

MOWA Mentorship Program

Overview

Mentorship provides a process for young professionals to gain the skills needed to build their own business or the businesses they work with. Any skilled trade industry will see an eventual “aging out” of experienced professionals. When this occurs, there is a large gap in knowledge basis for young professionals. Mentorship allows the bridging of this gap to build competent and confident professionals to continue to build the onsite wastewater industry.

The MOWA Mentorship Program strives to build the reputation of the onsite wastewater industry in Minnesota. Providing quality education and mentoring to young or new professionals will better serve the public and environment.

Goals of the Program

1. Graduate knowledgeable professionals that can adequately and responsibly install SSTS in Minnesota.
 2. Build a network of professionalism that provides resources to build skills in the SSTS industry.
 3. Provide or aid a professional in locating a mentor to complete the program.
 4. Show the importance of being a part of the Minnesota Onsite Wastewater Association (MOWA) to continue to build programs for professionals across the state.
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Roles of Participants in MOWA Mentorship Program

Apprentice

The apprentice is the new professional looking for experience to fulfill the requirements of MPCA to fulfill certification. This individual is willing to learn from experienced professionals. By participating in the MOWA Mentorship Program, they are willing to complete more than the minimum requirement of MPCA. Dedication to complete the program in its entirety is required.

Mentor

The mentor is an experienced professional willing to train and evaluate the apprentice. This person has had extensive experience in the SSTS industry and has the time to provide knowledge to the apprentice. The Mentor will be building a new professional of the industry. They will pledge to train, educate, and evaluate the apprentice to build their skills to better serve the SSTS industry of Minnesota.

MOWA

MOWA will provide support to both the Apprentice and Mentor throughout the program. It will administer the program by managing the application process, locating a mentor (if needed), aid in

compiling documentation for submittal to MPCA, an option to review documents prior to MPCA submittal, and provide a final report of completion of the program.

Program Options

Option 1: Current Employee of Company with Mentor

A current employee of a company is applying to be the Apprentice, and the Mentor would be a person already working for that company that is qualified to be a Mentor.

Option 2: New Professional seeking Mentor

A new professional that is not an employee of a company and is looking for a mentor to fulfill their requirements to become certified. When an individual is looking for a mentor, they will complete the Apprenticeship Application Form and MOWA will begin the process of locating a Mentor for this Apprentice.

In this option, the Apprentice must be open to a wide geographic location and possibly travel. In order to find the best possible mentorship, flexibility in scheduling with a mentor is needed. There is also the option that the Mentor may travel to work with the Apprentice. This will depend on the Mentor and their availability to do so.

Apprentice Installer Mentorship Requirements

Item	Complete
Complete MOWA Mentorship Program Application	
Passed Certification Course: Introduction to Onsite Systems	
Passed Certification Course: Installing Onsite Systems	
Completion of 1500 hours of field experience with Mentor or 2 seasons of work (whichever the Mentor deems appropriate)	
Completion of the SSTS Installer Task Analysis (see table in Appendix I)	
Types of Systems to be installed: <ol style="list-style-type: none"> 1. Type I Systems 2. Type II Systems 3. Type III Systems 4. Type IV Systems (1 system required) 5. Type V Systems * There must be at least one above-ground and one below-ground installation. * Five installs must be Type IV pressurized systems	
Apprentice may utilize the MOWA Mentorship Review Committee to review the construction plan, as-is, and final inspection documents prior to submittal to MPCA.	
Submittal of Systems for approval to MPCA (Items required)	

1. Copies of LGU sign-off/inspection sheet showing approval of construction activities checked and final inspection. OR 2. Copies of LGU issued Certification of Compliance (COC)	
Observe 10 visits with Maintainer	
Completion of NOWRA Installer Training Course (8.5 hours) https://www.pathlms.com/nowra/product_bundles/916 * At expense of Apprentice	
Complete 3 Business Classes on the NOWRA Learning Platform *At expense of Apprentice	
Register and attend the Annual MOWA Winter Convention	
Membership with MOWA	

SSTS Installer Task Analysis is listed below. See reference list in Appendix I.

Mentor Installer Requirements

Item	Complete
Must be a certified Installer <ul style="list-style-type: none"> May not have had a violation resulting in a successful MPCA enforcement action within the past 5 years. 	
Carry a valid business license	
Person or Business has to have 5+ years of experience with installing SSTS	
Agree to the MOWA Mentorship Code of Ethics & Expectations (see Appendix I)	
Experience installing all types of systems *Option for Mentor to send Apprentice to another certified Mentor to gain experience in installing a specific SSTS that is not common in their area.	
Person or Business will be able to do multiple types of system installs	
Must verify construction of systems according to approved design and applicable construction requirements with Apprentice. Verification must include on-site observations during the work periods in which the Apprentice is determining the following: <ul style="list-style-type: none"> System layout and placement. That the site conditions allow for construction. The proper soil moisture conditions for excavation. The elevations of sewage tanks and soil treatment systems. The quality of the tanks and suitability of other materials. Solutions to problems encountered. Upgrade and repair advice provided. 	
Complete the SSTS Installer Task Analysis (MPCA) (See Appendix I) for apprentice.	
Maintain annual membership with MOWA	
Attend the annual MOWA Winter Convention	

Fees & Compensation for the Program

In an effort to bring a high-quality program and find the right mentor/apprentice matches, MOWA will require a fee to complete these tasks.

MOWA Mentorship Program		
		Fee
Application Fee	Apprentice Pays	\$100.00
Tuition Fee	Apprentice Pays	\$5,000.00
MOWA Annual Membership (Individual)	Apprentice Pays	\$240.00
<p>This one-time fee enables MOWA to help locate a mentor and get the individual enrolled in the program. It gives the Apprentice access to the MOWA Mentorship Review Committee to review items prior to submittal to MPCA. It also helps cover the administrative costs to MOWA.</p>		
<p>Option 1: Current Employee of a Company with a Mentor</p>		
<p>There will be no additional stipend for the Mentor in this version of the program since the Apprentice is a paid employee.</p>		
<p>Option 2: New Professional Seeking Mentor</p>		
<p>This is a new professional that does not have the option of apprenticing under an employer. MOWA will help this person locate a Mentor. The Mentor will be listed as a sub-contractor under the apprentice's business license. The apprentice will submit a 1099 to the sub-contractor at the end of the tax year.</p>		
<p>Paid by Apprentice to Mentor</p>		
Each Site Visit by Mentor to Apprentice's site to evaluate workmanship, skills, and competencies of the program	\$900	
If travel is outside of 45 miles, Apprentice will cover mileage at the IRS mileage rate.		
If the Mentor has to review plans outside of the site visit	\$100/hour	
If the Mentor has to complete permitting for site	\$100/hour	

Summary of Program

The goal of the MOWA Mentorship Program is to train new professionals to become responsible SSTS Professionals for our industry. MOWA recognizes this takes a monumental effort by both mentors, apprentices, and volunteers of the program. This program will be evaluated by the MOWA Mentorship

Committee as it progresses and changes may be applied. Feedback will be appreciated by all participating parties as the program begins.

Training helps build responsible professionals that can better serve the public, public health and the environment.

Minnesota Onsite Wastewater Association (MOWA)

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Appendix I

SSTS Installer Task Analysis (wq-wwists12-16-a; 5/9/17)

<https://www.pca.state.mn.us/business-with-us/ssts-individual-certification>

Item No.	Item No.	Description	Date of Completion
I.		Participate in certification training	
	I.A	Complete required training	
	I.B	Pass certification exam	
	I.C	Apply for certification	
	I.D	Complete experience with mentor and meet observation requirements	
	I.D.1	Conduct work duties in compliance with restrictions of apprentice or employee designation	
	I.E	Complete continuing education	
II.		Obtain Installer business license	
	II.A. 1	Employ a Designated Certified Individual	
	II.A.2	Maintain appropriate surety bond and insurance coverage	
	II.A.3	Pay business license fee	
	II.B.	Renew business license	
	II.C.	Submit tank installation form and fees to Minnesota Pollution Control Agency (MPCA)	
III.		Communicate with clients, colleagues and authorities	
	III.A	Contact local unit of government	
	III.A.1	Participate in and comply with local SSTS construction permit program and conditions	
	III.A.2	Comply with local requirements for SSTS repair and rejuvenation	
	III.A.3	Call for construction inspections in accordance with local program requirements.	
	III.B	Identify additional administrative authorities and comply with all applicable requirements. (e.g. Commercial Driver's License and Minnesota Department of Transportation, Department of Labor and Industry (DLI) plumbing program, DLI electrical program, Minnesota Department of Health well program, MPCA Construction Stormwater, Occupational Safety and Health Administration (OSHA), U.S. Environmental Protection Agency Class V Underground Injection Control Program, etc.)	
	III.C	Coordinate with system owner throughout project duration	
	III.D	Clearly define contractor deliverables and client obligations when preparing project bid based on design specifications and entering into contractual agreement with client	
	III.E	Access resources to identify and reconcile conflicts and concerns	
	III.E.1	Coordinate with Designer and local program official to request design change, change orders, clarification or further instructions	

	III.E.2	Coordinate with subcontractors (plumbing, electrical, general contractor, etc. to ensure project needs are met	
	III.E.3	Contact MPCA representative	
	III.E.4	Contact Minnesota Onsite Wastewater Association representative	
	III.E.5	Contact SSTS Advisory Committee representative	
	III.E.6	Contact University of Minnesota Onsite Sewage Treatment Program	
	III.E.7	Contact proprietary product representative	
	III.F	Provide proper training and required supervision of work crew	
	III.F.1	Ensure all work is in accordance with approved design report and permit	
	III.F.2	Provide mentorship and observation services according to state rule and best practices	
IV.		Plan and prepare of installation	
	IV.A	Read construction permit and identify and difference from design report	
	IV.B	Contact Gopher State One-Call, obtain ticket number, and ensure all utilities have been located and cleared	
	IV.C	Ensure private utilities are located or cleared by property owner	
	IV.D.	Ensure site clearing is completed without impairing future treatment abilities or hydraulic performance of the site, according to contract	
	IV.E	Source registered or approved materials according to design specifications	
	IV.E.1	Source tanks, risers, effluent screens, maintenance hole covers and sealants	
	IV.E.2	Source pumps, alarms, control panel(s) and floats or sensors	
	IV.E.3	Source piping for building sewer and supply pipe	
	IV.E.4	Source soil treatment area supplies; distribution of product or media, clean sand, geotextile material, inspection pipes, clean-outs, caps, drop boxes, fittings primer, and glue	
	IV.E.5	Source vegetative cover, erosion control and freeze protection	
	IV.E.6	Source registered treatment products	
	IV.F	Clarify electrical needs for project and identify parties responsible for installation	
	IV.G	Confirm primary and secondary sites are protected from disturbance, compaction or damage	
	IV.H	Plan for material and equipment staging, delivery, and storage	
	IV.I	Confirm site matches design report and construction permit	
	IV.I.1	Confirm designer has laid out and staked system on site	
	IV.I.2	Identify benchmark and verify component elevations	
	IV.I.3	Confirm setbacks will be met	
	IV.I.4	Confirm system location will provide access for system management	
	IV.I.5	Confirm usability of components proposed for reuse in design report	

	IV.I.6	Encourage in-filed soils verification prior to breaking ground	
	IV.J	Check plastic limit of soils and confirm constructability of site before installation	
V.		Install building sewer and collection system piping according to approved design	
	V.A	Excavate trench for piping at depths defined in design	
	V.B	Install building sewer in accordance with American Society for Testing Materials (ASTM) 2321 (gravity) or ASTM 2774 (pressure), with bedding and support to prevent sagging, settling, and freezing	
	V.C	Install building sewer connected to septic system in accordance with Plumbing Program requirements	
	V.D	Install piping using direction drilling method	
	V.E.	Install high density polyethylene piping using proper equipment, materials, and methods in accordance with ASTM 2774	
	V.F	Install pipe lining properly	
	V.G	Install piping to comply with backflow prevention and other floodplain requirements	
	V.H	Install tracer wire. Especially when piping travels long distances or changes direction	
	V.I.	Repair and maintain building sewer and collection system piping	
VI.		Install registered sewage tanks according to approved design and manufacturer requirements	
	VI.A	Excavate hole for sewage tank(s) at depth defined in design	
	VI.B	Receive tank delivery, verify tank information, and attach written tank documentation to as-built	
	VI.C	Install sewage tanks level using proper bedding	
	VI.D	Establish watertight seal at all connections, meeting requirements of ASTM C923	
	VI.E	Establish watertight seal at all joints, meeting requirements of ASTM C990	
	VI.F	Install method to protect against tank flotation if specified in design	
	VI.G	Install properly rated pumps to be reachable, removable, and replaceable	
	VI.H	Install discharge assembly configured to provide proper flow and prevent freezing and siphoning	
	VI.I	Install flow measurement device	
	VI.J	Install siphon dosing system	
	VI.K	Install demand dosing controls to design, permit and manufacturer specifications	
	VI.L	Install timed-dosing controls to design, permit and manufacturer specifications	
	VI.M	Coordinate installation of buried wires with electrician	
	VI.N	Verify control panel is operational and alarms are properly assembled on a separate circuit	
	VI.O	Install baffles and effluent screen	

	VI.P	Install privy	
	VI.Q	Install holding tank system	
	VI.R	Conduct In-field watertightness testing for all holding tanks and where otherwise required	
	VI.S	Install watertight risers and secure maintenance hole covers	
	VI.T	Insulate tank and covers as required	
	VI.U	Backfill tank hole excavation and provide acceptable cover depth	
	VI.V	Repair, reuse, and maintain sewage tank components	
	VI.W	Abandon sewage tanks no longer in use	
VII		Install distribution system according to approved design	
	VII.A	Excavate trench for supply pipe and distribution system network	
	VII.B	Install supply pipe in accordance with ASTM 2321 (gravity) or ASTM 2774 (pressure), with bedding and support to prevent sagging, settling, and freezing	
	VII.C	Install manifold and confirm proper drainback	
	VII.D	Construct distribution network laterals – cut pipe, drill holes, clear burrs, glue joints, and clear of construction debris	
	VII.E.	Install serial gravity distribution network	
	VII.F	Install parallel gravity distribution network only if serial distribution is not possible	
	VII.G	Install level pressure distribution network	
	VII.H	Install non-level pressure distribution network	
	VII.I	Install cleanouts for service access to distribution laterals	
	VII.J	Install tracer line, especially when piping travels long distances or changes direction	
	VII.K	Install flow-splitting/zoned distribution system	
	VII.L	Repair, reuse, and maintain distribution system components	
VIII		Install soil dispersal system according to approved design	
	VIII.A	Install below-grade soil dispersal systems	
	VIII.A.1	Excavate trenches along contour at depth and location defined in design	
	VIII.A.2	Excavate seepage bed along contour at depth and location as defined in design	
	VIII.A.3	Place public domain or registered distribution media in accordance with design specifications and recommended standards or product registration guidance	
	VIII.B	Install above-grade soil dispersal systems	
	VIII.B.1	Cut vegetation in excess of two inches in length and remove organic debris	
	VIII.B.2	Roughen absorption area surface properly along the contour	
	VIII.B.3	Place clean sand across prepared mound absorption area to depth specified in design	
	VIII.B.4	Construct level distribution media bed out of public domain or registered distribution media in accordance with design specifications and recommended standards or product registration guidance	

	VIII.C	Use appropriate construction equipment and protect soil dispersal area and reserve area from compaction	
	VIII.D	Install anchored inspection pipes	
	VIII.E	Place geotextile fabric between distribution media and cover soil	
	VIII.F	Backfill and place acceptable soil cover materials and depth	
	VIII.G	Repair, reuse, extend or alter soil treatment area in accordance with design report and construction permit	
	VIII.H	Abandon soil dispersal system no longer in use	
	VIII.I	Install water table monitoring device	
IX		Install Type IV treatment products and Type V system components according to approved design and manufacturer requirements	
	IX.A	Install advanced treatment technology in accordance with Recommended Standards and Guidance or product registration requirements	
	IX.B	Install aerobic treatment unit blower and vent	
	IX.B.1	Install fixed film aerobic treatment unit	
	IX.B.2	Install suspended growth aerobic treatment unit	
	IX.C	Install single pass media filter	
	IX.D	Install recirculating media filter	
	IX.E	Install Type V system components in accordance with engineering specifications	
	IX.E.1	Install constructed wetland	
	IX.E.2	Install drip distribution	
	IX.F	Install custom control panels	
	IX.G	Install chlorine disinfection systems	
	IX.H	Install UV disinfection system	
	IX.I	Install access for sampling or monitoring	
	IX.J	Repair, reuse, maintain advanced treatment products	
	IX.K	Abandon advanced treatment products	
X		Finish system and complete project	
	X.A	Ensure that vegetation establishment activities begin immediately after placement of topsoil	
	X.B	Prepare, sign, and submit as-built drawing and required forms to owner and local SSTS program within 30 days	
	X.C	Maintain quality control and quality assurance records for period of at least five years	
	X.D	Provide system owners with information concerning system operation and maintenance	
	X.E	Conduct system start-up and operational visit to assure operation – e.g. calibrate pumps, verify floats, check for settling	
	X.F	Submit abandonment form to Local Government Unit	

MOWA Mentorship Program Code of Ethics & Expectations for Apprentice

The MOWA Mentorship Program is a voluntary program that enables individuals to gain work experience and certification for becoming an SSTS Professional. Below is the set of expectations and code of ethics that each participant agrees to prior to the start of the program.

1. I agree to put forth my best effort and attitude to learn how to become a better SSTS professional.
2. I will submit my documentation of completed projects in a timely manner for the mentor to review and can utilize the MOWA Mentorship Review Committee as an option to review my projects prior to submitting materials to MPCA.
3. I will conduct myself in a professional manner and participate in the training.
4. I will be respectful to my Mentor.
5. If there are any conflicts, I will attempt to reason with my Mentor. If this does not result in a solution, I will reach out to a member of the MOWA Mentorship Committee for guidance on the issue.
6. I will complete all tasks to fulfill the mentorship requirements; this includes the MOWA requirements in addition to the SSTS Installer Task Analysis.
7. I will do my best to attend the MOWA Winter Convention to network and learn more about our industry.
8. I will maintain my current membership with MOWA.
9. At the conclusion of the program, I will complete the feedback survey for MOWA to review my experience with the program.

MOWA Mentorship Program Code of Ethics & Expectations for Mentor

The MOWA Mentorship Program is a voluntary program that enables individuals to gain work experience and certification for becoming an SSTS Professional. Below is the set of expectations and code of ethics that each participant agrees to prior to the start of the program.

1. I agree to put forth my best effort and attitude to mentor this new professional become a better SSTS Installer.
2. I will submit my documentation of completed projects in a timely manner for the apprentice to review and can utilize the MOWA Mentorship Review Committee as an option to review my projects prior to submitting materials to MPCA.
3. I will conduct myself in a professional manner and participate in supervising all projects by the apprentice.
4. I will be respectful to my Apprentice.
5. If there are any conflicts, I will attempt to reason with my Apprentice. If this does not result in a solution, I will reach out to a member of the MOWA Mentorship Committee for guidance on the issue.
6. I will aid the Apprentice in completing all tasks to fulfill the mentorship requirements; this includes the MOWA requirements in addition to the SSTS Installer Task Analysis.
7. I will do my best to attend the MOWA Winter Convention to network and learn more about our industry.
8. I will maintain my current membership with MOWA.