA "lead-free" definition went into effect on January 4th, 2014. The current lead and copper EPA Action Level Exceedances (ALEs) are 15 parts per billion (ppb) and 1,300 ppb, respectively. On December 1, 2015, the CDC declared that "*No safe blood level has been identified and all sources of lead exposure for children should be controlled or eliminated. Lead concentrations in drinking water should be below the US Environmental Protection Agency's action level of 15 parts per billion.*" The lead action level is set to change in 2025 to 12 ppb.

Properties of Less than 2-acres by Jeff Leighton

This is a reminder for installers (and staff) that proposed metes and bounds land divisions less than 2.0 acres in size have more stringent regulations than larger property splits. Conventional metes-and-bounds soil evaluations require a minimum of three feet of permeable soil (sand) with no mottling (indicator of a high seasonal water table) in the top 12 inches of soil, with a vertical isolation of 3 feet from mottling to the bottom of drainfield stone. Per the State Subdivision Criteria of 1997, all proposed new land divisions of less than 2.0 acres requires a minimum of four feet of sand, no mottling in the top 2 feet of soil, and a vertical isolation of 4 feet from mottling to the bottom of drainfield stone.

Township zoning requirements also come in to play for any property division including: minimum lot size, minimum road frontage, etc. Larger developments such as multiple metes and bounds splits, subdivisions, and condominiums have additional criteria such as test wells and hydrogeological studies.

Winter installation with excavation frozen under ice/snow



Septic System Installation during Winter by Steve Aguinaga

Recently, I have encountered septic systems installations in Washtenaw County with multiple problems due to winter weather. For example, stone frozen solid even after being covered with straw, septic tank lids frozen to the tanks, and boots/clamps frozen and not visible. It is recommended that new construction wait until more favorable weather conditions exist. At a minimum, communication and coordination with the sanitarian should be established prior to installing a septic system in winter conditions. Septic contractors must have the equipment and personnel to be able to install septic systems quickly when installation occurs in the winter or during poor weather conditions.

Please be reminded: An excavation inspection cannot be completed if snow has fallen and covers the bottom of the excavation. A final inspection cannot be completed if the stone has frozen over the pipes, and nothing is visible. A final grade inspection cannot be completed if the ground is frozen and probing the ground is impossible. All these situations could result in a red tag being issued.

To prevent freezing, you could place a concrete /footing blanket on top of an excavation or drain field stone. For final grading inspections, install a 4-inch pipe (site tube) in an upright position (vertically) at all four corners of the drain field, so final cover over the drainfield can be ascertained.

In Michigan counties where I previously worked, septic systems were generally not installed during winter weather. Washtenaw County does not specifically prohibit installation of conventional septic systems in the winter. We do encourage installers to use communication and coordination to enable construction and inspections occur in a timely manner resulting in a high-quality product.

Winter installation that is not going well.





Environmental Health Division
 705 N. Zeeb Road • Ann Arbor, MI 48103
 Phone: (734) 222-3800 • Fax: (734) 222-3930
www.washtenaw.org/envhealth

ONSITE SEWAGE SYSTEM INSTALLATION & REPAIR CERTIFICATION 2022 RENEWAL APPLICATION

Due by April 15, 2022 for certification April 1, 2022 through March 31, 2024.

*Washtenaw County Certified Onsite Sewage System Installation/Repair Contractors are required to renew their certification with Washtenaw County every **two** years.*

Applicant Last Name		First Name		Middle Initial
Applicant Street Address		City	State	Zip Code
Legal Business Name				
Business Street Address		City	State	Zip Code
Phone []	Fax []	Cell []		
Email Address				

Contractors applying **before** April 15, 2022, will be placed on the contractor list published by Washtenaw County in random order. Contractors applying **after** April 15, 2022, will be placed at the bottom of the contractor list. Bids from installation contractors who have not renewed their certification will not be accepted for Time of Sale escrowing. Inspections will not be conducted for uncertified contractors after April 1st of their expiration year. Installers who have let their certification lapse may be required to retake the certification exam depending on the amount of time since their certification expired and the quantity of work successfully installed in the past.

Signature: _____

Certification Number: _____

Title: _____

Date: _____

FEES

Please complete this form and submit to the Environmental Health Division with a payment of **\$123**. Make check or money order payable to W.C.E.H.

Washtenaw County
Environmental Health Division
 705 N. Zeeb Rd.
 Ann Arbor, MI 48103

If you have any questions, please contact Randy Spaller at spallerr@washtenaw.org or (734) 222-3938.

RECEIPT