

SSTS Advisory Committee Agenda

March 13, 2014

Watab Town Hall - Sauk Rapids

- 9:00 – 9:30 Coffee, treats and conversation
- 9:30 – 9:45 Introductions, agenda review and vacancies on Committees. Scheduling of 2014 meetings, Sara Heger & Gretchen Sabel
- 9:40 – 10:00 Legislative initiatives, Gretchen Sabel
Goal -- AC informed of ongoing activity and provides input
1. Tank fee changes
 2. Ticketing authority for SSTS violations
 3. Building sewer licensing issues
- 10:00 – 10:15 UMN Update: Intermediate/Advanced Design, Online Training Survey, Research, etc., Sara Heger
- 10:40 – 12:00 Programing and Policy discussions
Goal -- AC informed of ongoing activity and provides input and approval
1. Plumbing code changes, Mark Wespetal and Cathy Tran
 2. MPCA unsewered initiative - report on Continuous Improvement project, Jim Ziegler
 3. Inspection manual launch, Mark Wespetal
 4. Intermediate certifications and high strength waste, Jim Ziegler
 5. Applicability of MPCA solid waste and National Fire Project Association standards to SSTS systems, MPCA staff and MnDOT
- 12:00 – 12:45 Buffet lunch, everyone pays their own
- 12:45 – 2:00 PM MPCA short updates
Goal -- AC informed of ongoing activity and provides input
1. Rule amendment done, website updated, Barb McCarthy
 2. Ordinance adoption update, Gretchen Sabel and Aaron, Jensen
 3. Annual report preliminary findings, Aaron Jensen
 4. Registered products update - Norweco, Infiltrator, Waterloo..., Barb McCarthy
 5. MPCA staff changes, Jim Ziegler
 6. Licensing and certification update, Nick Haig
- 2:00 – 2:30 Open forum for discussion – members invited to share information of mutual interest.
Goal – provide AC members the opportunity to discuss other issues of interest.

2014 Meeting dates: March 13, June 12, September 11, December 11
Committee Website: <http://septic.umn.edu/events/sstsac/>

Meeting was held at Watab Town Hall; 9am to 3pm

Attendees: Pete Otterness, Aaron Jensen, Mark Wespetal, Barb McCarthy, Sara Heger, Jim Larson, Neile Reider, Ron Thompson, Eric Van Dyken, Nick Haig, Chris LeClair, Terry Neff, Cathy Tran, Cindy Tiemann, Marilee De Groot, Gretchen Sabel, Ron Jaspersen, Troy Johnson

Introductions

Cindy Tiemann is a new member. She's a certified Maintainer from Royalton, with Fiedler Your Pumping Specialists Inc. Welcome Cindy! Cindy is in the SSTS Professional at-Large position.

Discussion of meeting times

Gretchen noted that attendance is low in the summer months and suggested that the group might want to consider meeting just three times a year. Or maybe have two meetings and then have one virtually. The group generally felt that three times a year, not in the summer, would be good. The idea of virtual meetings was not well received. Sara offered that she would work with MPCA to come up with a proposed meeting schedule for the remainder of 2014.

Legislative initiatives

Gretchen explained tank fee changes proposed. This is HF2345 and can be read here:

<http://www.house.leg.state.mn.us/bills/billnum.asp?billnumber=hf2543> . Tank fee changes are found at line 8.1; citation authority at lines 13.28 and 15.33. Question - would homeowners be invoiced from the LGU reports? Answer - yes, but they would probably not be invoiced but just sent a letter to pay their fee. Question re: the maximum of penalty, would it go to something more if the penalty was more than the maximum? APO would be used for larger penalties. Question – could installers still send in tank fee money throughout the year and the answer would be no and we would need to educate the installers on this new process.

Comment: the ticketing authority language is vague. Answer – statutes don't usually cite rules so language has to be used that mimic the rule language. The language that was questioned reflects Minnesota Rule chapter 7060.0600 sub 3: <https://www.revisor.mn.gov/rules/?id=7060.0600> .

Comment: the tank language would be clearer if it said it didn't apply to homeowners. He also asked about the obtaining permit part of the language. Question - what can an LGU ask a permit for? Answer - it has to be defined in ordinance what needs to be permitted. Question – is the language at 12.5 in this bill the part that says that engineers are required for MSTs when public funding is involved? No, this comes from rule. Comment – advanced designers should be allowed to work on MSTs that are receiving state funds. Discussion – engineers are needed for projects that cut through streets, etc. More information was sought from other MPCA staff. Via email, MPCA staff back in St. Paul answered that a PE is not required for self-funded projects that are locally permitted unless the LGU requires it. It is some of the funding programs that require a PE -

- A. Small Community Grant Program – stat 446A.075 **doesn't require a PE** however some skill sets of consulting firms are desirable; must follow Stat 115.55.
- B. Clean Water Revolving Fund – MN R 7077 **requires a PE** (has not been used at all or very little for MSTs)
- C. Point Source Implementation Grant – Stat. 446A.073 **requires a PE**

Other legislative issues

None noted. Question – is anyone doing anything for a pumper exemption from road restrictions? Yes, Lori Ende from MOWA got this rolling; it is MPCA’s understanding that the Governor’s office is drafting this now. Pete stated that there are widespread problems with freezing in south-central MN now so this exemption is needed.

Building sewer jurisdictional overlap

Nick gave some info on the group that’s working on this now. This workgroup is convening to identify a mutually beneficial solution to the jurisdictional overlap between SSTS and Plumbing programs.

1. Simplified administration of SSTS business license and DLI pipelayer registration application processing, review, approval, document retention, and information sharing processes.
2. Explore options with affected parties to overcome licensure limitations for septic professionals that conduct building sewer work.

DLI has emphasized the importance of avoiding any legislative changes to its statutes, but recognizes the possibility of legislative or administrative rule changes that may be necessary on MPCA’s side. MPCA accepts this condition and does not see this as an obstacle to positive change. The workgroup includes Steve Giddings (MPCA Section Manager), Charlie Thompson (MPCA Certification Supervisor) Nick Haig (MPCA Certification Staff), Jane Seaver (MPCA Certification Staff), Jean Coleman (MPCA Legal), Charlie Durenberger (DLI Licensing Asst. Division Director), Jim Lungstrom (DLI Plumbing Program Asst. Division Director), Cathy Tran (DLI Plumbing Program Supervisor), Jeff Lebowski (DLI Legal). Additional expertise and affected party representation will be brought in, as needed.

DLI and MPCA would like to identify a mutually acceptable solution before collecting feedback from the affected parties (MOWA, Plumbing Board, AELSLAGID Board, Mechanical Contractors, Pipetrades, MUCA, MN ABC, LECET) in 2014. Any necessary legislative or administrative rule changes would be pursued in 2015. Implementation would take place upon the current bond cycle expiration on 12/31/2015.

Cathy Tran said that folks at DLI are generally supportive of resolving this. Question – haven’t we been working on this a year? Why isn’t it resolved? Answer – it has taken some learning from both agencies to learn each other’s issues; now we are poised to get it done. It is a complicated issue. Question – isn’t MOWA working on this? Answer – MOWA has backed off to allow space for the agencies to work it out. This issue is like an onion; it has many layers and you have to peel them back one at a time.

Question – is there something that the SSTS AC can do to help move this along? Discussion of options – it could be as simple as altering the definition of plumbing. Other ideas were discussed. Ron talked about the problems that many have had with the joint bond; some have had their licenses cancelled when the DLI didn’t inform MPCA of the bonds they have processed.

Plumbing Code update

DLI administers plumbing code but the Plumbing Board is the actual agency charged with developing the code. Cathy told the group that the PB put out a request for comments on a proposed rulemaking about a year ago; this process is now coming to an end. A PB meeting will be held in April to identify the changes that need to be done. Cathy hopes that there will be a draft coming out soon. Question – are there any standards in the UPC for reuse? Cathy – the board chose not to include this. Ron Thompson noted that there is an interagency re-use group that's working on this; Cathy and Ron are both on it. Gene Soderbeck and Mark Wespetal have attended some meetings.

Ron T noted that the plumbing code will be gone soon. Cathy said that there are options; one would be to just use the plumbing code we have. Only a few states have retained their individual codes. Ron noted that when the rules are proposed, there will be a public hearing and folks should participate if they are interested.

U of M Updates

Sara provided an update on what's going on at the U. She talked about adult care facilities – get this from the newsletter. Group homes use way more water and way more cleaning chemicals. Report is on website here: <http://www.septic.umn.edu/research/index.htm> .

She also talked about work that is going on with SSTS at MNDOT facilities – they have inspected them all and are now developing a priority list. Neile shared some data– when new, these systems with designed with a design flow of 5 gallons per car stopping. Recent data shows that during the week the actual flow is .8 gallons per car and on weekends it doubles to 1.6 gpc. Neile thinks this is because there are two people in the car on weekends but only one during the week. Question – what is the typical waste strength? 200-400 BOD, based on grab samples. Neile said that he has some other data that shows it a little lower. Question – are you finding sulfate problems or any tank problems? No – the tanks are 20-30 years old but were cast in place.

The project to develop a community system owner's guide and then breaking it is moving into testing now. Goal is to get it done in a year... this is the USDA project. Their testing has to be done nationally so the product has some things that don't look 'right' to people accustomed to Minnesota terminology and practices.

Inspection Manual

Gretchen started off by providing some context. She said that a draft manual was developed in the early 90's but not completed. The U teaches inspection practices; these have been vetted with MPCA and there is good agreement. The U's manual covers inspection in the various areas of the manual but there is not a specific process laid out. MPCA has kept a record of questions we've been asked about inspections and our answers but this is not readily available to people outside of MPCA. At this point, there is a diversity of practices in place for conducting an SSTS inspection. Without a recommended standard in place, the diversity grows and people become entrenched in doing things the way they have always done them. This leads to disputes and further inconsistencies. To address these problems, MPCA proposes to work with the SSTS Advisory Committee and other interested parties to develop an inspection manual.

Mark Wespetal has spent time accumulating information from MPCA's early draft inspection manual, the U's inspection training, the agency's task analysis, current inspection form and the MPCA's answers to questions on inspection into a single document. Today he is bringing some questions to the AC that reflect areas where the sources did not agree or the guidance did not clearly address current situations. After this meeting, he will include comments in his draft and put out the first draft for initial review.

Gretchen then proposed steps to the review and refine process:

The initial review will be done by those to volunteer to work on this. So far, Troy Johnson and Tom Esperson are the two have volunteered for this review; more are welcome but this is meant to be a quick review for completeness, not a forum for discussion of big issues. It is anticipated that work here would be completed via email and phone, no meetings. Expected completion date – April 30.

A revised draft will be developed and shared with the SSTS AC and others in May, with discussion planned for the next AC meeting, currently set for June. At this meeting, a plan for proceeding will be developed. Questions to answer:

- Is the manual ready to go out for wider public comment?
- Is wider public comment necessary?
- Are there areas that need more work? If so, should committees be set up to discuss these areas and come back with recommendations?

It would be good to find time to talk about this in the field, at a special meeting or maybe at the MOWA summer seminar. This way, people can try out different techniques and discuss the benefit of different approaches – example: how different of conclusions do you reach using a test pit vs borings?

The goal is to incorporate any changes that result from the broader discussions and finalize the manual in time for the winter training season.

Mark added - pretreatment systems are a whole new area – how is this done? How do you review data submitted for an operating permit? Question – didn't we set up a subcommittee to discuss this? Answer – yes, this group met and advised on the draft that is reflected now. Who was on this group? Tom and Troy. Sara and Chris asked to be part of the next level of review. Question – what role does this manual serve? Will it be mandatory like Design Guidance? Answer - No, not at this time. But changes that are made to the inspection form will be required to be completed, so that part will be mandatory. Comment – some of these will require rule changes to be mandatory.

Mark ran through the questions he prepared for the group:

Discussion Question 1– What needs to be done to determine compliance for a pre-2008, large SSTS with just septic tanks with a soil dispersal system (no pretreatment device). Is the inspection method the same as for a single family home? Should other things be checked (mounding and nitrogen)? Should these other things be required to be checked?

Discussion 1 – Maybe more thorough investigation such as a check D-boxes, look at water meter readings.

Discussion Question 2 – How do you hand compliance for a pretreatment device?

Discussion 2 - After discussion the following appeared to be the consensus:

- If system has an operating permit, device must meet the operating permit standard to be in compliance.
- If the system does not have an operating permit, any performance level was assumed during design, is the compliance standard.
- If no operating permit or assumed design standard exists, and the system has a reduced vertical separation distance or has gravity distribution (or both), it is recommended that the system be sampled to determine the concentration of fecal organisms. If pressure distribution has not been employed treatment may be compromised which could be a discretionary compliance trigger by the inspector. (NOTE: If dictated or described, then it is no longer discretionary, others thought that help should be given on using the discretionary powers, seemed liked most favored the former)
- If no operating permit or assumed standard exists, and the system has the required vertical separation distance and employs pressure distribution, compliance is determined if the device appears to be functioning properly. (NOTE: this is a maintenance issue, not a compliance issue, we don't fail a system if the septic tank is not pumped)

Other discussion issues on this topic:

- How to inspect a pretreatment device that's 'turned off' on an un-occupied dwelling?
- Use registered treatment requirements as a compliance standard for non-registered products
- Should non-registered treatment devices trip the development of an operating permit vs. a compliance determination?

Question – how many LGU's actually review and 'accept' COC's for existing system compliance inspections? Pete and Marilee nodded yes.

Discussion Question 3 – How do you handle compliance on a pretreatment device with compliance data issues?

Discussion – There seemed to be agreement with the following:

- The LGU will make the determination of whether the system is currently considered to be in compliance if performance/compliance has been inconsistent, or if the required number of samplings has not been conducted.

The remaining items from Mark's handout will be included in draft manual when complete and can be discussed in the review of that draft.

Discussion of Preliminary Annual Report findings

Two documents were provided to the group. The first one was a short draft summary for the 2013 annual report. This summary compared residential systems of all types to the 2012 data. It also compared the residential and other establishment permits issued in 2012 and 2013. The second handout was a summary of the new annual report questions that were asked in 2013. There were four new questions that asked how many compliance inspections were done on existing systems and the number of noncompliant properties that were mitigated by connection to central sewer, abandonment or removal of a dwelling, and government buyout. One encouraging statistic is that there were over 12,000 compliance inspections reported by LGU's in 2013. The 2013 annual report data is currently being processed and the new report work will begin soon.

Discussion of Intermediate and HSW

This was discussed many times and still not fully resolved. At the TAP meeting in December of 2011, that group felt that the Intermediate would be limited to residential strength waste only. Mark and Nick worked on developing the Intermediate classification; it was developed based on this understanding. A different position was taken at the November 2013 SIETF meeting. This group felt that since high strength waste is taught in the Intermediate, that it should be included. Sara stated that the training does not address how to design for HSW; they cover only related elements.

Terry looked at the data from the Annual Report that was distributed earlier, and noted that there were 93 replacement Other Establishments and 229 new Other Establishments – this means that more than 300 systems were probably HSW but only 68 type IVs were reported. He said this shows that LGUs do not understand HSW. Sara said this shows the need for education of LGUs– get more education to LGUs to understand what they are missing so they enforce.) Examples were discussed. Ron J – reiterated the need for a healthy market for Advanced Certifications, these people are trying to build businesses and don't need Intermediates nipping away at their market.

Question – can a Basic design on organic loading rates? Answer – this is one of the questions we need to answer. Comment - Pete talked about how getting Advanced cert has helped him to do a better job with all systems. He agrees that there are a lot of HSW that's not being properly addressed – these will be shorter-life time systems that we all pay for later. Sara noted that it's hard to keep teaching to a moving target; the U would prefer to see no change in how this works. Ron J indicated his support for the 'no change' approach – preserve market for Advanced. Neile said that if MPCA changes this, MNDOT will have a lot of issues.

National Fire Protection Agency standards and SSTS

MNDOT is assumes these standards apply to SSTS over five homes (and similar flows) and follow it. This adds significant costs – electrical alone cost \$40K more. Who is it that administers the NFPA? Nobody knew. Discussion. How to resolve? LSTS have to meet NFPA20. This is not an enforceable standard. Ron T – when it is enforced (MDH experience), it's under the electrical code and enforced by electrical inspectors.

Crushed septic tanks as solid waste

Pete said that Brian Green told him that since our rules tell you it's OK to crush and leave in place.

Discussion. Neile was recommended to talk with Heidi Kroening, Solid Waste Supervisor, for answers to these questions.

Ordinance Adoption

Gretchen shared a preliminary look at ordinance adoption; so far 62 counties are done with this and 24 are still in progress. There is still a lot of change here; summary statistics will be developed once the counties' work is done.

Registered Products

Barb provided an update regarding the Technical Advisory Panel activities. The items presented were 1) product renewals, 2) sewage tank registration, 3) distribution media, 4) treatment products, 5) Operating permit template for septage storage, and manufacturer's manuals. Barb talked about website updates. Barb is making sure that everything's up to date for the start of the construction season.

Licensing and Certification Update**1. Need-to-Know process for Basic Designers and Basic Inspectors**

The job analysis process is the MPCA's way of periodically aligning the tasks of SSTS professionals with the curriculum priorities and certification exam competencies. The first step is a stakeholder process to identify the activities or job tasks of each specialty area. This Task Analysis is the basis for a validation survey that is implemented to a random sample of SSTS professionals to weigh the frequency of task completion over the course of one's SSTS design and/or inspection work and the importance of the correct completion of each task in the design and/or inspection of an effective wastewater treatment solution. The survey data is used to write examinations and inform course instructors.

The Basic Design and Basic Inspector Steering team met four times between September and December of 2013. Both Task Analysis documents have been published to the MPCA's SSTS Certification and Licensing webpage. The Basic Designer validation survey has been completed, and the Basic Inspector survey will be implemented in the next month. The MPCA is accepting both Design and Inspection exam questions and will be rewriting and piloting both exams in the coming year. . Question – what are you going to do to improve pass rates for advanced and service provider? Answer – these were made to raise the bar. The test must demonstrate competence, and there is not a target for so many to pass. Tutoring will help. Nick shared a number of graphics on exam statistics which are appended at the end of these notes.

2. Basic Design validation survey results

The Basic Design survey closed on February 9, 2014 and MPCA has generated a criticality score for each task. A criticality score is a combination of the importance and frequency rankings we ask for in our validation surveys: Criticality = 3 x Mean Importance + Mean Frequency.

- 550 (of about 1100) SSTS designers were randomly selected to complete the survey.

- There were 137 complete responses.
- About 96 (91-98) individuals ranked each task.
- 39 respondents indicated they don't do design work and were routed out of the survey.

Respondents ranked the frequency with which they complete each task and the importance of completing each task correctly. MPCA uses this metric as a basis for populating the certification exams. This doesn't mean we toss out the tasks with the lowest criticality scores, but it is true that tasks with lower criticality scores are less likely to appear in exams that don't have questions about each task and are less likely to appear multiple times in exams with multiple questions about each task.

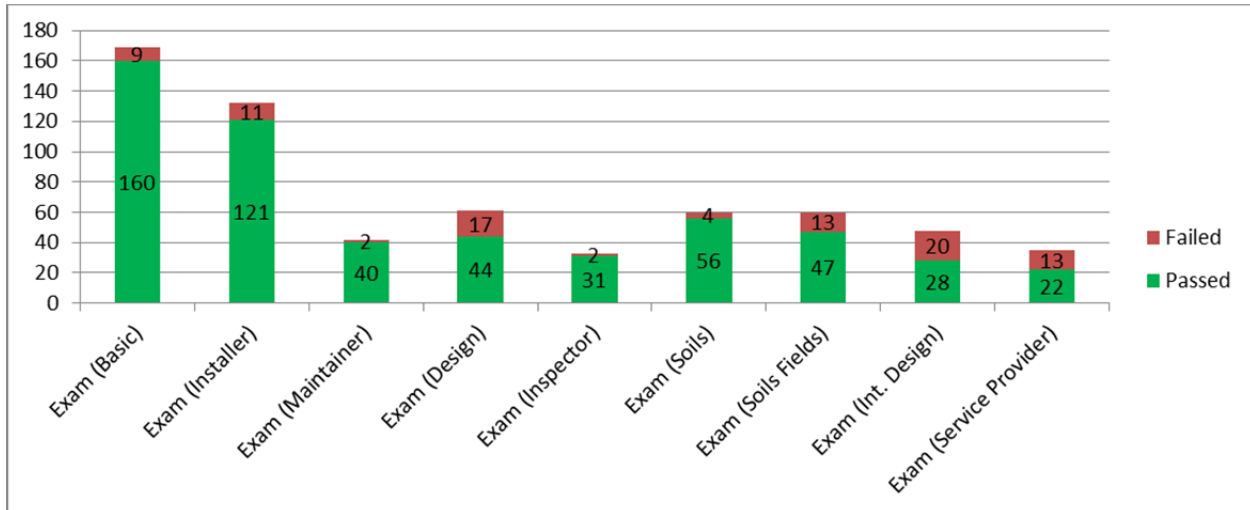
An additional benefit of generating this data is the feedback loop between the respondents and course developers/instructors. This data provides a glimpse of how responding SSTS Designers prioritize the tasks defined by the Need-To-Know steering committee.

The data isn't perfect, and the results are not necessarily generalizable across the entire SSTS design community. Certain tasks do stand out on both ends of the criticality spectrum and do reveal differences among tasks in terms of their importance and frequency. I don't think the uncertainty of the data means we should dismiss this information or what it suggests in regards to how and what information we present in the SSTS Certification program.

Meeting adjourned at 3pm. The date for the next meeting has not been set. Editor's Note: **The next meeting will be on June 11 at Watab Town Hall.**

SSTS Certification Exam Statistics

Figure 1: 2013 SSTS Certification Exams Pass/Fail Count by Specialty Area



- 640 Exams in Calendar Year 2013
- 86% Pass rate

Figure 2: 2009 - 2013 SSTS Certification Exams Pass/Fail Percent by Specialty Area

Specialty Area Exam	Training Year	Passed
Introduction to SSTS	2009	91.81%
	2010	87.90%
	2011	94.37%
	2012	92.44%
	2013	94.67%
Intro Total		92.22%
Installing SSTS	2009	79.84%
	2010	80.95%
	2011	89.58%
	2012	90.79%
	2013	91.67%
Install Total		86.25%
Maintaining SSTS	2009	84.78%
	2010	98.00%
	2011	100.00%
	2012	93.94%
	2013	95.24%
Maintain Total		94.47%
Service Provider	2009	74.00%
	2010	80.00%
	2011	72.73%
	2012	57.45%
	2013	62.86%
SP Total		70.64%

Basic Design	2009	80.00%
	2010	74.63%
	2011	76.92%
	2012	83.78%
	2013	72.13%
BD Total		76.95%
Basic Inspector	2009	84.62%
	2010	71.43%
	2011	87.50%
	2012	92.31%
	2013	93.94%
BI Total		85.45%
Soils	2009	92.00%
	2010	92.06%
	2011	93.33%
	2012	93.33%
	2013	93.33%
Soils Total		92.67%
Soils Field	2009	58.67%
	2010	74.60%
	2011	77.78%
	2012	83.33%
	2013	78.33%
Soils Field Total		72.53%
Intermediate Design-Inspect	2013	58.33%
ID-I Total		58.33%
Advanced Design-Inspect	2009	59.34%

Figure 3: 1996-2013 SSTS Certification Exams Pass/Fail Count

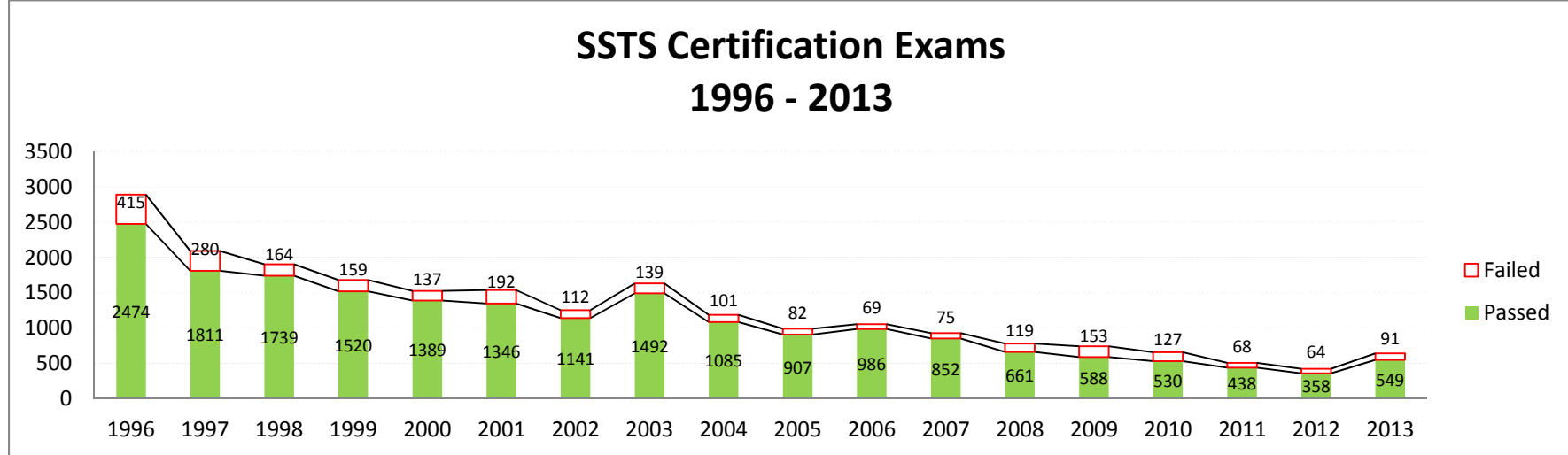
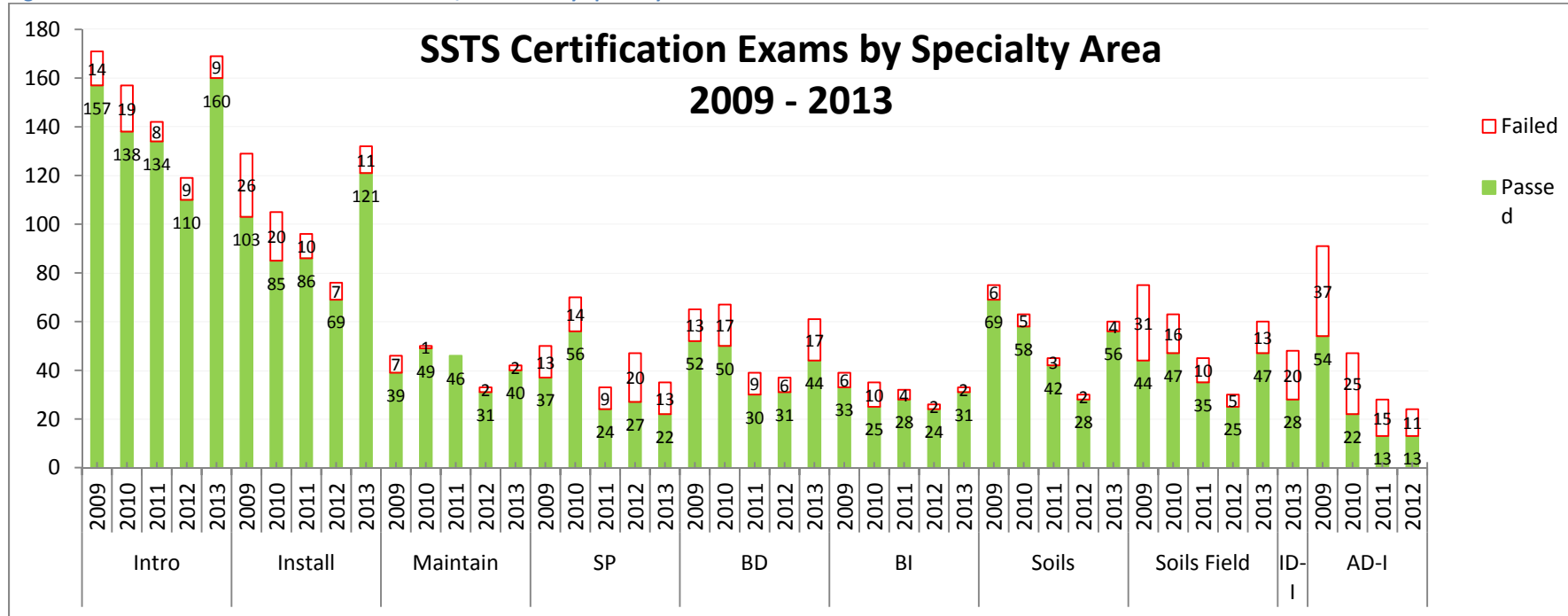


Figure 4: 2009 - 2013 SSTS Certification Exams Pass/Fail Count by Specialty Area





Subsurface Sewage Treatment Systems

Minor Rule Changes

Effective January 20, 2014

Minnesota Rules Chapters 7080 to 7083 have undergone minor rule changes for clarity. The changes were not intended to change any standards or procedures. The changes become effective on **January 20, 2014**. Due to the small number of changes, it is suggested that each user of the rules make handwritten changes to their purple copy of the rules. If confused about the changes you can contact a Minnesota Pollution Control Agency Subsurface Sewage Treatment Systems (SSTS) staff member or check the final revised rule language at: <https://www.revisor.mn.gov/rules/?agency=167>. The changes to the rules are as follows:

7080.2050 DISTRIBUTION OF EFFLUENT.

Subp. 3. Gravity distribution.

D. Distribution boxes must meet the standards in sub items (1) to (6).

(6) When sewage tank effluent is delivered by pump, a baffle wall must be installed in the distribution box or the pump discharge must be directed against a wall, baffle, side of the box on which there is no outlet, or directed against a deflection wall, baffle, or other energy dissipater. The baffle must be secured to the box and extend at least one inch above the crown of the inlet pipe. The discharge rate into the ~~drop~~ drop distribution box must not result in surfacing of sewage from the ~~drop~~ box. Pressure must not build up in the box during pump discharge.

7080.2150 FINAL TREATMENT AND DISPERSAL.

TABLE IX

LOADING RATES FOR DETERMINING BOTTOM ABSORPTION AREA AND ABSORPTION RATIOS USING DETAILED SOIL DESCRIPTIONS *

		Treatment Level C	Treatment Level C	Treatment Level A, A-2, B, B-2	Treatment Level A, A-2, B, B-2
		Absorption area loading rate (gpd/ft ²)	Mound absorption ratio	Absorption area loading rate (gpd/ft ²)	Mound absorption ratio***
USDA soil texture	Soil structure and grade				
Fine sand, very fine sand, loamy fine sand, loamy very fine sand, >35% <35% rock fragments	Single grain, granular, blocky, or prismatic structure; weak grade	0.6	2.0	1.0	1.6

*Only includes soil horizons with <50% rock fragments, with Proposed absorption areas must meet item L and must have very friable and friable consistence, and or loose noncemented sands. Soil horizons with >50% rock fragments must not come in contact with soil dispersal system media.

7080.2450 MAINTENANCE.

Subp. 6. **Septage disposal.** Septage or any waste mixed with septage must be disposed of in accordance with state, federal, ~~or~~ and local requirements for septage and other wastes. If septage is disposed of into a sewage or septage treatment facility, a written agreement must be provided between the accepting facility and the maintenance business.

7081.0020 DEFINITIONS.

Subp. 2. ~~Capillary fringe.~~

~~"Capillary fringe" means the soil layer directly above a saturated layer in which the pore spaces are nearly filled with water as water is drawn upward due to adhesive and cohesive forces.~~

Subp. ~~5~~ **6. Other establishment.** "Other establishment" means any public or private structure other than a dwelling that generates sewage that discharges to an ~~MSTS~~ SSTS.

Subparts 3 through 8 will be renumbered due to the loss of subpart 2.

7081.0150 NECESSITY OF SOIL AND SITE EVALUATIONS.

Soil and site evaluations must be conducted for MSTs design. The evaluations must be conducted according to parts 7081.0160 ~~and to~~ 7081.0200. Evaluations must identify and delineate an initial and replacement soil treatment and dispersal area with appropriate system site boundaries.

7081.0270 FINAL TREATMENT AND DISPERSAL.

Subp. 5. Soil absorption area sizing.

B. If the absorption area receives septic tank or treatment level C effluent as described in ~~item A, subitem (1) part 7083.4030,~~ the absorption area shall be increased by 50 percent of the amount derived in item A, subitem (1), and zoned for dosing and resting.

7081.0280 CONSTRUCTION REQUIREMENTS.

B. The ~~MSTS~~ advanced designer must observe critical periods of system construction. The designer shall prepare a report of observed construction activities and submit the report to the local unit of government prior to final inspection.

7082.0040 REGULATORY ADMINISTRATION RESPONSIBILITY.

Subp. 4. **Required fiscal and physical capacity for local programs.** All local governments that administer SSTS programs must have:

A. adequate personnel to properly conduct SSTS technical and administrative functions. All local governments that administer SSTS programs must have:

(1) at least one certified inspector as described in ~~part 7083.1010, subpart 2~~ 7083.1020, subpart 1, item C, who is employed by the local unit of government or a contracted licensed SSTS inspection business. Multiple local units of government are allowed to contract for services with the same certified inspector; and

7083.1060 CONTINUING EDUCATION.

Subpart 1. **Renewal requirements.**

B. An individual with a maintainer certification must complete 12 hours of continuing education related in general to SSTS or nine hours of continuing education specifically related to SSTS maintenance or land application of septage every three years. ~~A maintainer whose gross annual revenue from pumping systems is \$9,000 or less and whose gross revenue from pumping systems during the year ending May 11, 1994, was at least \$1,000 is not subject to the continuing education requirements.~~

SSTS Licensing and Certification Update

SSTS Advisory Committee Meeting

3/13/2014

Watab Town Hall

Report Contents:

1. Need-to-know process for Basic Designers and Basic Inspectors
2. Basic Design validation survey results
3. 2013 exam statistics
4. MPCA & DLI interagency workgroup

1. Need-to-Know process for Basic Designers and Basic Inspectors

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- 39 respondents indicated they don't do design work and were routed out of the survey.

Respondents ranked the frequency with which they complete each task and the importance of completing each task correctly. We use this metric as a basis for populating the certification exams. This doesn't mean we toss out the tasks with the lowest criticality scores, but it is true that tasks with lower criticality scores are less likely to appear in exams that don't have questions about each task and are less likely to appear multiple times in exams with multiple questions about each task.

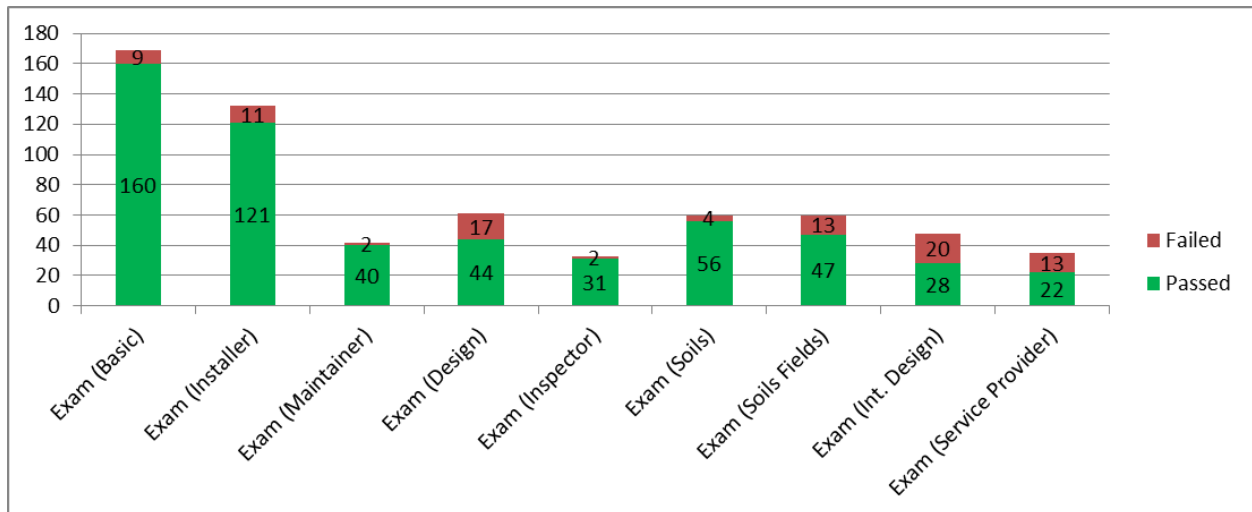
An additional benefit of generating this data is the feedback loop between the respondents and course developers/instructors. This data provides a glimpse of how responding SSTS Designers prioritize the tasks defined by the Need-To-Know steering committee.

The data isn't perfect. While I was pleased with the response we received, you shouldn't assume these results are generalizable across the entire SSTS design community. Certain tasks do stand out on both ends of the criticality spectrum and do reveal differences among tasks in terms of their importance and frequency. I don't think the uncertainty of the data means we should dismiss this information or what it suggests in regards to how and what information we present in the SSTS Certification program.

Your feedback is always appreciated. Contact Nick Haig, nick.haig@state.mn.us if you would like a copy of the survey, response data, criticality scores, or have any questions about this effort.

3. SSTS Certification Exam Statistics

Figure 1: 2013 SSTS Certification Exams Pass/Fail Count by Specialty Area



- 640 Exams in Calendar Year 2013
- 86% Pass rate

Figure 2: 1996-2013 SSTS Certification Exams Pass/Fail Count

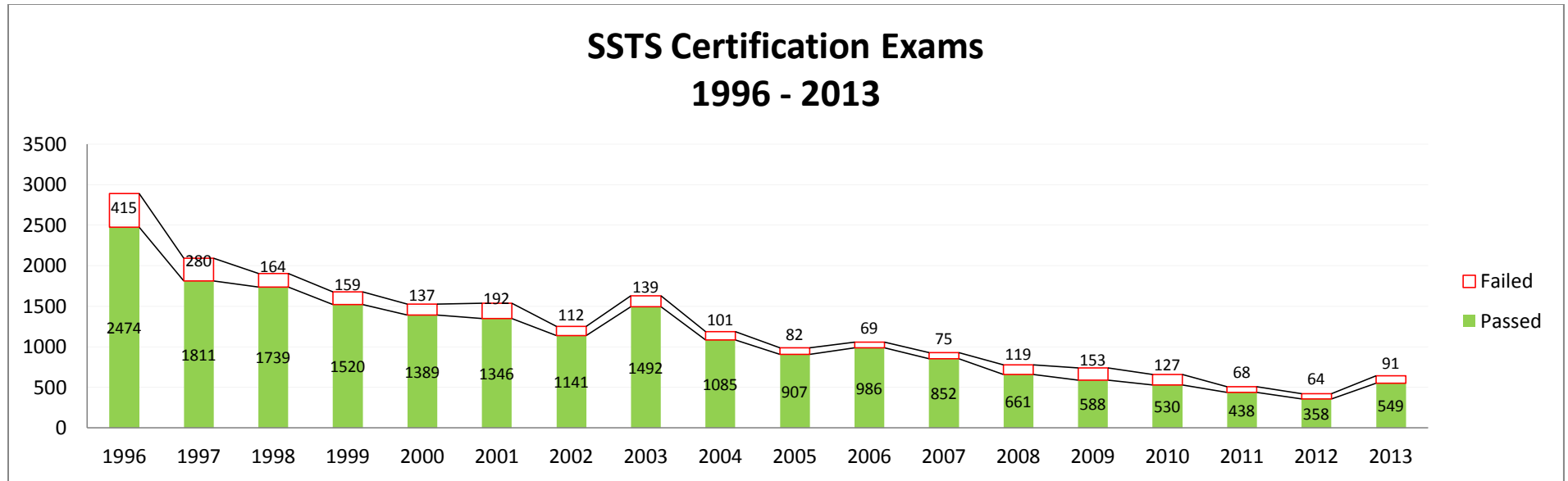


Figure 3: 2009 - 2013 SSTS Certification Exams Pass/Fail Count by Specialty Area

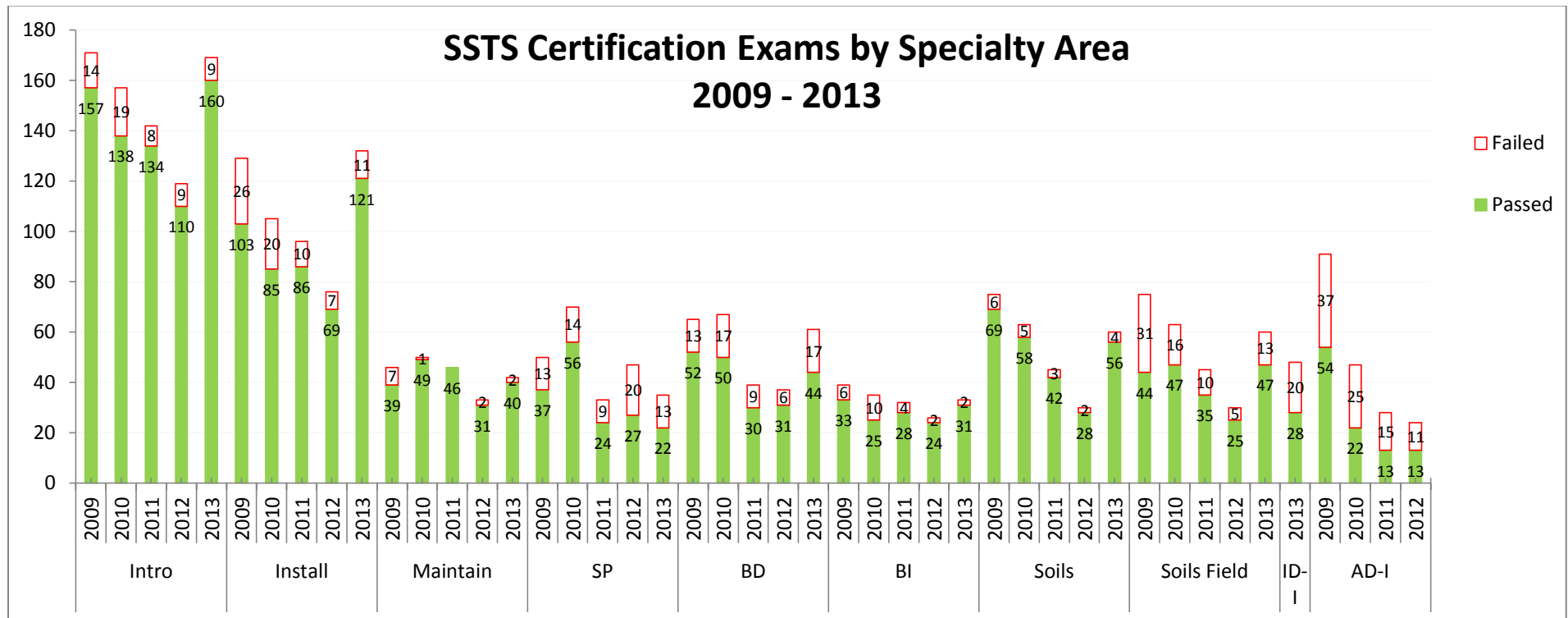


Figure 4: 2009 - 2013 SSTS Certification Exams Pass/Fail Percent by Specialty Area

Specialty Area Exam	Training Year	Passed	Failed
Introduction to SSTS	2009	91.81%	8.19%
	2010	87.90%	12.10%
	2011	94.37%	5.63%
	2012	92.44%	7.56%
	2013	94.67%	5.33%
Intro Total		92.22%	7.78%
Installing SSTS	2009	79.84%	20.16%
	2010	80.95%	19.05%
	2011	89.58%	10.42%
	2012	90.79%	9.21%
	2013	91.67%	8.33%
Install Total		86.25%	13.75%
Maintaining SSTS	2009	84.78%	15.22%
	2010	98.00%	2.00%
	2011	100.00%	0.00%
	2012	93.94%	6.06%
	2013	95.24%	4.76%
Maintain Total		94.47%	5.53%
Service Provider	2009	74.00%	26.00%
	2010	80.00%	20.00%
	2011	72.73%	27.27%
	2012	57.45%	42.55%
	2013	62.86%	37.14%
SP Total		70.64%	29.36%
Basic Design	2009	80.00%	20.00%
	2010	74.63%	25.37%
	2011	76.92%	23.08%
	2012	83.78%	16.22%
	2013	72.13%	27.87%
BD Total		76.95%	23.05%
Basic Inspector	2009	84.62%	15.38%
	2010	71.43%	28.57%
	2011	87.50%	12.50%
	2012	92.31%	7.69%
	2013	93.94%	6.06%
BI Total		85.45%	14.55%
Soils	2009	92.00%	8.00%
	2010	92.06%	7.94%
	2011	93.33%	6.67%
	2012	93.33%	6.67%
	2013	93.33%	6.67%
Soils Total		92.67%	7.33%
Soils Field	2009	58.67%	41.33%
	2010	74.60%	25.40%
	2011	77.78%	22.22%
	2012	83.33%	16.67%
	2013	78.33%	21.67%
Soils Field Total		72.53%	27.47%
Intermediate Design-Inspect	2013	58.33%	41.67%
ID-I Total		58.33%	41.67%
Advanced Design-Inspect	2009	59.34%	40.66%
	2010	46.81%	53.19%
	2011	46.43%	53.57%
	2012	54.17%	45.83%
AD-I Total		53.68%	46.32%
Grand Total		83.04%	16.96%

4. MPCA & DLI Interagency Workgroup

Goals

This workgroup is convening to identify a mutually beneficial solution to the jurisdictional overlap between SSTS and Plumbing programs.

1. Simplified administration of SSTS business license and DLI pipelayer registration application processing, review, approval, document retention, and information sharing processes.
2. Explore options with affected parties to overcome licensure limitations for septic professionals that conduct building sewer work.

DLI has emphasized the importance of avoiding any legislative changes to its statutes, but recognizes the possibility of legislative or administrative rule changes that may be necessary on MPCA's side. MPCA accepts this condition and does not see this as an obstacle to positive change.

Who

Steve Giddings (MPCA Section Manager), Charlie Thompson (MPCA Certification Supervisor) Nick Haig (MPCA Certification Staff), Jane Seaver (MPCA Certification Staff), Jean Coleman (MPCA Legal), Charlie Durenberger (DLI Licensing Asst. Division Director), Jim Lungstrom (DLI Plumbing Program Asst. Division Director), Cathy Tran (DLI Plumbing Program Supervisor), Jeff Lebowski (DLI Legal). Additional expertise and affected party representation will be brought in, as needed.

Timeframe

DLI and MPCA would like to identify a mutually acceptable solution before collecting feedback from the affected parties (MOWA, Plumbing Board, AELSLAGID Board, Mechanical Contractors, Pipetrades, MUCA, MN ABC, LECET) in 2014. Any necessary legislative or administrative rule changes would be pursued in 2015. Implementation would take place upon the current bond cycle expiration on 12/31/2015.

2013 Annual Report
 Draft Summary
 Advisory Committee Meeting
 March 13, 2013

Residential Only	2012	2013
Type I		
# Trenches and beds	3,379	3,333
# Mounds	3,508	3,471
# At grades	453	400
Type II	721	671
Holding Tanks	308	306
Type III	397	449
Type IV	63	68
Type V	5	3
Warrantied	0	0
ALS	23	31

Residential + Other Establishment	2012	2013
New Residential	3,550	3,737
New Other Establishment	227	229
Replacement Residential	5,143	4,807
Replacement Other Establishment	83	93
Total Permits	9,003	8,866

New Annual Report Questions – Summary for SSTS Advisory Committee

03/13/14

DRAFT DATA

For discussion at AC meeting

The 2013 SSTS Annual Report Form sent to local SSTS program staff contained four new questions. A new law passed in 2013 requires the MPCA to request the following information from local SSTS programs:

1. The number of compliance inspections of existing SSTS's conducted in their jurisdiction
2. The number of noncompliant properties connected to centralized sewer
3. The number of noncompliant properties mitigated by abandonment or removal of a dwelling
4. The number of noncompliant properties mitigated through government buyout

Question 1

The number of compliance inspections of existing systems reported by LGUs in 2013 is show in Table 1. There were 12,095 reported compliance inspections of existing systems by local SSTS programs. Nearly 11,000 of the compliance inspections of existing SSTS were reported by counties. Cities reported 908 compliance inspections and townships reported 185 compliance inspections. A Joint Powers Board reported four compliance inspections of existing systems in 2013.

Table 1. The number of compliance inspections of existing systems reported by LGUs in 2013 (02/25/14).

Local Unit of Government	Number of Compliance Inspections of Existing Systems	Percentage
County	10,998	91
City	908	7.5
Township	185	1.5
Joint Powers Board	4	<0.1
Total	12,095	

Questions 2, 3, and 4

The information related to noncompliant properties with SSTS that were discontinued through 1) connection to centralized sewer, 2) abandonment or removal, or 3) a government buyout program is shown in Figure 1. A total of 567 systems were reported by LGUs as discontinued though one of these three mechanisms.

Of the 567 systems, 342 structures were reportedly connected to a centralized sewer system. Of the 342 systems connected to central sewer, counties reported 301 systems were connected to central sewer.

There were 211 structures reported abandoned or removed in 2013 and fourteen structures were discontinued via a government buyout. For each of the three discontinued-use mechanisms, counties reported the largest number and these numbers are presented in Figure 1 above each bar in the graph.

The total numbers of SSTS reported as new systems and existing systems that were replaced, connected to central sewer, abandoned/removed, and purchased through a buyout program are shown in Figure 2.

Figure 1. The reported number of SSTS by LGUs in 2013 discontinued – via connection to centralized sewer, system abandonment or removal, or through a government buyout program.

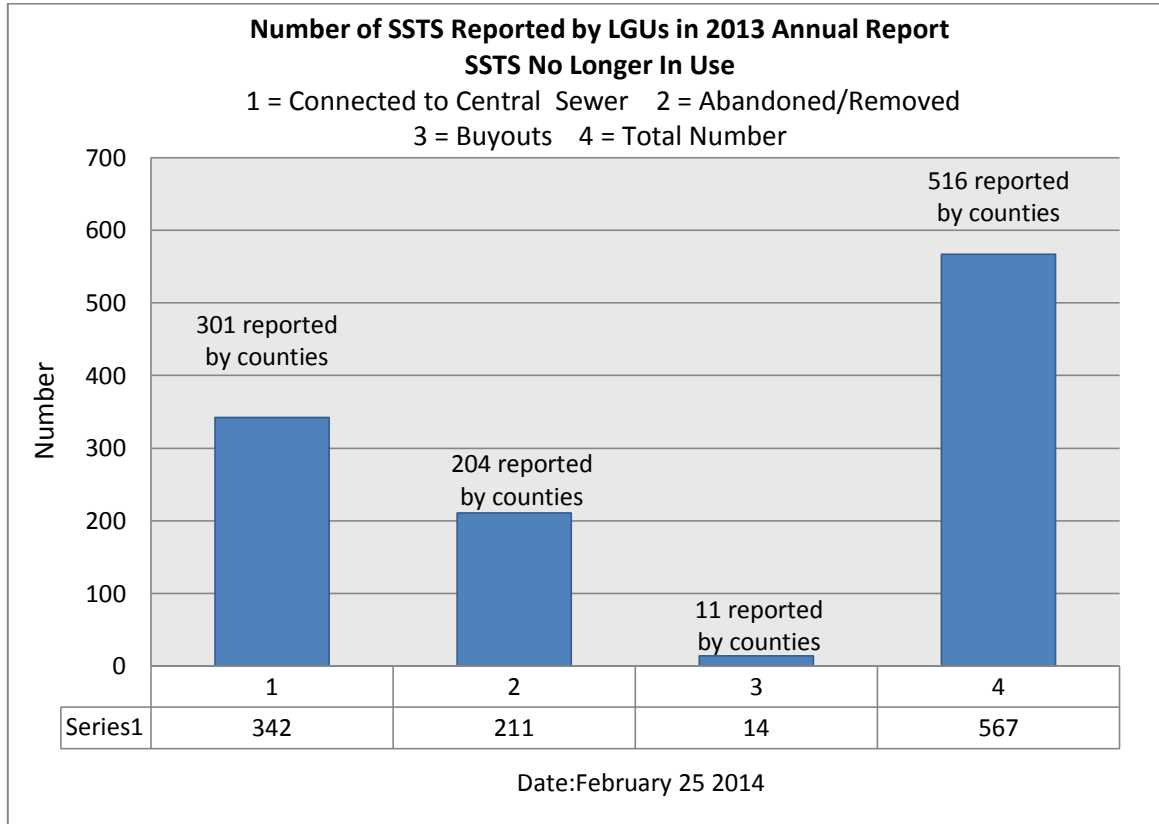
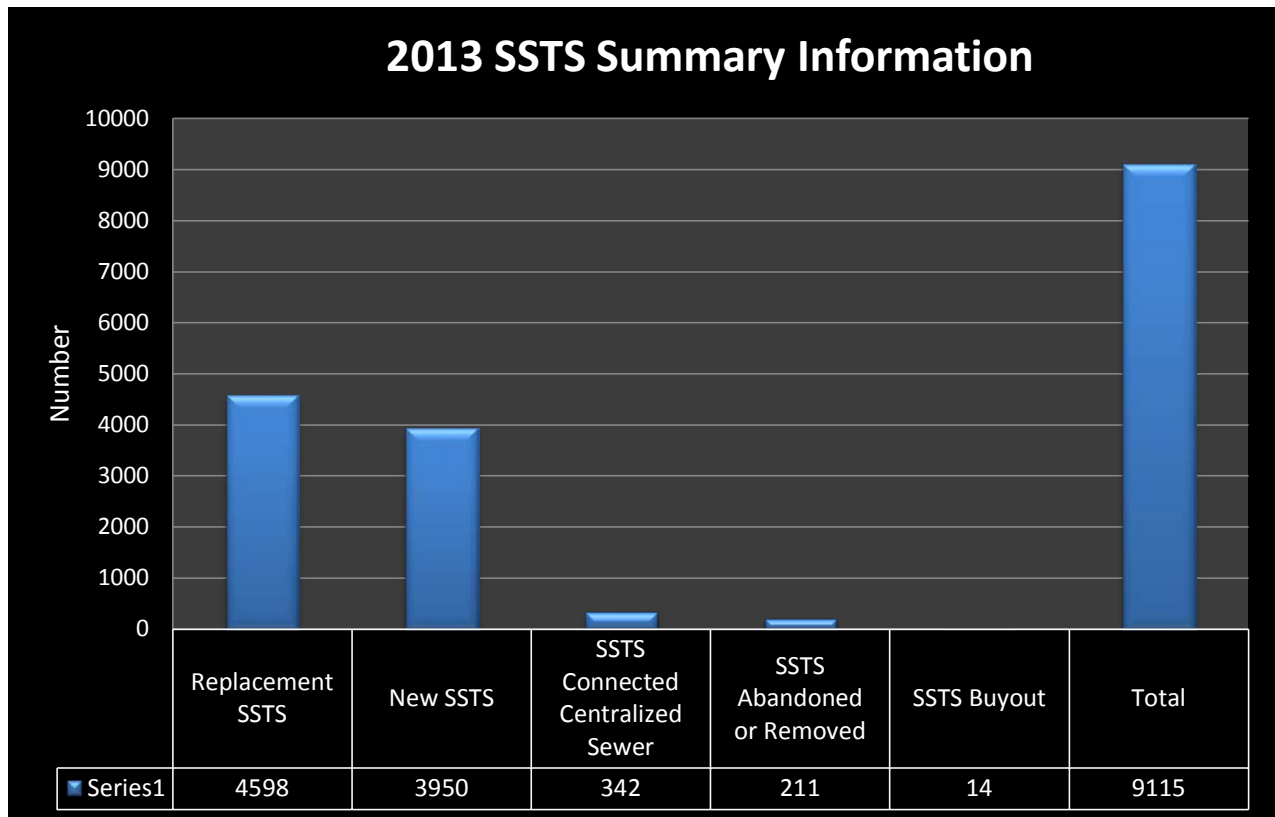


Figure 2. Summary information for replacement SSTS, new SSTS, systems connected to central sewer, systems abandoned/removed, and systems reported as buyouts in 2013.



Summary information reported for new, replacement, connected to central sewer, removals and buyout are shown in Figure 4 and Figure 5.

Figure 4. The percentage of systems that were reported in 2013 as new SSTS, replacement SSTS, connection to centralized sewer systems, removal/abandonment and buyout.

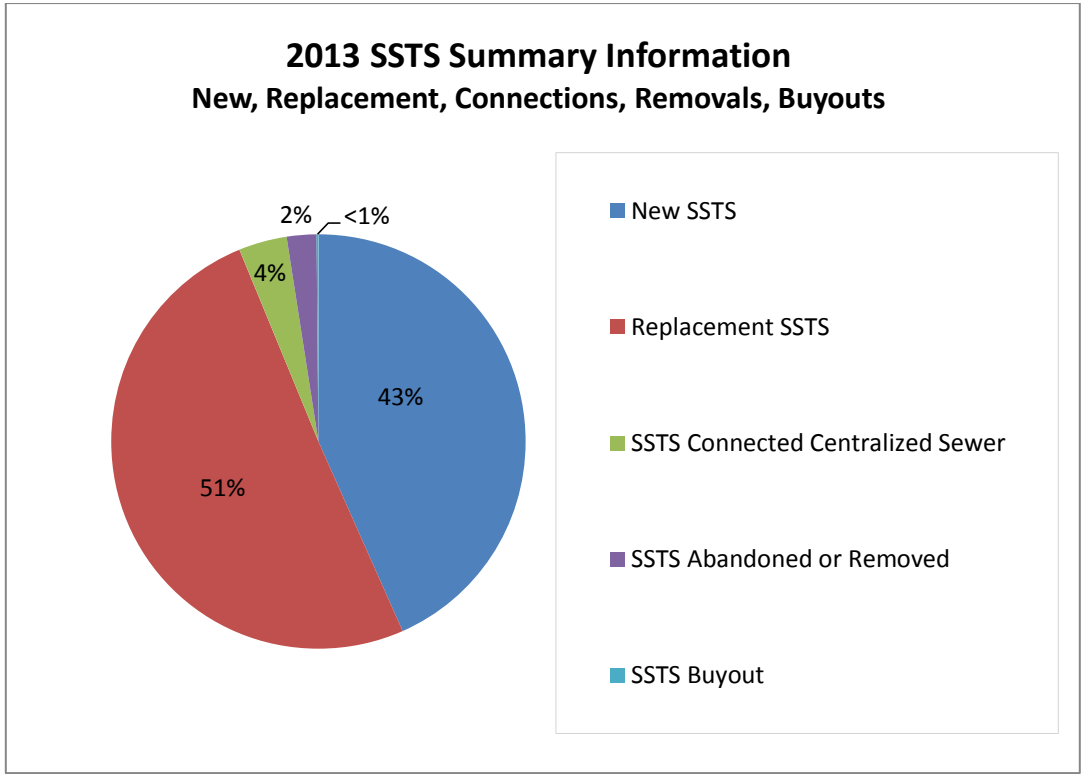
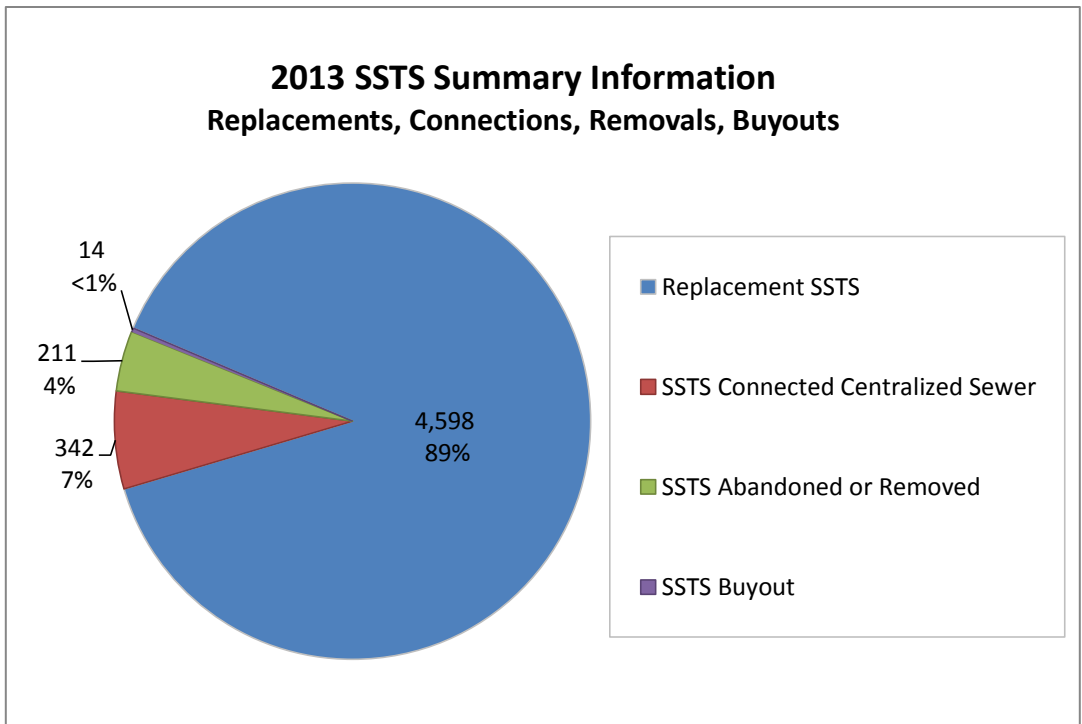


Figure 6. The number of systems reported as replacement SSTS, connections to centralized sewer systems, removal/abandonment and buyout in 2013.



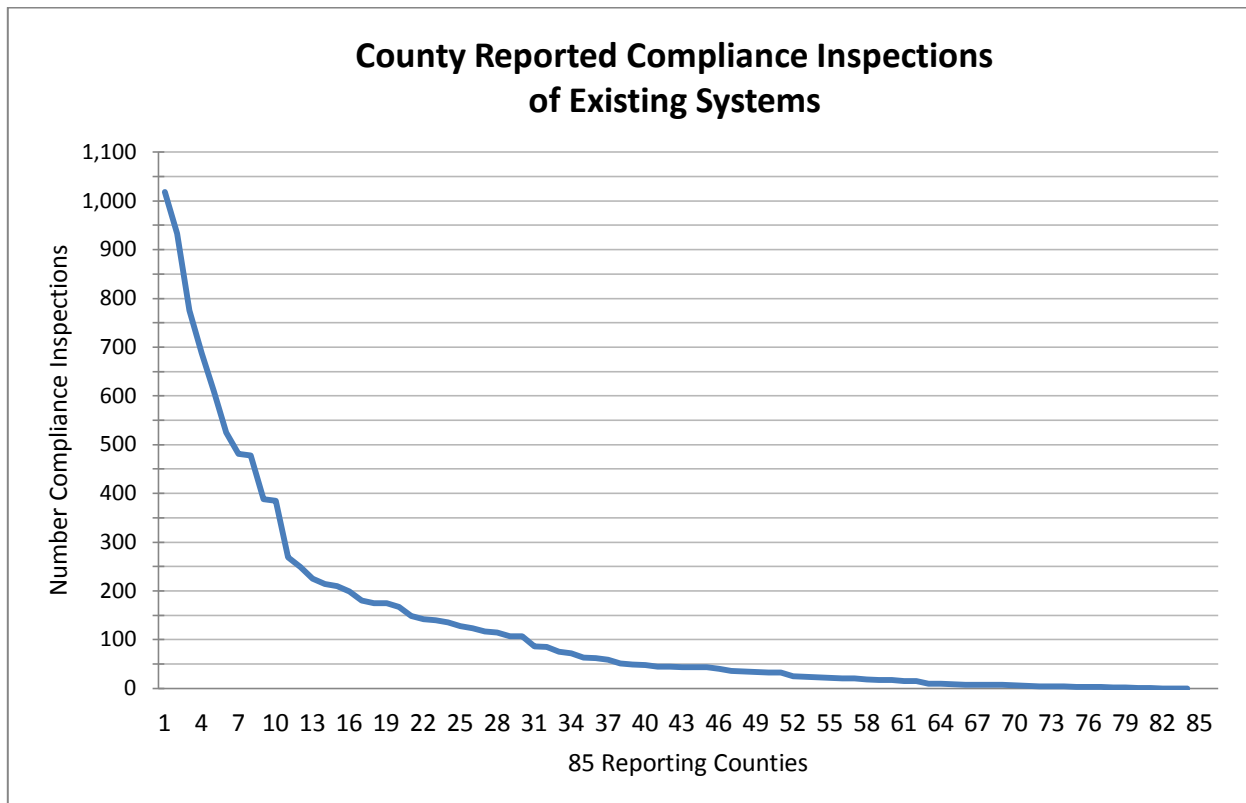
General information about the number of compliance inspections for existing systems is presented in Table 2 and Figure 6. The data was simply grouped into 11 classes based on the number of compliance inspections reported.

Table 2. The number of compliance inspections of existing systems reported by counties in 2013. Values are 'grouped' for reporting purposes to show the distribution of numbers of compliance inspections.

Group	Number of Compliance Inspections for Existing Systems	Number of Counties Reported within each Group of Compliance Inspections
A	> 1000	1
B	700-999	2
C	500-699	3
D	300-499	4
E	200-299	5
F	100-199	15
G	50-99	8
H	25-49	14
I	10-24	12
J	1-9	17
K	0	5

Sherburne County reported the greatest number (n=1,018) of compliance inspections for existing systems in 2013. The other five highest reporting counties (over 500 SSTS) included Otter Tail County (n=933), Cass County (n=776), Crow Wing County (n=688), St Louis County (n=609) and Stearns County (n=525).

Figure 6. The number of compliance inspections for existing systems reported by counties in 2013.



<Insert logo/address here>

Temporary Septage Storage Operating Permit

Operating Permit No. _____

Doc Type: Agency Generated

Facility Information

Permittee name: _____ Phone number: _____

Business name (if applicable): _____

Mailing address: _____

City: _____ State: _____ Zip code: _____

Facility location: _____

_____ authorizes the Permittee to operate a storage facility for the temporary holding of septage at the location identified above, in accordance with the requirements of this operating permit.

Issuance date (mm/dd/yyyy): _____ Expiration date (mm/dd/yyyy): _____

Septage storage capacity: _____ gallons

Summary Information

Operating Permit Conditions

1. The Permittee is required to maintain a valid SSTS Business License by the Minnesota Pollution Control Agency (MPCA).
2. Only domestic septage pumped and transported by the Permittee is allowed to be temporarily stored at the site.
3. No freezing of the tanks or its contents is permitted to occur.
4. No build-up of solids in the tanks is permitted that would prevent the near complete removal of solids from the tanks.
5. An alarm device must be maintained and periodically tested to determine if it is operational. The owner shall provide a visual inspection of the tank each time septage is transferred from the truck to the holding tank to ensure the tank is never overfilled.
6. The Permittee shall maintain an accurate inventory record for each day the tanks are used.
7. All land application practices shall include the liming of septage prior to land application and **not before** storage in the tanks.
7. All records shall be made available to _____ County for review upon request.
8. _____ County has the authority to inspect the temporary septage storage facility and land application site(s) to ensure compliance with the Operating Permit.
9. Failure to maintain a valid operating permit shall require the tanks to be removed by the Permittee within 60 days upon notification by _____ County.
10. No spillage, over flow, or subsurface discharge of septage at the facility is permitted.
11. In the event of a spill, overflow, or suspected or known subsurface discharge, the Permittee is required to promptly notify _____ County at _____ and the MPCA Duty Officer at 800-422-0798 or 651-649-5451 within 24 hours.
12. The Permittee is required to adequately train employees in facility operations, safety and emergency procedures.

Authorization

This operating permit is effective on the issuance date identified above. This permit and the authorization to store domestic septage temporarily shall expire in ____ year(s). The Permittee is not authorized to continue septage storage after the above date of expiration. This operating permit is not transferable.

I hereby certify with my signature as the Permittee that I understand the provisions of the septage storage facility operating permit. I agree to indemnify and hold ____ County harmless from all loss, damages, costs and charges that may be incurred by the use of this facility. If I fail to comply with the provisions of this operating permit, I understand that penalties may be issued.

The Operating Permit is hereby granted to: _____

Permittee (please print): _____	Permitting Authority (please print): _____
Title: _____ Date: _____	Title: _____ Date: _____
Signature: _____	Signature: _____

Instructions for Completing an Operating Permit for Septage Storage with Total Tank Volume up to 50,000 gallons

The following instructions provide an explanation for local units of government to complete this operating permit template. The template is intended to provide some guidance to local units of governments (LGU) in developing operating permits for the temporary storage of septage in sewage tanks with volumes less than 50,000 gallons (per MPCA's Program Management Decision, dated January 2012).

LGU Name, Department and Address – fill in the name, department and address of local unit of government at the top of the operating permit.

Operating Permit No. – assign an operating permit number to be able to track the system over the years.

Facility Information

Permittee Name, Business Name, Telephone Number, and Address – fill in the name, address and phone number of the permittee.

Facility Location – these are simply identifiers used by the local unit of government, including an address of the facility. It could include coordinate location.

Issuance Date – fill in the date the operating permit is issued. The operating permit should not be issued until all required information is submitted.

Expiration Date – fill in the date when this operating permit expires.

Septage Storage Capacity – fill in the total sewage tank capacity, in gallons.

Summary Information

Fill in information about the storage facility, such as number of sewage tanks, tank manufacturer, and size of the sewage tanks.

Operating Permit Conditions

There are 12 conditions specified in the operating permit template. The LGU can use these conditions as a starting point and use the conditions that apply. In the blanks, fill in the name of the LGU. The conditions are meant to help determine what may be appropriate for the facility being permitted.

Authorization

Fill in the length of time of the operating permit; this is typically one to five years. Note that this permit is identified as non-transferable. Fill in the name of the local unit of government; it contains a general indemnification statement.

The Operating Permits Hereby Granted to – print the name of the owner who signed the operating permit.

Signature of Permittee (and date of signature) – the owner signs and dates the operating permit.

By Order of – signature of the permitting authority, title, and date.

CHAPTER FOUR: INSPECTION PROTOCOL

4.1. INTRODUCTION

It should be understood that there is no set, step-by-step protocol for conducting existing system compliance inspections. The starting point for the preliminary inspection will likely start with a check of design and inspection records at the local permitting authority. The field inspection will likely start with an easily indefinable component of the system. The rule states that all system components must be found and assessed for compliance. If this is not possible, practical or desired, then the system is classified as an imminent threat to public health or safety and must be upgraded within 10 months or sooner if required by the LGU. The problem with not finding each component is that the system will have compliance issues if it cannot be properly abandoned and future water supply wells are suppose to maintain a setback from contaminated materials.

Questions/Issues: The any received a comment which said if you cannot find something (like the tank) which is doubtful of being an ITPHS then why cannot it be called failing to protect groundwater? Also if can't be found and classified as an imminent threat to public health and safety, then the current system would just be out of compliance for abandonment reasons and then just classified as failing to protect groundwater – correct?. So lastly, what rigor is needed to find the old system?

Since each inspection will likely be unique in nature, this manual will generally not be organized in a chronological sequence of steps, but will be organized by topic. It is advisable to first determine if the system is an imminent threat to public health and safety and then check if the system is failing to protect groundwater.

Questions/Issues: OK to have it organized by topic? OK to say “advisable” to conduct chronologically as they see fit vs. the rule says you have to do the ITPHS first.

4.4.8. - SOIL DISPERSAL SYSTEM

4.4.8.2. - SURFACE SEEPAGE

It is the recommended to classify a systems as an imminent threat to public health or safety if the soil system has reached its full hydraulic capacity, but there is yet no current indication of a failure to the ground system. Reaching “full hydraulic capacity” is defined below:

- A gravity fed trench system in which all trenches have maximum ponded effluent
- Any pressure fed system which has standing effluent - of any level – in the distribution media.

Questions/Issues: Is this OK?

4.4.8.3.1.1. - USE OF PAST SOIL INFORMATION

If past soil borings are to be used, it is strongly advisable that the borings indicate the soil coloration which includes the Munsell color notation and the presence or absence of redoximorphic features.

You should check with the local SSTS authority concerning acceptable past information. The approximate location of the past borings also needs to be determined.

Questions/Issues: Is this OK?

Monitor the height of the periodically saturated soil

The second option is to monitor the height of the periodically saturated soil with a water table monitoring device. The specifications for a water table monitoring device can be found in Section VI. C in the agency's document: *Prescriptive Designs and Design Guidance for Advanced Designers* which can be found

at: <http://www.pca.state.mn.us/index.php/view-document.html?gid=5185> .

At a minimum, the height of the periodically saturated soil must be monitored over the months of April, May and June with those months receiving average or above average precipitation. Those months must also be preceded by a spring with average or above average precipitation. Monitoring shall take place weekly (12 events). If one event indicates non-compliance additional samples (above the 12) shall take place the next day, and every day that the system is out of compliance. Final compliance will be that 90% of the days (not events) shall meet or exceed the required vertical separation distance.

Questions/Issues: Is this OK?

4.5 COMPLIANCE REQUIREMENTS AND INSPECTION METHODS FOR SYSTEMS WITH PRETREATMENT DEVICES

Systems with mechanical pretreatment devices or soil/textile media filters have additional compliance requirements and inspection procedures. These systems still need to meet the compliance criteria for the non-pretreatment components such as septic tanks.

4.5.1 PRE-2008 SYSTEMS

A "pre-2008" system in this section means a system that was designed and installed under a local ordinance in compliance with the 2006 or earlier version of chapter 7080 (typically installed sometime before 2008 to 2014 depending on when the 2008 rule was locally adopted).

4.5.1.1. COMPLIANCE CRITERIA AND INSPECTION METHODS

4.5.1.1.1 GENERAL COMPONENTS_(SEPTIC TANKS, DISTRIBUTION NETWORK, ETC....)

The compliance criteria and inspection procedures for the non-pretreatment components remains the same as for systems without pretreatment.

4.5.1.1.2. PRETREATMENT DEVICE

Compliance Criteria

The compliance criteria for the pretreatment device will be as follows:

- If system has an operating permit, device must meet the operating permit standard to be in compliance.
- If the system does not have an operating permit, any performance level was assumed during design , is the compliance standard.
- If no operating permit or assumed design standard exists, and the system has a reduced vertical separation distance or has gravity distribution (or both), it is recommended that the system be sampled to determine the concentration of fecal organisms. If pressure distribution has not been employed treatment may be compromised which could be a discretionary compliance trigger by the inspector.
- If no operating permit or assumed standard exists, and the system has the required vertical separation distance and employs pressure distribution, compliance is determined if the device appears to be functioning properly.

Questions/Issues: Is this OK?

Inspection Methods

xx

4.5.1.1.3. SOIL DISPERSAL SYSTEM

Compliance Criteria

The soil system needs to meet the designed separation distance, and hydraulically functioning. If pressure distribution has not been employed treatment may be compromised which could be a discretionary compliance trigger by the inspector.

Questions/Issues: Is this OK?

Inspection Methods

The soil system is inspected in the same manner as section xx.

4.5.2 POST-2008 SYSTEMS

A “post-2008” system in this section means a system that was designed and installed under a local ordinance in compliance with the 2008 or later versions of chapters 7080 and 7081. (typically installed sometime after early 2008 depending on when the 2008 rule was locally adopted).

4.5.2.1. COMPLIANCE CRITERIA AND INSPECTION METHODS

4.5.2.1.1. GENERAL COMPONENTS (SEPTIC TANKS, DISTRIBUTION NETWORK, ETC....)

The compliance criteria and inspection procedures for the non-pretreatment components remains the same as for systems without pretreatment.

4.5.2.1.2. PRETREATMENT DEVICE

Compliance Criteria

The system is required to be operated under an operating permit. If the system is meeting its operating permit it is considered in compliance. Systems out of compliance for operational or monitoring deficiencies must immediately be maintained, monitored, or managed according to the operating permit (7082.0700 subpart 3 item A).

The LGU will make the determination of whether the system is currently considered to be in compliance if performance/compliance has been inconsistent, or if the required number of samplings has not been conducted.

Questions/Issues: Is this OK?

4.5.2.1.3. SOIL DISPERSAL SYSTEM

The soil system needs to meet the designed separation distance, and hydraulically functioning. The system should have been designed with pressure distribution.

4.6 COMPLIANCE CRITERIA AND INSPECTION METHODS FOR SYSTEMS WITH A DESIGN FLOW BETWEEN 2,501 TO 10,000 GPD WITH DO NOT REQUIRE A STATE PERMIT.

Larger SSTS may have additional compliance requirements than those systems with a design flow of 2,500 gpd and less. This section will outline the similarities and possible differences in compliance and inspection methods.

4.6.1. LARGER SYSTEMS WITH PRETREATMENT DEVICE

If the system employs a pretreatment device please see section 4.5 to determine compliance for that component.

4.6.2. NITROGEN TREATMENT

Larger and newer systems may have been required to employ nitrogen reduction. The two regulatory levels of nitrogen treatment are:

- Use of a nitrogen best management practice (BMP), or
- Meet a concentration of 10 mg/l at the property boundary or nearest receptor, whichever is closest.

4.6.2.1 NITROGEN BMP

There may be various types of nitrogen BMPs that may be employed. BMPs do not have a numerical compliance limit. The compliance determination is basically if the system appears to be functioning.

The common BMPs are listed below along with the compliance determination. In addition, always be sure to review the operating permit reports.

Mound System

A mound system placed on a loamy soil (sandy loam or finer) with moderate to high organic matter (color value of 3 or less) is a nitrogen BMP. The inspector can examine design records or conduct soil boring to determine if the soil beneath the mound meets these requirements.

Blackwater Separation

The toilet waste contains the majority of the nitrogen in sewage. If this waste is segregated and is not discharged to the system, it is considered a nitrogen BMP. The compliance determination is to ensure that blackwater is not entering the system.

Use of a Registered Product

If a Registered nitrogen treatment device is employed, it is considered a nitrogen BMP. The inspector can check if the device is Registered as a nitrogen reduction device and then determine if the system appears to be operating properly. No sampling and analysis is required.

Use of Natural Soil Denitrification

During design the soil treatment zone may have been ascertained to have nitrogen reduction capabilities. Therefore, there is no specific assessment that the designer needs to conduct.

Other Nitrogen BMPs

If other nitrogen BMPs have been employed, please review the system's operating permit to determine what assessment is necessary to determine compliance.

4.6.2.2. NITROGEN CONCENTRATION OF 10 MG/L

Some systems were designed to meet a concentration of 10 mg/l at the property boundary or nearest receptor (water supply well), whichever is closest. Typically the system will have more than one method to meet this requirement (e.g. – registered nitrogen pretreatment device followed by natural soil nitrification).

The operating permit should report of the results of the nitrogen reduction and whether the system has a nitrogen concentration in violation of compliance requirements.

Sampling and analysis does not need to be conducted unless a sampling is due. The LGU will make the determination of whether the system is currently considered to be in compliance if performance/compliance has been inconsistent, or if the required number of samplings has not been conducted.

Questions/Issues: Is this OK?

4.6.3. GROUNDWATER MOUNDING

Some systems may have been instrumented with water table monitoring devices to determine the extent of groundwater mounding.

The operating permit should report of the results of the ground water table monitoring devices and whether the system has a groundwater mound height in violation of compliance requirements.

Reading of the monitoring devices does not need to be conducted unless a sampling is due. The LGU will make the determination of whether the system is currently considered to be in compliance if performance/compliance has been inconsistent, or if the required number of samplings has not been conducted.

Questions/Issues: Is this OK?

4.6.4. PHOSPHORUS

Some systems may have a phosphorus requirement to protect surface water from phosphorus additions from groundwater. The system may be designed with a phosphorus treatment device or rely on native soil treatment.

The operating permit should report of the results of the phosphorus treatment device or groundwater phosphorus concentrations in violation of compliance requirements.

Reading of the monitoring devices does not need to be conducted unless a sampling is due. The LGU will make the determination of whether the system is currently considered to be in compliance if performance/compliance has been inconsistent, or if the required number of samplings has not been conducted.

Questions/Issues: Is this OK?

4.6.5. TYPE I, II or III SYSTEMS (OLD STANDARD, ALTERNATIVE OR OTHER SYSTEMS)

Some larger systems may just be a simple system with the components just being a septic tank(s) and a soil dispersal system. This would especially be true for larger systems built previous to the 2008 rule adoption by the LGU's.

The compliance standards and inspection methods for these systems is the same as for smaller SSTS. However it is recommended that the compliance standards and inspection methods in section 4.6 be assessed as best as possible. If a significant issue arises from this extra assessment, the inspector has the discretion to issue a Notice of Non-compliance (7080.1500 subpart 4). Some extra assessments can include:

- Conduct soil borings in the center of the system to assess for excessive ground water mounding.
- Test nearby well for contaminants found in sewage (but any contamination found may not be from the system).

Questions/Issues: Is this OK?

4.7. – SYSTEMS NO LONGER IN USE

It may be extremely difficult to determine the presence and location of a system-no-longer-in-use. A record of abandonment may be on record at the local governmental unit. The procedures in section xx can be a good starting point to try to locate the presence of a very old system. However more investigation will likely be needed to make a determination. If no evidence can be found to establish the existence of a system-no-longer-in-use

Questions/Issues: Is this OK?