THE LITTLE DIGGER

MOWA minnesota onsite wastewater association

A bi-monthly publication

April/May 2017 - Vol. 32, Issue 2

Why Should You Support NOWRA's Advocacy Efforts in Washington?

Reprinted from the National Onsite Wastewater Recycling Association at www.nowra.org - 2017 Legislative Fly-In

We get it. Your business is local.

You deal with county regulators and rules on a daily basis. You've built your business to comply with your state's onsite wastewater code.

What happens in Washington, DC has virtually no impact on your day-to-day operations.

All of that is true, but it would be a mistake to think that the federal government has no impact on your business.

For decades, Washington has ignored the onsite wastewater industry, choosing instead to concentrate their money, resources and regulations on municipal sewage treatment. For example:

- ❑ Congress and the EPA have given the states more than $100 Billion to address wastewater treatment problems. 99.7% of that money has gone to fix sewer systems. Our industry serves 86 million Americans, but we get crumbs.
- ❑ EPA's policies and regulations are overwhelmingly skewed in favor of "Big Pipe."
- ❑ EPA's Office of Water has hundreds of employees supporting sewer systems. They have two employees focused on onsite wastewater.
- ❑ EPA's policies encourage utilities to convert septic systems to sewer.

  More than four times as much money is spent converting septic systems to sewer than what has been spent to fix failing systems or install new systems.
- ❑ Although we are the "Original Green Infrastructure," EPA does not recognize onsite systems as green infrastructure. As a result, we don't have access to the billions being given to utilities to implement green infrastructure initiatives.

In short, Congress and federal regulators have created a set of conditions which heavily favors sewer over onsite systems. As a result of these policies:

- ❑ You are losing customers because their systems are being converted to sewer.

NOWRA Advocacy Alert, *Continued on Page 5*

In this Little Digger

SAVE THE DATE!

Minnesota Onsite Wastewater Association (MOWA),
in association with the Minnesota Pollution Control Agency (MPCA),
is pleased to announce the 2017 Summer Seminar:

◆ **Friday, July 21, 2017** ◆

Registration from 7:30 to 8:00 am

◆ **Flygare Excavating** ◆

9595 67th Street, NW ◆ Annandale, MN 55302

MOWA's 2017 Summer Seminar offers the opportunity for SSTS professionals to gain "hands-on" experience, earn continuing education credits and network with other professionals. The day will end with a cookout featuring fun, food, and prizes!

Track 1 – Soils
6.0 Soils CEUs*

8:00 - Noon Classroom Session.

Noon -1:00 Lunch (provided by MOWA)

1:00 – 3:30 Field Session: Critique and group discussion of soil pits.

Bring your:

- Munsell Color book
- Spray water bottle
- Small shovel or knife to removal sample from pit face
- Tape measure
- Sunscreen/bug spray
- Rain gear

Track 2 – Technology/Tour & Competition
6.0 Non-Soils CEUs*

8:00 - Noon "Sept-a-Thon": Friendly onsite-related small group competition. Prizes will be awarded

Noon -1:00 Lunch (provided by MOWA)

1:00 –5:00 Onsite Technology Demonstration: A chance to get your hands on and see some of the latest innovative onsite products and tools.

*Schedule subject to change; CEUs are anticipated, based on MPCA approval

5:30 – 7:00 "Second Annual Bellyachers Pig-Out" Cookout

7:00 - ? Games, Prizes, Fun! Including Texas Hold 'Em, Bean Bag Competition

EVENT HOST

Thank You to Flygare Excavating for Hosting the 2017 Summer Seminar!

Please visit our Web site for updated information:
www.mowa-mn.com or call 1-612-801-5897

From MOWA's Executive Director

By Pat Martyn, MOWA Executive Director

We are pleased to announce that our annual Summer Seminar will held on Friday, July 21st at Flygare Excavating in Annandale. We will bringing back the same successful format we offered last year of two daytime tracks followed by an evening cookout. If you would like to be involved in this or make a contribution, be sure you let the office know. Our committee continues its hard work on the details, so look for registration materials soon. We are also pleased to announce the 2017 Tony Ruppert Scholarship. We will be awarding a total of $5,000 in scholarships this year to deserving college students who are relatives of MOWA members. See pages 15-16 for details.

Do you ever wonder how MOWA sets its work plan for the year? How do we decide on what needs to be done, or is it whatever wheel is the squeakiest? Or do we just address things that come into the inbox on a random basis? We think we can do much better than that. Each year we have a deliberative process where we sit and think and discuss what will best serve our membership. This year, we got together in March to have a board meeting entirely devoted to planning. Plan your work and work your plan is a guiding thought for us as we set out on a set of tasks that will carry us into 2018.

We call it strategic planning, an exercise in thought and preparation that helps an organization establish goals and determine how to apply human and financial resources to accomplish those goals. We want to get everyone on the same page so we can get tangible results in 2018. A priority for us is to address any problems that have been reported to the Board, visit about any complaints we have had during the year, incorporate suggestions and also determine what is our best approach for improving the organization and the benefits for the membership. And then we keep track about what we have done by regularly measuring ourselves against what it is we set out to do.

You will find elsewhere in this newsletter a listing of the Board Members. You are invited to pick up a phone or email any of them, and let them know how you feel about the organization. President Dean Flygare would appreciate it very much.

CALENDAR OF EVENTS

MOWA Events

July 21, 2017—2017 Summer Seminar at Flygare Excavating in Annandale. Visit our Website for details: www.mowa-mn.com.

Industry Events

October 22-25, 2017—2017 NOWRA/NAWT Onsite Wastewater Mega-Conference at Dover Downs Hotel & Casino, Dover, Delaware.

For more details regarding the conference as it becomes available, visit www.nowra.org/2017mega.

February 21 – 24, 2018—Water & Wastewater Equipment, Treatment & Transport (WWETT) Show at the Indiana Convention Center (visit https://wwettshow.com/ for details).

The is a bi-monthly publication of the Minnesota Onsite Wastewater Association

Editor: Carla Tourin **E-mail:** MOWAcarla@aol.com

The articles printed in the publication do not necessarily reflect the opinion of this organization. Readers are encouraged to respond to the articles with their own points-of-view. We welcome industry-related comments or articles. Information or inquires should be sent to any of the following: MN Onsite Wastewater Association, MOWA, 5021 Vernon Ave, So., Suite 241, Edina, MN 55436 Phone: 612.801.5897 Fax: 952.487.4447 Website: www.mowa-mn.com

NOWRA takes the onsite message to Washington D.C.

Decentralized Wastewater Treatment …A Sensible Solution

Reprinted from the National Onsite Wastewater Recycling Association at www.nowra.org - 2017 Legislative Fly-In

Decentralized Wastewater Treatment (also called Onsite or Distributed Wastewater Treatment) offers many advantages. Here are some of them:

Serving 85 million Americans...and Counting
Decentralized wastewater treatment is the other wastewater infrastructure, serving more than 25% of Americans. The industry supports as many as 150,000 jobs, mostly in the private sector. In 1997, EPA recognized decentralized wastewater systems as a permanent part of national wastewater infrastructure.

Environmental Protection
Decentralized systems effectively remove pollutants, including nitrogen and phosphorus. Their energy footprint is also much smaller than conventional sewage treatment plants.

Groundwater Recharge
Because decentralized systems disperse treated water below ground, they not only keep the water within the watershed, they recharge underground aquifers – a rapidly dwindling resource.

NOWRA'S GOALS

- Increase onsite/decentralized market share from 30% to 35% of new construction
- Secure a larger share of existing federal funding for wastewater treatment
- Work with EPA and other federal agencies to develop policies which will promote the use of onsite/decentralized technologies

WHY THESE GOALS ARE IMPORTANT

Onsite/decentralized treatment is the "forgotten infrastructure. Despite the fact that more than 85 million Americans—more than one-quarter of the country—the industry gets a miniscule share of federal funds intended for new facilities or upgrade/replacement of existing facilities. For nearly 30 years our industry has been virtually ignored, by a system which is rigged in favor of central sewer. This has made the challenges we face more difficult to solve and has limited the opportunities for expanding its use. The only way it's going to change is if we stand up and tell Congress that the status quo needs to change. And that's why we want you to CONTACT YOUR LEGISLATOR and advocate for onsite!

Protecting Public Health
Decentralized treatment facilities are designed to meet or exceed public health standards. They can treat effluent to the same standards as centralized sewage treatment plants.

Network Resilience
During Superstorm Sandy, most centralized treatment plants were out of service for weeks. By contrast, virtually all large decentralized treatment facilities in the area were down for less than a day.

Profitability
Decentralized wastewater treatment systems can usually be built, operated and maintained less expensively than a centralized sewage treatment facility of comparable size.

Just-in-time Construction

Because decentralized systems are modular, treatment capacity is put where and when it's needed. This helps keep control over development with local communities.

Scalability
Decentralized systems can be designed to treat any size flow -- from 1,000 gallons per day to more than 1,000,000 gpd. They can serve individual homes, commercial facilities, subdivisions and entire communities.

The Watershed Agenda
Decentralized systems are ideal for use within watershed-based management plans. They use natural processes to treat wastewater, keep water within the watershed, create local jobs, and improve the ability of community leaders to achieve positive, cost-effective and environmentally friendly outcomes.

Increasing conventional sewer capacity
In Mobile, AL, the local utility 'mines' water from their wastewater pipes, treats it onsite, and then recycles it by irrigating golf courses, parks, and other open spaces.

Recycling & Reuse
Decentralized systems disperse treated water below ground, eventually filtering into the aquifer as clean water. Plus, since these systems treat water onsite where it is generated, it also makes reuse (e.g., toilet flushing, irrigation, etc.) more economical for homes and businesses.

Congress Should Support Wider Use of This Green Technology

Minnesota Legislature takes another swipe at wipes

Labeling legislation stalls in committee; expensive problem persists

MPCA labeling article reprinted from www.mpca.org

Legislation that would restrict labeling on non-woven disposable products was introduced in the 90th Minnesota Legislative session, but wipes are moving through wastewater systems faster than the House and Senate bills through each legislative chamber. SF2040 was introduced by Sen.Scott J. Newman (R), had its first reading on March 13th, and was referred to the Senate Environment and Natural Resources Policy and Legacy Finance Committee. Its companion bill, H F 2 2 9 2, w a s introduced by Rep.Glenn Gruenhagen (R) and Rep. Dean Urdahl (R), had its first reading on March 9th, and was referred to the House Environment and Natural Resources Policy and Finance Committee. Neither committee has chosen to move their respective bill foward. Each bill has language that prohibits advertising, packaging or labeling nonwoven disposable product for sale in the state of Minnesota as "flushable," "septic safe," or "sewer safe" unless it meets definitions set forth in each bill. A nonwoven disposable product for sale in the state must meet the most recent INDA (Association of the Nonwoven Fabrics Industry) code of practice for product labeling that has been approved by the commissioner of the Pollution Control Agency.

Do Not Flush 2017,
Continued on Page 13

HOW TO BE AN ADVOCATE IN LESS THAN FIVE MINUTES!

Believe it or not, your voice counts and you can be an advocate for causes that you champion in less than five minutes.

First,get your Congressmen's contact information by going to https://mn.gov/portal/government/federal/congress/minnesota-delegation.jsp Follow the links to your rep's'website where you will find phone numbers and a "Contact me" or "Email me" link.

If you call, be prepared to state your name, address and the subject of your call. For example: "I am Joe Septicman from Sunnydale, MN and I am calling Rep. _____ to let him/her know that I am requesting equitable funding for decentralized wastewater treatment through the EPA,the Community Development Block Grant Program at HUD and other funding sources. To email, follow the prompts on the Congressman's website.

Whether calling or emailing, it is also important to identify real outcomes in your district---either positive or negative---that illustrate the benefits and cost savings of targeted support for a decentralized wastewater system. And with that investment of five minutes, you will have advocated for your industry!

NOWRA Advocacy Alert,
Continued from Page 1

- ❑ You are losing business when your customers can't afford to fix or replace a failing system. Utilities and their customers have been handed billions to upgrade systems which are out of compliance.
- ❑ Your tax dollars are subsidizing users of sewer systems.
- ❑ Your company's reputation suffers because federal neglect of onsite systems have given our entire industry a bad name.

Our industry has a great story to tell and Congress needs to hear it!

- ❑ We protect public health and the environment.
- ❑ We are a green technology (by any definition other than EPA).
- ❑ We replenish groundwater supplies.
- ❑ We treat water to the same levels as municipal water treatment facilities.
- ❑ We are the job creators. Nearly everyone in our industry is a small business – the engine of job growth.

The "Big Pipe" folks are well-organized, well-funded and well-known in Washington. While we are taking many steps to level the playing field, the onsite wastewater industry needs your help and support to make that happen.

Right now, the deck is stacked against our industry. At the same time, we represent the interests of the 86 million people. That's a lot of potential voters. And with the establishment of the Decentralized Wastewater Recycling Caucus in the US House of Representatives, we now have a voice to air our concerns.

The more Members of Congress we can encourage to join the Decentralized Caucus, the stronger our message will become. Most Members don't even realize that federal wastewater policy shortchanges thousands of their own constituents. That's why we're asking you to help change their minds.

There is strength in numbers. The more people who come to

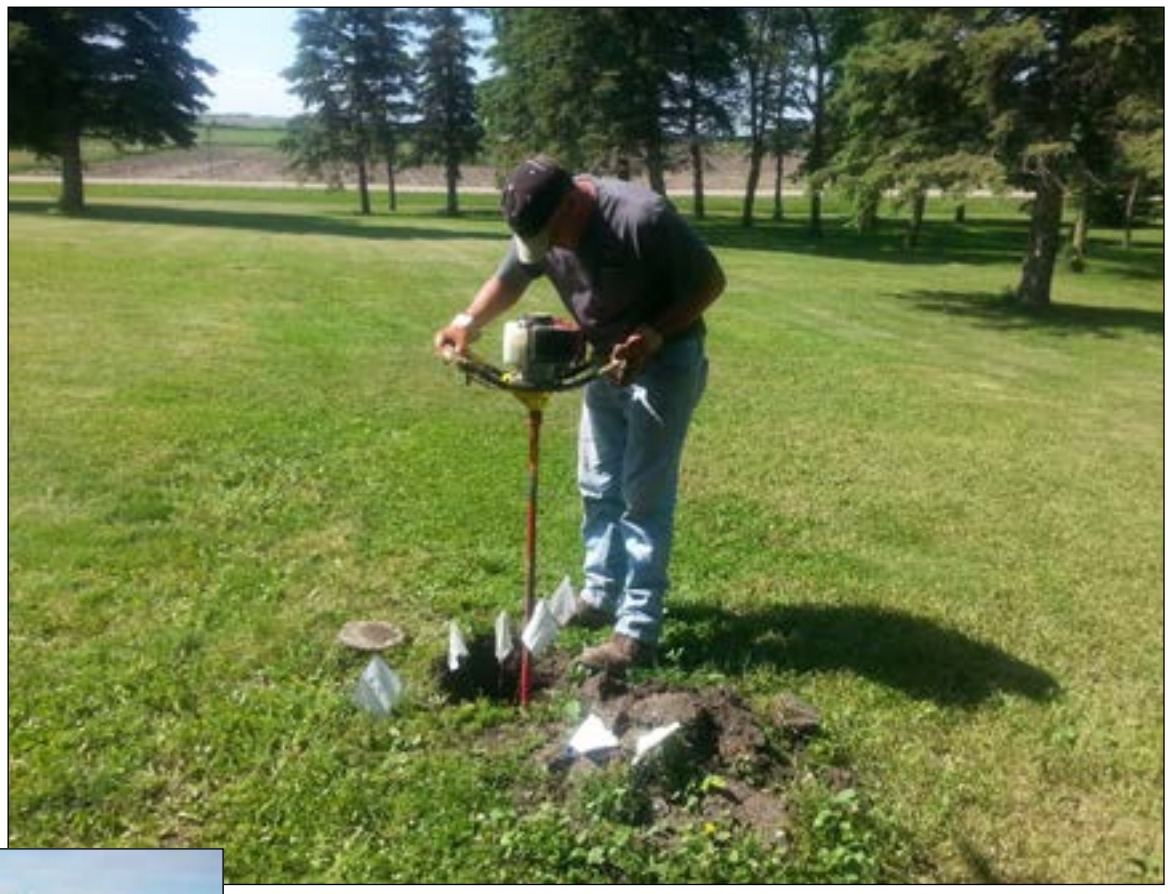
UNIVERSITY OF MINNESOTA

Study shows consumer ed critical for homeowners

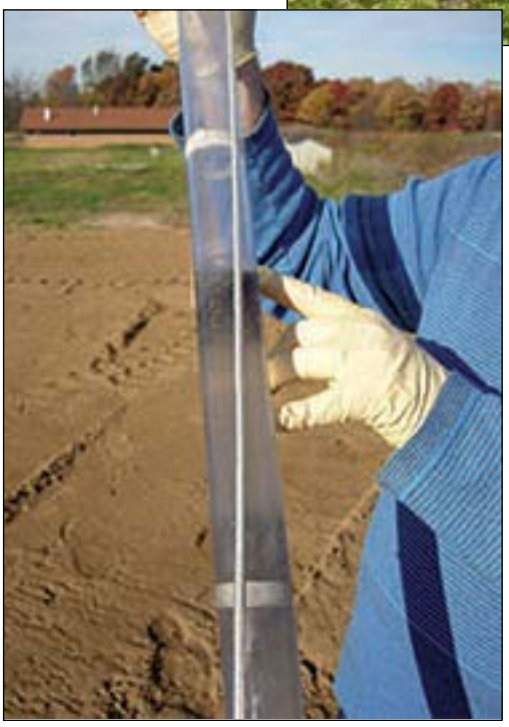
Household water habits affect the frequency of septic tank pumping

By Sara Heger, Ph.D., University of Minnesota OSTP

The Otter Tail Water Management District (OTWMD) in Minnesota provided a unique study opportunity for the analysis of household practices and maintenance needs of septic systems. The District is comprised of approximately 440 (26%) permanent residences and 1260 (74%) seasonal residences. This study looked for correlations between household practices and the accumulation of sludge and scum. Homeowner surveys (response rate 27%) were coupled with septic tank inspection and monitoring records kept by the OTWMD since 1981. The 1500-gallon two-compartment septic tanks were cleaned when more than 25% of the liquid capacity was storing sludge and scum. The frequency at which septic tank pumping occurred and the average length of time between septic pumping events were evaluated for both seasonal and full time residences.



Agitating a tank with a Crustbuster ® prior to tank cleaning



Measuring the amount of scum in a septic tank

There were 28 household factors, which were tested against the two cleaning categories. Of the 56 factors tested, 17 were found to have an impact on the need for septic tank cleaning based on sludge and scum accumulation.

Septic tank cleaning frequency and average time between tank cleanings were found to be significantly different based on property use type (e.g. full vs. part-time), meaning those who lived in a home full-time had their septic tanks pumped more frequently. Since 1981, the average frequencies for septic tank cleanings between property use categories were 2.4 times for warm-month (May - September) part-time residents, 3.2 times for full time residents and 2.7 times for all season part-time residents. The average of average time between septic tank cleanings between property

Household Habits and Pumping, *Continued on page 5*

Securing septic tank lids needs to be a priority for everyone in the industry

By Kim Peterson, Online Exclusives, Pumper.com

A fifth-grader should never be faced with the responsibility of saving another child's life. But such was the case on April 8 for 10-year-old Quinnlan Kittson of Milton, Vermont.

Several children were playing in a yard during a birthday party when Hannah Danaher jumped onto the septic tank cover. It flipped and she fell in. Luckily, the girl was able to maintain enough of a hold on the ground to not fall in completely. Quinlann heard her scream and rushed to help. With the help of the children's mothers, he managed to pull Hannah to safety.

Over the past several years we've seen too many stories of similar accidents, often with much younger children who are unable to keep themselves from completely falling into the tank and who, sadly, aren't always rescued in time.

This story is another sobering reminder — albeit with a happy ending — that securing septic tanks lids needs to be a priority for everyone involved in the onsite industry: installers, pumpers, maintenance providers, inspectors, regulators and homeowners.

Here are some tips from instructor Sara Heger, Ph. D.:

If you see an unsafe lid, don't walk away from it! Often when you are out doing service or an inspection on a system the owner is not home. This typically results in a report with a list of repair activities that need to occur and you wait to receive permission. Issues of safety should not be optional repairs. Therefore, having service and maintenance vehicles stocked with likely material for lid repair and replacement is key. In addition, have safety tape and lathes to block off the area until the repair can be made with the supplies available. A new lid can be made available for under $50.

Include information about lid and tank safety on all education materials you provide and place danger signs on exposed lids. The potential risk of an open septic tank is not something that all members of the general public understand and it is part of all of our jobs to change this. To the public, falling in a septic tank seems like a disgusting mess to get out of, and unfortunately some people think that it doesn't pose a real danger. Include a reminder to check tank covers between servicing to make sure lids are in place, screws are securely fastened and there is no cover damage.

If you are concerned about a lid that is technically safe but likely to be driven over or accessed by the public, install a permanent barricade, secondary restraint or additional locking mechanism. A safety screen or secondary restraint can be added for as little as $25 and provides an extra layer of protection, and should be installed even if the access is not exposed to traffic and public.

"This article first appeared online at Pumper.com on April 24, 2017, published by COLE Publishing, Three Lakes, Wis. It is reprinted by permission."

Household Habits and Pumping, *Continued from Page 4*

uses categories were: 8.9 years for warm-month part-time residents, 4.9 years for full time residents, and 7.9 for all season part-time residents.

Well water use was found to have an impact on average time between septic tank cleanings. This may be due to increased awareness of water usage if paying for city-water, unlike well water where there is no city fee. Septic tank cleaning frequency and average time between septic tank cleanings were found to be impacted by the presence of a dishwasher or washing machine. This is likely due to increased water usage associated with dishwashers and washing machines and the use of detergents. To ensure maximum water efficiency, washing machines and dishwashers should be set on proper load cycles and lint should be captured from the washing machine. Unlike other similar studies, the presence of a garbage disposal did not impact the frequency of septic tank cleaning. This may be due to the small size of the particles not settling out well in the septic tank or the seasonality of the majority of the properties. Septic tank cleaning frequency and average time between septic tank cleanings were impacted by the presence of a water softener, hot tub, and fixture leaks all adding extra water to the septic system. Water is relatively hard in the Otter Tail area with most homes having a softener so there is a potential for excess sodium loading in water softener discharge, which can affect septic tank performance. There was no impact due to the use of septic system additives, which supports the principle that additives cannot be used in place of tank cleaning.

The results of the study still indicated an assessment every two-four years is still recommended to evaluate the need for pumping and to evaluate other system and use issues, which can affect long-term system performance.

A full copy of the report can be found at septic.umn/edu/research/

Clean Water Partnership awards $3.45 in SSTS loans

CWP, SSTS and BMP spell less pollution

Reprinted from the MPCA website

The Clean Water Partnership Loan Program recently awarded $3.45 million in low-interest loans to four local partners to reduce pollution by upgrading subsurface sewer treatment systems (SSTS) and implementing best management practices (BMPs) in their watersheds.

Pine County received $600,000 to provide low-interest loans to implement 20 SSTS upgrades each year for three years in Pine County, resulting in bacteria load reductions and estimated annual reductions of 50 pounds of phosphorus and 200 pounds of nitrogen.

The Lac qui Parle-Yellow Bank Watershed District received $500,000 to fund low-interest loans to implement up to 45 SSTS upgrades in Lac qui Parle County, resulting in estimated annual reductions of 210 pounds of phosphorus, 14 tons suspended solids, 5,060 pounds of biological oxygen demand, and 675 pounds of nitrogen.

The Crow River Organization of Water (CROW) received $1.35 million to fund low-interest loans to implement 115 SSTS upgrades, resulting in an estimated annual reduction of 339 pounds of phosphorus, 7,566 tons of sediment, 13,696 pounds biochemical oxygen demand, and 834 pounds of nitrogen.

The Cedar River Watershed District received $1 million for its capital improvement project. This project will assist in implementing 25 fixed structures, which will be designed to trap, treat and store rain events as a means of reducing sediment, phosphorus and to a lower extent nitrate delivery to the Cedar River and its tributaries. This project will result in an estimated annual reduction of 112 pounds of phosphorus, 112 tons of sediment, and 15 pounds of nitrogen.

The Clean Water Partnership (CWP) program continues to accept applications from local governmental units interested in loan funding to lead a nonpoint source pollution control project for protection or restoration of Minnesota water bodies. Applications can be made at any time, and more than $11 million of low-interest loan funding is available.The CWP Request for Proposals can be found on the Minnesota Pollution Control Agency (MPCA) website. The application and related information will be accepted through an email address listed in the RFP.

MPCA clarifications re: Continuing Ed credits

3 common myths about related Continuing Education credits

By Jane Seaver, State Programs Administrator, Certification & Training Unit, Minnesota Pollution Control Agency

Continuing education (CE) requirements help certified SSTS professionals maintain the expertise they need to be successful in the SSTS Industry. All approved SSTS training receives accreditation to award either direct or related credits to those who attend. Below, we dispel the most common myths about training that awards related credits.

Related CE Credits Cannot Be Used to Renew My SSTS Certification

False. Related (or indirect) continuing education credits are tracked by the MPCA and *do* count towards your renewal requirement. Individuals with any combination of Installer, Maintainer and Service Provider Certifications must earn 12 credits (or hours) every 3 years. Individuals with a combination of certifications that include any level of the Designer or Inspector specialty areas must earn 18 credits every 3 years with at least 6 credits of Soils CE.

Related CE Credits Are Worth Less than Direct CE Credits

False. Related CE Credits are valued *equally* to direct CE credits when the MPCA evaluates your renewal requirements. However, those with a 12-credit requirement cannot count more than 6 related credits towards renewal every 3 years. For example, you could meet your requirement with 6 related credits + 6 direct credits. Those with an 18-credit requirement cannot count more than 9 related credits every 3 years. In this case, you could meet your requirement with 9 related credits + 3 direct credits + 6 soils direct credits.

CE that Awards Related Credits Covers Topics of No Value

False. You earn related credits at events that do not provide training *specific to SSTS in Minnesota.* Learning about septic systems at a national conference or about emerging technologies is undeniably valuable. However, you would earn related credits from attending these training events because you have not received targeted education or updates on Minnesota Rules Chapters 7080-7083. The MPCA requires a minimum amount of direct credits to ensure that individuals are exposed to its SSTS Rules during each 3-year CE period.

Questions? Contact MPCA SSTS Licensing & Certification staff, Jane Seaver, at Jane.Seaver@state.mn.us or 651-757-2711.

MPCA training for SSTS administrators

Published on the MPCA website

Each local unit of government that administers an SSTS program needs to have at least one person on staff trained in the administrative requirements of the program. The MPCA has created a series of relatively short videos (each is less than 15 minutes) that provides this required training. If you are one of these people, review each of the videos below.

Complete quiz as you view each video

Prior to viewing the videos, print out a copy of the MPCA SSTS Administrative Videos Quiz, which has a few questions for each video segment that highlight information that is especially important to remember for each topic. Keep the quiz handy and answer the questions as you view each video (it is an open-computer test!).

Once you finish a video and answer the quiz questions associated with that video, record the date and write your initials in the box provided in the top right hand corner of the quiz. Keep these completed quizzes in your files.

SSTS Administrators Training, *Continued on Page 15*

Rule change on SDS permit coming in 2018

by MPCA staff

The MPCA has been working with MOWA on a rule change related to when a facility is required to get a State Disposal System (SDS) permit vs. a local permit. To help answer this question under existing rules, a facility could measure its actual wastewater flows or use “table values.” Table values are values stated in rule for various types and sizes of facilities. If a facility did not measure flows they needed to use table values in determining the type of permit needed. If they did measure flows, they needed to use the greater of the two values to determine the type of permit required. The most significant proposed change would change rule language to indicate a facility can choose to use either table values or measured values to determine the type of permit required.

The rule change process requires a public notice period and other steps. A final version of the updated rule language likely won’t go into effect until sometime in 2018.

Customer care: referrals to USDA Housing Repair Funds

USDA Septic System Loans and Grants Minnesota

Telling a home owner that they need a new septic system is a conversation almost all septic system professionals have had with customers each year. When the home owner has limited resources, there's one more conversation that can be helpful. Onsite Septic System professionals can refer potential customers to the USDA website and the USDA Single Family Housing Repair Loan & Grant Program, which can supply financial assistance to qualifying applicants.

Also known as the Section 504 Home Repair program, funds are available as loans to very-low-income homeowners to repair, improve or modernize their homes—or as grants to elderly, very-low-income homeowners to remove health and safety hazards.

Funds up to $27,500 may be available for qualifying homeowners who use the money for qualifying expenses.

Who may apply for this program?

To qualify, a homeowner must:

- Be the homeowner and occupy the house
- Be unable to obtain affordable credit elsewhere
- Have a family income below 50 percent of the area median income
- And for grants, be age 62 or older and not be able to repay a repair loan

Home owners 62 years of age and older may qualify for grants to repair ailing septic systems

How may funds be used?

- Loans may be used to repair, improve or modernize homes or remove health and safety hazards
- Grants must be used to remove health and safety hazards

How much money is available per home?

- Maximum loan is $20,000
- Maximum grant is $7,500
- Loans and grants can be combined for up to $27,500 in assistance

USDA Loans/Grants for Septic Repair, *Continued on Page 12*

USDA Loan/Grants for Septic Repair, *Continued from Page 11*

- Full title service is required for loans of $7,500 or more
- Grants have a lifetime limit of $7,500
- Grants must be repaid if the property is sold in less than 3 years
- If applicants can repay part, but not all of the costs, applicants may be offered a loan and grant combination

Is there a deadline to apply?

- Home loans are available year round as long as funding is available
- Home loan applications are processed in the order they are received

How long does an application take?

Approval times depend on funding availability in your area. Talk to a USDA home loan specialist in your area for help with the application

Who can answer questions and how do I get started?

Contact a USDA home loan specialist in your area

What governs this program?

The Housing Act of 1949 as amended, 7 CFR Part 3550

HB-1-3550 - Direct Single Family Housing Loans and Grants Field Office Handbook

Why does USDA Rural Development do this?

Helping people stay in their own home and keep it in good repair helps families and their communities. Homeownership helps families and individuals build savings over time. It strengthens communities and helps many kinds of businesses that support the local economy.

NOTE FOR WEBSITE USERS: Because information changes, always consult the program instructions listed in the section titled "What Governs this Program?"

Do Not Flush 2017, *Continued from Page 5*

MPCA proposes labeling change on disposable wipes: Do Not Flush

Reprinted from 2017 MPCA Policy Proposal (https://www.pca.state.mn.us/about-mpca/legislative-fact-sheets)

Disposable wipes — used for changing diapers, personal hygiene, housecleaning, and more — cause major problems when flushed down toilets. Because they don't break down the way toilet paper does, these wipes clog homeowner and municipal sewer pipes, put stress on community wastewater collection and treatment equipment, and cause cities to spend thousands on premature equipment repair and replacement. Wipes snag on any imperfection in sewer pipes, catch passing debris and grease, and create a "ball" that will grow to plug the pipe. Municipalities must manually clean screens or remove clogs.

What local officials are saying

In Water Infrastructure Listening Sessions held by the MPCA, many municipalities requested a flat-out ban on the sale of disposable wipes due to the big, costly problems they cause in municipal sewer pipes and wastewater facilities. Princeton, Mankato, Elk River and several other Minnesota cities are involved in a class-action lawsuit against companies that make "flushable" wipes. Stories on WCCO-TV news ("'Flushable' wet wipes wreaking havoc on sewer systems," 4/16/16), in the Forest Lake Times ("Princeton joins Wyoming in wipes lawsuit," 7/1/15), and the Hutchinson Leader ("Flushable wipes not so flushable," 4/6/16) have reported on the problems for cities.

What MPCA is proposing

This proposal would ban "flushable," "septic safe," or "sewer safe" labeling from nonwoven disposable products (wipes) sold in Minnesota. It would also require the packaging to include a "Do not flush" message.

How will it help?

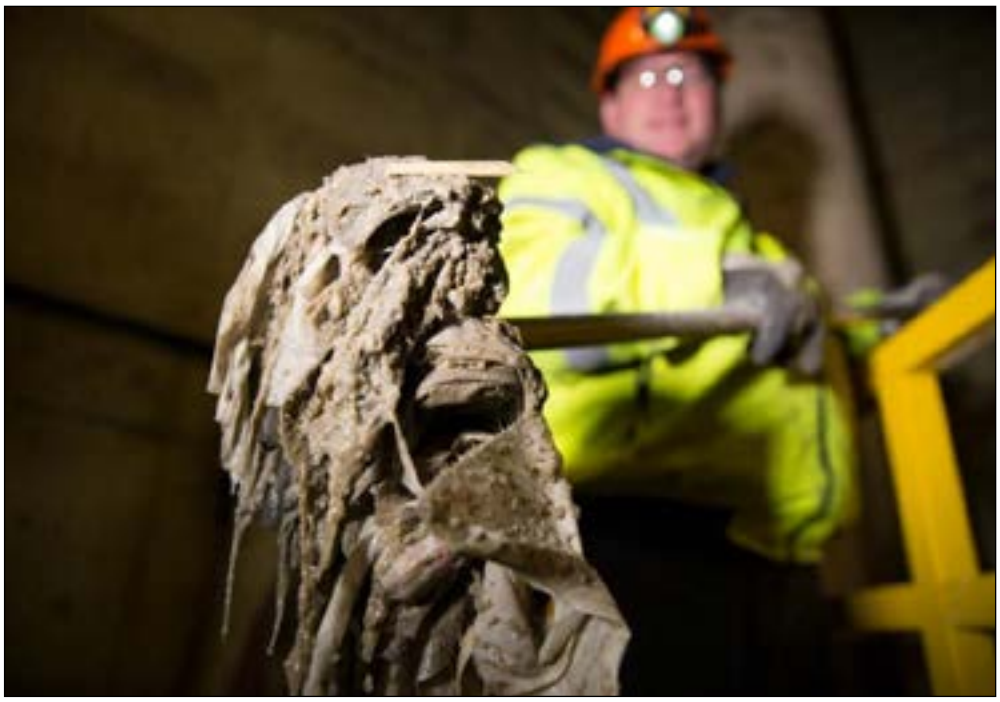
Changing the labeling on disposable wipes packaging would help change public behavior and over time reduce the amount of such wipes being flushed. Fewer wipes flushed would reduce operation and maintenance costs for municipalities across the state (examples of which are detailed on Page 15).

Do Not Flush 2017, *Continued on Page 14*

Do Not Flush 2017, *Continued from Page 13*

The expensive problems that the MPCA labeling proposal will prevent!

Flushed disposable personal products carry a hefty pricetag for wastewater treatment infrastructure and septic systems. Here are examples:



WADENA *(pop. 4,088)* — In a 2015 educational campaign, the CIty of Wadena encouraged residents not to flush disposable wipes, to try to cut down on its increasing number of sewer backups. The city originally installed a "Muffin Monster," an expensive piece of equipment that would shred wipes in the pipes, but the debris ended up clogging back together later in the system. In 2012-2013, the city spent $85,000 on a strainer that collects and compacts wipes before they reach the waterwater treatment facility. Later, they also spent $18,000 on two grinder pumps.

PILLAGER *(pop. 469)* — The City of Pillager spent $10,000 over six months repairing and replacing two pumps in its collection system that were damaged by wipes.

SERPENT LAKE SANITARY SEWER DISTRICT *(serving Crosby, Ironton, Cuyuna, and Deerwood)* — Wastewater staff have to clean wipes out of the system multiple times a day to avoid wear and tear on pumps; before the wipes epidemic, it was once or twice a week. Maintenance costs have gone up sharply, and staff respond to an increasing number of emergency calls related to wipes issues.

HUTCHINSON *(pop. 14,178)* — Timothy Gratke, Hutchinson's Wastewater Supervisor, says they finished a $200,000 piping project in January 2016 to bypass a valve that was completely plugged with wipes. They will also soon be installing a $90,000 grinder at a lift station to deal with wipes.

RICE *(pop. 1,275)* — Mark Sauer, a wastewater operator for the City of Rice, says the city spent $30,000 on a crane truck that's used to regularly pull pumps out of lift stations when wipes clogs need to be cleared.

BRAINERD *(pop. 13,592)* — Brainerd now has three grinder stations in its collection system to deal with wipes. The grinders each cost around $20,000 upfront and about $6,000 a year to maintain.

BAXTER *(pop. 7,610)* — Kevin Kassidy of Baxter Public Works reports that the city has been upgrading all its lift station pumps to units that can handle a higher volume of wipes, but are less energy effiencient that their previous pumps.

MINNETONKA *(pop. 48,370)*— Starting in 2007, Tom Pletcher and his team with the City of Minnetonka's sanitary sewer system have had to clear wipes from pumps every three days. Pletcher, the city's water and sewer utilities field supervisor, says that wipes have been a major factor in all of Minnetonka's sewer backups in the past five years and have contributed to early equipment failures. Clearing backups costs the city $1,000-$1,500 for each clog, and Minnetonka has 8-10 backups every year. Once or twice a year, clogs cause sewage to back up into homes. This, Pletcher says, is the worst: "How do you put a cost on filling someone's basement with sewage?"

AVON *(pop. 970)* — Avon's utilities team checks pumps in the town's sewer system every day. When there is a wipes clog, they often have to use a crane to pull the pumps from 15 or 20 feet underground in order to clear them. In the past few years, the city has spent about $73,000 to upgrade lift station pumps. Avon's utilities supervisor Jon Forsell says the older pumps were still functional, but not designed to handle wipes. In addition, the city spends almost $4,000 a year on labor to clear wipes out of pumps.

LEWISTON *(pop. 1,591)* — Lewiston was paying about $15,000 a year to a company to clear wipes clogs in its lift station pumps. Then the city bought a "Muffin Monster" — a machine that grinds up wipes before they get to pumps — for $70,000. "We wouldn't have had to put it in, if not for wipes," says public works director Curt Benter. The average monthly sewer charge for Lewiston residents is $75.66.

Tony Ruppert Scholarship Deadline is August 15th

2017 Tony Ruppert Scholarship Application

The Minnesota Onsite Wastewater Association (MOWA) is pleased to announce that applications are now being accepted for the Tony Ruppert Scholarship Fund. Up to $5,000 in scholarships are available to high school graduates (as of June 2017) who will be enrolled as a full-time student in post-secondary undergraduate education during the 2017- 2018 school year.

Applicants must be no more than 26 years old as of June 1, 2017 and be a MOWA member, or a child, sibling, grandchild, or niece/nephew of a MOWA member. Students may only win this scholarship once. Students must complete an application, write an essay, and provide certification of the relationship to a MOWA member or member's employee.

A complete application must include: (3 items)

Item 1: ***Application Form*** *(To be completed by the student; you may use this form or print all required items on a separate sheet.)* Please type or print clearly:

Name: _____ Social Security #: _____

Address:_____ City/State/Zip:_____

Phone:_____ E mail address _____

Year graduated from high school _____ MOWA Member Name _____

Name of school you are/will be attending: _____*(Must be a full time student)*

Curriculum you are/will be enrolled in: _____

All of the above information is true and correct and I hereby grant permission to MOWA to reprint my essay or abstract in whole, or in part, or use the created digital media for informational or advertising purposes, such as on the MOWA website or as a MOWA newsletter article or press release.

_____ *(Applicant's signature)*

Item 2: ***Essay. See Essay Content Form***

Item 3: ***Certification Form:*** *(To be completed by the MOWA member)*

Name of Applicant for Tony Ruppert Scholarship: _____

The Tony Ruppert Scholarship Fund Applicant is my:_____*(insert relation).*

I agree that the information contained in this form is true and correct to the best of my knowledge:

MOWA Member Name (printed): _____

MOWA Member Signature: _____ Date: _____

Business Name and Address: _____

All applications must be submitted to MOWA no later than August 15, 2017. Applications will be rated by a panel of MOWA members. Winners will be notified in September 2017.

Send the complete application (with essay in Word format) to: mowacarla@aol.com

SSTS Administrators Training, *Continued from Page 9*

Companion documents provide more information

For most of the videos, there is a companion document containing information that will help you follow along with the video by making it easier to see some of the graphs, text, etc. Some also contain additional information such as a fact sheet or other information pertaining to that particular topic. Prior to viewing a video, print out the related companion document and refer to it while watching the video.

If you have questions during the videos, please take notes and contact Aaron Jensen (651-757-2544) for assistance.

Happy viewing!

MPCA SSTS Administrative Videos Quiz Print out and complete as you view the videos and keep with your records. For the complete listing of videos and companion documents, go to https://www.pca.state.mn.us/water/training-resources-ssts-administrators

Tony Ruppert Scholarship Instructions & Tips

This essay is to be completed by the applicant. The applicant can choose a topic to write about that is related to the environment, water quality and quantity, and wastewater treatment. The sponsor of this scholarship is the Minnesota Onsite Wastewater Association (MOWA). MOWA is associated with the onsite/decentralized wastewater industry (a.k.a. septic systems). The sections of Introduction, Literature Review, Conclusions and References shall be included in the essay.

TITLE

AUTHOR

DATE

I. INTRODUCTION

What is the problem/issue? Keep the introduction brief, but do indicate the purpose of the paper as well as present appropriate background. Make sure that the reader knows enough to appreciate the relevance of the issue and why it is appropriate to ask the question that you will address with your paper. State what angle is going to be explored and arrange key issues that will be addressed in this review by answering questions that you have personally developed and are tailored to fit your topic.

Typical length 2-4 paragraphs.

II. LITERATURE REVIEWED

This section is a summary of information, references and research that has been published about your particular subject. It provides the reader with an idea about the current situation in terms of what has been done, and what we know. Sometimes it includes suggestions about what needs to be done to increase the knowledge and understanding of a particular problem.

This is the longest section of your essay and will range from one to several pages.

III. CONCLUSION

Effectively wraps up the review. Summarize the points of comparison or contrast among the works based on information and literature reviewed. It should also provide insight of relationship between the topic of the review and a larger area of study such as a specific discipline or profession

Typical length 2-4 paragraphs.

IV. LITERATURE CITED

Literature citations in the body of your paper should be in parentheses and contain only the author's last name and the date; for multiple authors include the last name of the first author, et al., and the date. If the author's name is used in the text then just the date in parentheses is sufficient. For example: (Monod, 1949) (Neidhardt et al., 1990) or Monod (1949) compared the reaction….. List all literature cited in your report in alphabetical order by the last name of the first author in a separate section. Use the proper form for citations. If the citation is to a specific page add the page number. For a technical paper you will need to review several sources. **For this essay a minimum of four citations is required.**

Examples:

For scientific papers:

Monod, J. 1949. The growth of bacterial cultures. *Annu. Rev. Microbiol.* 3:371-394.

For a book:

Neidhardt, F.C, Ingraham, J.L. and. Schaechter, M. 1990. *Physiology of the Bacterial Cell*. Sinauer Associates, Sunderland, MA.

For a newspaper article:

McKay, D. 2000. Arsenic: how much is safe? *Albuquerque Journal.* July 30, 2000, p. A1.

For a web site:

National Research Council. 1999. Arsenic in drinking water. Subcommittee on Arsenic in Drinking Water. http://www4.nationalacademies.org/news.nsf/isbn/030906337?OpenDocument.

For a personal communication:

Sanchez, R. 1993. City of Socorro, Water Utilities Division, Socorro, NM. Personal communication.

2017 OSTP Certification Course Descriptions and Offerings

Introduction to Onsite Systems (15 Direct Credits)
Fee: $360 Exam: Yes
This 15-hour workshop is the foundation for all SSTS certification courses and is best completed prior to the other workshops. It prepares participants for the Basic exam and provides an overview of onsite treatment options and concepts. Enrollment in this workshop includes a copy of the Manual for SSTS Professionals in Minnesota.
Topics include:
- Treatment of wastewater
- Site evaluation
- Wastewater characteristics
- Soil treatment systems

10-3 St. Cloud - Moose Lodge 11/13-15/17 Deadline: 11/6/17

Installing Onsite Systems (12 Direct Credits)
Fee: $265 Exam: Yes
This 12-hour workshop prepares attendees for the Installer exam and provides information about proper installation practices.
PREREQUISITE: Introduction to Onsite Systems
Topics include:
- Construction planning
- Tools for installing
- Construction practices
- Pipelayer certification

112-3 St. Cloud - Moose Lodge 11/16-17/17 Deadline: 11/9/17

Inspecting Onsite Systems (12 Direct Credits)
Fee: $265 Exam: Yes
This 12-hour workshop identifies Minnesota requirements for existing and new system inspections and prepares participants for the Inspector exam.
PREREQUISITE: Introduction to Onsite Systems.
Topics include:
- Administrative requirements
- New system inspection
- Existing system inspection
- Tools and procedures

30-1 Alexandria - Douglas County Public Works Building 6/6-7/17 Deadline: 5/30/17

Installer Continuing Education (12 Direct Credits)
Fee: $265 Exam: No
This 12-hour workshop will meet the continuing education requirements for any certification but is specifically tailored for Installers. All information will be provided from the perspective of a system installer.
Topics Include:
- Construction safety
- Keys to proper installation
- Pumps and dosing
- Rule change implications

69-3 Grand Rapids - Sawmill Inn 11/29-30/17 Deadline: 11/22/17

Pipelayer Certification (2 Direct Credits, 1 Related Credit)
Course begins at 1:00PM Exam: Yes Fee: $75
This 3-hour workshop is once again offered this year to accommodate a change in the Minnesota Plumbing Code that requires all septic system installers be either certified pipelayers, licensed plumbers, or registered apprentices in order to install sewer or water service pipes outside of a building in Minnesota.
Topics include:
- MN Plumbing Code
- Pipelaying
- Code compliance bond packet instruction

92-3 Grand Rapids - Sawmill Inn 11/30/17 Deadline: 11/23/17

OSTP, 173 McNeal Hall, 1985 Buford Ave., St Paul, MN 55108
Fax: 612-624-6434 Phone: 800-322-8642

General Continuing Education (12 Direct Credits)
Fee: $265 Exam: No
This 12-hour workshop is designed to meet the continuing education requirement for SSTS professional registration. The topics will be varied to give a wide range of information for SSTS professionals.
Topics include:
- Rule change implications
- Pressure distribution
- Working on difficult sites
- MPCA update

60-3 Mankato - Morson-Ario VFW 11/2-3/17 Deadline:10/26/17
60-4 St. Cloud - Moose Lodge 12/12-13/17 Deadline: 12/5/17

Field Troubleshooting Systems Continuing Education
(6 Direct Credits) Fee: $240 Exam: No
This 6-hour workshop combines a classroom and field component to give all septic professionals additional knowledge about troubleshooting systems that are experiencing problems.
Topics include:
- Homeowner use issues
- Hydraulic and organic overload
- Afternoon field visit
- Evaluating soil treatment systems

64-1 Chaska - MN Landscape Arboretum 6/8/17 Deadline: 6/1/17

Soils (15 Direct Credits)
Fee: $310 or $475 with Munsell Color Guide Exam: Yes
This 15-hour workshop prepares attendees for the Soils exam and provides participants with a detailed understanding of how particular soils affect the treatment of sewage. Participants will also receive instruction at a field location. Munsell Color Guides are available for $165 and Sand Cards for $10. This class does NOT meet the 6-hour soils continuing education requirement for all Designer and Inspector categories.
PREREQUISITE: Introduction to Onsite Systems
Topics include:
- Percolation testing
- Soil characteristics
- Field evaluations
- Soil survey use

515-1 Farmington - Dakota County Extension Office 5/23-25/17 Deadline: 5/16/17
515-2 Alexandria - Douglas County Public Works Building 6/28-30/17 Deadline: 6/21/17

Soils Continuing Education (6 Soils-Specific Direct Credits)
Fee: $240 or $405 with Munsell Color Guide Exam: No
This 6-hour course couples classroom and field training to meet soils-specific MPCA continuing educational requirements for designers and inspectors. Munsell Color Guides are available for $165 and Sand Cards for $10.
Topics include:
- Regional geology and soils
- Local soil hydrology information
- Soils observations
- System siting and design

55-1 Cologne - Carver County Public Works 5/18/17 Deadline: 5/11/17
55-2 Little Falls - Initiative Foundation 6/13/17 Deadline: 6/6/17
55-3 Bemidji - Beltrami Electric Co-op 6/22/17 Deadline: 6/15/17
55-4 Cook - VFW Post 1757 7/27/17 Deadline: 7/20/17
55-5 Alexandria - Douglas County Public Works Building 8/8/17 Deadline: 8/1/17
55-6 Lamberton - SW Research and Outreach Center 8/31/17 Deadline: 8/24/17
55-7 Austin - Holiday Inn 9/19/17 Deadline: 9/12/17

Enroll online at: septic.umn.edu

2017 MOWA MEMBERSHIP APPLICATION

MOWA minnesota onsite wastewater association

Membership: ❑ **Renewal** ❑ **New Member**

❑ Individual Member $240 (1 person)
❑ Business Group /Government Unit $340 (up to 5 people; $100 /person after 5)
❑ Student $140 (1 person)
❑ Life-time
❑ Honorary

Note: Your MOWA Membership includes one NOWRA membership

Memberships are based on calendar year - After July 1st, new members pay $140-individual / $190-business or gov't groups for remainder of 2017

Individual/Group Contact: **This person will be listed as the NOWRA member on the Septic Locator website. They will be listed first in all MOWA publications. Please print clearly.**

• **1st Member** _____ **Company Name** _____

Address _____ City/State/Zip _____

Title _____ Phone _____ Mobile/800# _____ Fax _____

Email _____ Website _____ County _____

Circle the counties you work in: *Needed for Directory and Website.*

Statewide 88

Aitkin	1	Clay	14	Hubbard	29	Marshall	44	Pipestone	59	Steele	74
Anoka	2	Clearwater	15	Isanti	30	Martin	45	Polk	60	Stevens	75
Becker	3	Cook	16	Itasca	31	McLeod	46	Pope	61	Swift	76
Beltrami	4	Cottonwood	17	Jackson	32	Meeker	47	Ramsey	62	Todd	77
Benton	5	Crow Wing	18	Kanabec	33	Mille Lacs	48	Red Lake	63	Traverse	78
Big Stone	6	Dakota	19	Kandiyohi	34	Morrison	49	Redwood	64	Wabasha	79
Blue Earth	7	Dodge	20	Kittson	35	Mower	50	Renville	65	Wadena	80
Brown	8	Douglas	21	Koochiching	36	Murray	51	Rice	66	Waseca	81
Carlton	9	Faribault	22	Lac qui Parle Lake	37	Nicollet	52	Rock	67	Washington	82
Carver	10	Fillmore	23	Lake	38	Nobles	53	Roseau	68	Watonwan	83
Cass	11	Freeborn	24	Lake of the Woods	39	Norman	54	Scott	69	Wilkin	84
Chippewa	12	Goodhue	25	Le Sueur	40	Olmsted	55	Sherburne	70	Winona	85
Chisago	13	Grant	26	Lincoln	41	Otter Tail	56	Sibley	71	Wright	86
		Hennepin	27	Lyon	42	Pennington	57	St. Louis	72	Yellow Medicine	87
		Houston	28	Mahnomen	43	Pine	58	Stearns	73		

Information: **(Check all that apply)**

❑ Installer ❑ Pumper ❑ Designer ❑ Inspector ❑ Gov't Regulator ❑ Educator ❑ Service Provider ❑ Student
❑ Soil Scientist ❑ Professional Engineer ❑ Manufacturer ❑ Operator/Maintenance ❑ Supplier ❑ Other: _____

Additional Business/Government Members:

• **2nd Member** _____ Title _____ County _____

Address _____ City/State/Zip _____

Phone _____ Mobile/800# _____ Fax _____ Email _____

• **3rd Member** _____ Title _____ County _____

Address _____ City/State/Zip _____

Phone _____ Mobile/800# _____ Fax _____ Email _____

(Please list additional business/government group members on separate sheet with complete contact information.)

Publications: Would you prefer receiving 'Little Digger' newsletters via ... ❑ Regular Mail ❑ Electronically

We currently send one publication per address to business/government groups. Contact the MOWA office if you'd like additional copies.

Additional NOWRA Memberships: **MOWA membership fees include one NOWRA membership per company/organization. List names of members who want additional NOWRA memberships here: Cost - $40 per person.**

2)_____ 3)_____ 4)_____ 5)_____

Payment: *(Please print)*

MOWA Membership $_____ + Add'l NOWRA Memberships = **Amount: $ _____**

❑ Check enclosed (Payable to MOWA) ❑ VISA ❑ MasterCard

Card Number: _____ CVV: ____ Expiration Date: _____ Cardholder Name: _____

Signature: _____ Date_____

MOWA, 5021 Vernon Ave, So., Suite 241, Edina, MN 55436 Phone: 612.801.5897 Fax: 952.487.4447

Note: Dues payable to MOWA are not deductible as a charitable contribution but may be deductible as an ordinary and necessary business expense. MOWA estimates that 10% of your MOWA dues are used for governmental affairs issues and therefore are not deductible.

MOWA
minnesota onsite wastewater association

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