

## SSTS Maintainer Task Analysis Subsurface Sewage Treatment System (SSTS) Program

Doc Type: Task Analysis

#### Maintainer Task Analysis

A specialty area task analysis document is an outline of job tasks that certified professionals must be able to competently complete. It is a working document that was developed and is periodically maintained by a steering committee of experts, which is validated and prioritized by a broader group of practicing professionals. It is the foundation of Minnesota's SSTS specialty area certification program and provides the basis for curriculum objectives and exam competencies. It includes tasks authorized by rule and those determined to be necessary to conduct authorized work in a safe and lawful manner. It is not meant to represent a required order of operations and should not be used as a procedural checklist.

**Minn R. 7083.0770 subp. 1: Authorization.** A licensed maintenance business is authorized to measure scum and sludge depths in sewage tanks for the accumulation of solids and removing these deposits; remove solids and liquids from toilet waste treatment devices; transport septage; land apply septage or dispose of septage in a treatment facility; identify problems related to sewage tanks, baffles, maintenance hole covers, extensions, and pumps and make the repairs; evaluate sewage tanks, pump tanks, distribution devices, valve boxes, or drop boxes for leakage; identify cesspools, seepage pits, leaching pits, and drywells; and clean supply pipes and distribution pipes for all SSTS.

**Minn R. 7083.0770 subp. 2: Responsibilities.** Maintenance licensees must: A. record pump-out date, gallons removed, any tank leakage below or above the operating depth, the access point used to remove the septage, the method of disposal, the reason for pumping, any safety concerns with the maintenance hole cover, and any troubleshooting or repairs conducted. This information must be submitted to the homeowner within 30 days after the maintenance work is performed. Maintenance business pumping record information must be maintained by the business for a period of five years; B. observe and provide written reports of any noncompliance to the system owner within 30 days; and C. obtain a signed statement if the owner refuses to allow the removal of solids and liquids through the maintenance hole.

**Minn R. 7083.0770 subp.3: Certified Maintainers.** Certified maintainers must provide proper training, daily review of work, and periodic observation of work conducted by noncertified individuals. Certified maintainers are responsible for conducting or supervising: (A) the measurement of scum and sludge depths; (B) the making of sensory observations if nondomestic wastes have been discharged into the system; (C) the identification of problems and watertightness related to sewage tanks; (D) the assessment of the condition of baffles, effluent screens, maintenance hole covers, and extensions; (E) the removal of septage; and (F) the land application of septage or disposal in a treatment facility.

|      | Particir | articipate in certification program |   |  |  |  |  |  |
|------|----------|-------------------------------------|---|--|--|--|--|--|
| •    | · · · ·  |                                     |   |  |  |  |  |  |
|      | I.A      | Complet                             | Complete training   |  |  |  |  |  |
|      | I.B      | Pass ce                             | rtification exam  |  |  |  |  |  |
|      | I.C      | Apply fo                            | r certification   |  |  |  |  |  |
|      | I.D      | Complet                             | e experience with mentor  |  |  |  |  |  |
|      |          | I.D.1                               | Conduct work duties in compliance with restrictions of apprentice or employee designation       |  |  |  |  |  |
|      | I.E      | Complet                             | e continuing education  |  |  |  |  |  |
| ١١.  | Obtain   | Detain Maintainer business license  |   |  |  |  |  |  |
|      | II.A     | Apply for a business license        |   |  |  |  |  |  |
|      |          | II.A.1                              | Employ a Designated Certified Individual (DCI)  |  |  |  |  |  |
|      |          | II.A.2                              | Maintain appropriate SSTS surety bond and general liability insurance                           |  |  |  |  |  |
|      |          | II.A.3                              | Remit appropriate business license fee  |  |  |  |  |  |
|      | II.B     | Renew                               | business license  |  |  |  |  |  |
| III. | Comm     | unicate w                           | ith clients, colleagues, and authorities  |  |  |  |  |  |
|      | III.A    | Contact                             | local unit of government program with SSTS jurisdiction   |  |  |  |  |  |
|      |          | III.A.1                             | Be knowledgeable of local septage management requirements                                       |  |  |  |  |  |
|      |          | III.A.2                             | Obtain design report, as-built drawing, management plan, and other pertinent site documentation |  |  |  |  |  |
|      |          | III.A.3                             | Be knowledgeable of repair, replacement, and upgrade requirements in local ordinances           |  |  |  |  |  |

### Maintainer Task Analysis

|     | _        | -         |  |   |
|-----|----------|-----------|--|---|
|     | III.B    | Access    | esources to identify and reconcile conflicts and cond                                      | cerns   |
|     |          | III.B.1   | Contact Minnesota Pollution Control Agency representativ                                   | e   |
|     |          | III.B.2   | Contact Minnesota Duty Officer in the event of a spill                                     |   |
|     |          | III.B.3   | Contact Minnesota Onsite Wastewater Association repres                                     | entative  |
|     |          | III.B.4   | Contact SSTS Advisory Committee representative   |   |
|     |          | III.B.5   | Contact University of Minnesota Onsite Sewage Treatmer                                     | t Program   |
|     | III.C    | Provide   | oper training, daily work review, and periodic work observ                                 | ation of noncertified individuals                             |
|     |          | III.C.1   | ensure all work follows applicable rules and regulati                                      | ons   |
|     |          | III.C.2   | Provide mentorship and observation services according to                                   | state code and best practices                                 |
|     | III.D    | Prepare   | conduct a maintenance visit  |   |
|     |          | III.D.1   | lert Gopher State One Call   |   |
|     |          | III.D.2   | peak with owner about system, use, and concerns  |   |
|     |          | III.D.3   | og and load vehicle with necessary tools, equipment, per<br>orms to complete               | sonal protective equipment, existing records, and service     |
|     |          | III.D.4   | Plan management activities by designer recommendation                                      | s on management plan or operating permit                      |
|     |          | III.D.5   | ducate owner about management activities, managemer  | t frequency, and best practices                               |
| IV. | Establis | sh septag | distribution site  |   |
|     | IV.A     | Obtain w  | tten agreement with approved public sewage treatment fa                                    | cility  |
|     | IV.B     | Obtain w  | tten agreement with approved private sewage treatment f                                    | acility   |
|     | IV.C     | Use web   | oil survey and select an acceptable land application site                                  |   |
|     |          | IV.C.1    | Confirm soil conditions are suitable for land application                                  |   |
|     |          | IV.C.2    | Confirm slope and surface drainage patterns are suitable                                   | or land application   |
|     |          | IV.C.3    | Confirm that minimum separation distances from land app                                    | lication site are met   |
|     | IV.D.    | Obtain n  | cessary permits and approvals for land application of sep                                  | age and septage storage facility                              |
|     | IV.E     | Commu     | cate effectively with neighboring owners   |   |
|     | IV.F     | Calculat  | maximum allowable nitrogen application rate (MANA)   |   |
|     | IV.G     | Appropri  | ely restrict public access to site   |   |
| V.  | Servic   | e sewag   | tank(s) and system components  |   |
|     |          | Access t  |  |   |
|     |          | V.A.1     | ocate tank(s) on property  |   |
|     |          | V.A.2     | ocate and expose maintenance hole cover(s)   |   |
|     |          | V.A.3     | Remove maintenance hole cover(s) and secure when finis                                     | hed   |
|     | V.B      | Evaluate  | ank contents   |   |
|     |          | V.B.1     | valuate contents for non-sewage sources, referring to lab<br>vastes (Document ID w-sw4-18) | poratory characterization best practices for managing unusual |
|     |          |           | A.1.A Identify domestic waste  |   |
|     |          |           | A.B.1.B Identify non-domestic/non-hazardous waste that                                     | is suitable for groundwater discharge                         |
|     |          |           | .B.1.C Identify non-domestic/non-hazardous waste that                                      | is not suitable for groundwater discharge                     |
|     |          |           | /.B.1.D Identify hazardous waste   |   |
|     |          | V.B.2     | valuate liquid levels and stratification   |   |
|     |          | V.B.3     | leasure scum and sludge levels   |   |
|     |          | V.B.4     | Determine necessity and value of content removal   |   |
|     | V.C      | Remove    | Il tank contents through maintenance hole  |   |
|     |          |           |  |   |

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|     |         | V.C.1     | Backflush or agitate septage before completely removing tank contents   |
|-----|---------|-----------|---|
|     |         | V.C.2     | Dbtain signed statement if owner refuses to allow service through maintenance hole  |
|     |         | V.C.3     | Remove septage from Type IV or Type V sewage tanks as directed by service provider  |
|     |         | V.C.4     | Remove septage from external gravity grease interceptor (EGGI) in adherence with Minnesota Septage and Restaurant<br>Naste Management Guidelines (Document ID wq-wwists-4-20) |
|     | V.D     | Assess o  | undition of tank(s) and system components   |
|     |         | V.D.1     | Assess and/or certify sewage tank(s) as structurally sound and watertight   |
|     |         | V.D.2     | Assess and/or certify maintenance hole risers and covers as structurally sound and safe   |
|     |         | V.D.3     | Assess system operation based on use and design   |
|     |         | V.D.4     | dentify cesspools, seepage pits, leaching pits and drywells   |
|     |         | V.D.5     | Assess building sewer   |
|     |         | V.D.6     | Assess baffles  |
|     |         | V.D.7     | Assess effluent screen(s)   |
|     |         | V.D.8     | Assess tank inspection pipe(s)  |
|     |         | V.D.9     | Assess pump(s), alarms, and floats  |
|     |         | V.D.10    | Assess siphon(s)  |
|     |         | V.D.11    | Assess supply pipe(s)   |
|     |         | V.D.12    | Assess valve box(es), drop box(es), and distribution box(es) for leakage  |
|     |         | V.D.13    | Assess distribution pipes   |
|     | V.E     | Determir  | e if operation, repair, replacement, or upgrade is recommended or required  |
|     |         | V.E.1     | Defer duties outside of scope of practice to appropriately licensed designer, installer, inspector, service provider,<br>electrician, plumber, or other licensed professional |
|     |         | V.E.2     | Comply with repair, replacement, and upgrade requirements in local ordinances   |
|     |         | V.E.3     | Properly abandon system with no future intent for use   |
|     |         |           | /.E.3.A Properly abandon tank(s)  |
|     |         |           | /.E.3.B Properly dispose or cover contaminated materials  |
|     |         |           | /.E.3.C Complete, sign, and submit a record of abandonment to local program within 90 days  |
|     |         | V.E.4     | Repair, replace, or upgrade maintenance hole riser and cover  |
|     |         | V.E.5     | Clean, steam, or jet building sewer, supply pipe, and distribution pipes  |
|     |         | V.E.6     | Repair, replace, or upgrade baffle  |
|     |         | V.E.7     | Clean, repair, replace, or upgrade effluent screen  |
|     |         | V.E.8     | Repair, replace, or upgrade tank inspection pipe  |
|     |         | V.E.9     | Clean, repair or replace pump, alarm, or floats according to design or permit   |
|     |         | V.E.10    | Repair or replace siphon  |
|     | V.F     | Complet   | service visit   |
|     |         | V.F.1     | Close tank(s)   |
|     |         | V.F.2     | Restore property  |
|     |         | V.F.3     | Submit required information to system owner within 30 days of maintenance work  |
| VI. | Service | toilet wa | te treatment device   |
|     | VI.A    | Service   | portable restroom facilities  |
|     |         | VI.A.1    | Fransport equipment safely  |
|     |         | VI.A.2    | Maintain accurate records   |
|     |         | VI.A.3    | Provide facilities appropriate to customer needs  |

### Maintainer Task Analysis

| <u> </u> | r        | 1          | 1                    |   |
|----------|----------|------------|----------------------|---|
|          |          | VI.A.4     | Maintain s           | sanitary condition of all facilities  |
|          |          | VI.A.5     |                      | nanage spills   |
|          |          |            |                      | g, incinerating, chemical, and other non-flushing toilets in accordance with state and local requirements and   |
|          | VI.B     |            |                      | nmendations   |
| VII.     | Distribu | ute septaç | ge                   |   |
|          | VII.A    | Comply     | with local s         | septage management requirements   |
|          | VII.B    | Haul sep   | otage to ap          | proved public sewage treatment facility   |
|          | VII.C    | Haul sep   | otage to ap          | proved private sewage treatment facility  |
|          | VII.D    | Prepare    | and land a           | pply septage in compliance with Minnesota Guidelines and 40 CFR, Part 503   |
|          |          | VII.D.1    | Employ pa            | athogen control measures of site use restrictions and lime stabilization  |
|          |          | VII.D.2    | Employ ve            | ector attraction reduction strategy of injection, immediate incorporation, or lime stabilization  |
|          |          | VII.D.3    | Add appro            | opriate type and amount of lime to septage  |
|          |          | VII.D.4    | Continue<br>achieved | to measure and document the septage until a temperature corrected pH of 12 of greater for a full 30 minutes is  |
|          |          | VII.D.5    | Spread se            | eptage in compliance with daily, winter, and agronomic application rate limits  |
|          |          | VII.D.6    | Calibrate            | equipment to comply with application rate limits  |
|          |          | VII.D.7    |                      | nnesota Septage and Restaurant Waste Management Guidelines (Document ID wq-wwists-4-20) for land nof restaurant grease trap waste                     |
| VIII.    | Keep, r  | maintain,  | and share            | adequate records  |
|          | VIII.A   | Complet    | te daily hau         | lling record  |
|          | VIII.B   | Complet    | te site spec         | sific record  |
|          | VIII.C   | Record a   | and submit           | management information to system owner within 30 days of performing work  |
|          |          | VIII.C.1   |                      | nd submit pump-out date, reason for pumping, access point, gallons removed, and method of septage disposal  |
|          |          | VIII.C.2   |                      | nd submit any tank leakage; both above and below tank operating depth; including the identification of<br>s, seepage pits, leaching pits and drywells |
|          |          | VIII.C.3   | Record ar            | nd submit any troubleshooting or repairs conducted and any safety concerns with maintenance hole cover  |
|          | VIII.D   | Provide    | certified sig        | gnature for any sewage tank certification of compliance   |
|          | VIII.E   | Provide    | written rep          | orts of noncompliance to homeowner within 30 days   |
|          | VIII.F   | Maintain   | pumping i            | records for a period of at least five years   |
|          | VIII.G   |            |                      | reements for any sewage treatment facilities that accept septage  |
| I        |          | 1          |                      |   |

| Subsurfac  | e Sev     | vage Treatment System Profes                             | ssional I            | Need-to-Know: Maintainer  |
|--|-----------|--|----------------------|---|
| Minnesota Pollution<br>Control Agency  | I. Par    | ticipate in certification prog                           | ram                  |   |
| List sequenced order of steps to<br>complete the master task   |           | Identify knowledge necessary to<br>complete the subtasks |                      | Describe how you must behave<br>to complete the subtasks  |
| <ul> <li>1 Complete training</li> <li>2 Pass certification exam</li> <li>3 Apply for certification</li> <li>4 Complete experience with mentor<br/>Conduct work duties in compliance with</li> <li>5 restrictions of apprentice or employee<br/>designation</li> <li>6 Complete continuing education</li> </ul> | Knowledge |  | Attitudes            |   |
| Sut  | Knov      |  | Interpersonal Skills | Identify the skills necessary for<br>interacting with other people in<br>order to complete the subtasks |

|          | Subsurfa   | ce Se     | wage Treatment System Profes                             | siona                          | I Need-to-Know: Maintainer                               |
|----------|--|-----------|--|--------------------------------|--|
|          | rota Pollution<br>rol Agency   | II. Ob    | otain Maintainer business license                        | e                              |  |
| Subtasks | List sequenced order of steps to<br>complete the master task<br>Apply for a business license<br>Employ a Designated Certified Individual<br>(DCI)<br>Maintain appropriate SSTS surety bond and<br>Remit appropriate business license fee<br>Renew business license | Knowledge | Identify knowledge necessary to<br>complete the subtasks | Interpersonal Skills Attitudes | Describe how you must behave to<br>complete the subtasks |

| ( | Subsurfa  | ice Se    | wage Treatment System Profes                             | siona           | l Need-to-Know: Maintainer  |
|---|---|-----------|--|-----------------|---|
|   | ota Pollution<br>rol Agency   | III. Co   | ommunicate with clients, colleag                         | gues, a         | and authorities   |
|   | List sequenced order of steps to<br>complete the master task  |           | Identify knowledge necessary to<br>complete the subtasks |                 | Describe how you must behave to<br>complete the subtasks  |
| 2 | Contact local unit of government program with<br>SSTS jurisdiction<br>Access resources to identify and reconcile<br>conflicts and concerns<br>Provide proper training, daily work review, and<br>periodic work observation of noncertified<br>individuals<br>Prepare to conduct a maintenance visit | Knowledge |  | Attitudes       |   |
| S |   | K         |  | personal Skills | Identify the skills necessary for<br>interacting with other people in<br>order to complete the subtasks |

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|          | Sub   | surface Se | ewage Treatment System Profes                            | sional               |
|----------|---|------------|--|----------------------|
|          | ota Pollution<br>rol Agency   | III.A      | Contact local unit of government                         | t progr              |
|          | List sequenced order of steps complete the master task  | to         | Identify knowledge necessary to<br>complete the subtasks |                      |
| 1<br>2   | Be knowledgeable of local septage<br>management requirements<br>Obtain design report, as-built drawing,<br>management plan, and other pertinent si<br>documentation | ite        |  |                      |
| Subtasks | Be knowledgable of various repair, repla<br>and upgrade requirements in local ordina  |            |  | Attitudes            |
|          |   | ×          |  | Interpersonal Skills |

am with SSTS jurisdiction

Describe how you must behave to complete the subtasks

|                  | Subsurfa   | ace Se    | wage Treatment System Profes                             | sional               |
|------------------|--|-----------|--|----------------------|
| Minne            | ota Pollution  | III.B /   | Access resources to identify and                         | d recor              |
|                  | rol Agency   | conce     | erns   |                      |
| 1<br>2<br>3<br>4 | List sequenced order of steps to<br>complete the master task<br>Contact Minnesota Pollution Control Agency<br>representative<br>Contact Minnesota Onsite Wastewater<br>Association representative<br>Contact SSTS Advisory Committee<br>representative<br>Contact University of Minnesota Onsite Sewage<br>Treatment Program |           | Identify knowledge necessary to<br>complete the subtasks | Attitudes            |
| Subtasks         |  | Knowledge |  | Atti                 |
|                  |  | Ā         |  | Interpersonal Skills |

ncile conflicts and

Describe how you must behave to complete the subtasks

|          | Subsurfa  | ice Se    | wage Treatment System Profes                             | sional               |
|----------|---|-----------|--|----------------------|
|          |   |           | Provide proper training, daily wo                        |                      |
|          | sota Pollution<br>trol Agency   |           | rvation of noncertified individuals                      |                      |
|          | List sequenced order of steps to<br>complete the master task  |           | Identify knowledge necessary to<br>complete the subtasks |                      |
| Subtasks | Ensure all work follows applicable rules and<br>regulations<br>Provide mentorship and observation services<br>according to state code | Knowledge |  | Attitudes            |
| S        |   | Kne       |  | Interpersonal Skills |

ew, and periodic work

Describe how you must behave to complete the subtasks

|          | ()  | Subsurface S  | Sewage Treatment System Profess                          | sional               |
|----------|---|---|--|----------------------|
|          | nnesota Pollution<br>Control Agency   | III.C   | D Prepare to conduct a maintenance                       | ce visi              |
|          | List sequenced order of complete the mast   |   | Identify knowledge necessary to<br>complete the subtasks |                      |
| Subtasks | <ol> <li>Alert Gopher State One call</li> <li>Speak with owner about system<br/>concerns</li> <li>Log and load vehicle with necess</li> <li>equipment, existing records, and<br/>to complete</li> <li>Plan management activities by<br/>recommendations on managem<br/>operating permit</li> <li>Educate owner about managem<br/>management frequency, and be<br/>Obtain signed statement if owner<br/>allow service through maintena</li> <li>Obtain signed statement if owner<br/>allow service through maintena</li> </ol> | ssary tools,<br>d service forms<br>designer<br>nent plan or<br>nent activities,<br>est practices<br>er refuses to |  | Attitudes            |
|          | 13<br>14<br>15<br>16<br>17<br>18<br>19  |   |  | Interpersonal Skills |

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Describe how you must behave to complete the subtasks

|             |   | Subsurfa   | ce Se        | ewage Treatment System Profes  | sional    | Need-to-Know: Maintainer                                 |
|-------------|---|--|--------------|--|-----------|--|
| N           |   | ota Pollution<br>rol Agency  | IV. E        | stablish septage distribution site                                       |           |  |
|             |   | List sequenced order of steps to complete<br>the master task   |              | Identify knowledge necessary to complete the subtasks                    |           | Describe how you must behave to<br>complete the subtasks |
|             | 1 | Obtain written agreement with approved public sewage treatment facility  |              | Where to obtain soil survey  |           |  |
|             | 2 | Obtain written agreement with approved private sewage treatment facility   |              | Soil characteristics   |           |  |
|             | 3 | Use web soil survey and select an acceptable<br>land application site<br>Confirm soil conditions are suitable for land |              | Soil treatment   | les       |  |
|             | 4 | application<br>Confirm slope and surface drainage patterns   |              | Landscape characteristics  | tuc       |  |
|             | 5 | are suitable for land application<br>Confirm that minimum separation distances   |              | How to find a specific location in soil survey                           | Attitude  |  |
| C C         | ) | from land application site are met<br>Obtain necessary permits and approvals for                                       | Ge           | What information is contained in soil survey                             |           |  |
| N<br>X<br>X | - | land application of septage and septage storage facility   | )<br>pe      | How to evaluate soil series for suitability                              |           |  |
| Subtas      | 8 | Communicate effectively with neigboring owners<br>Calculate maximum allowable nitrogen                                 | wle          | MPCA Recommendations   |           |  |
| Sub         | 9 | application rate (MANA)  |              | Pathogen Control Rules<br>Site restriction rules                         |           | Identify the skills necessary for                        |
|             | • |  | $\mathbf{X}$ | Vector attraction rules<br>Injection rules                               | S         | interacting with other people in order                   |
|             |   |  |              | Incorporation rules<br>Lime stabilization rules                          | Skills    |  |
|             |   |  |              | Annual application rate recommendations<br>Annual application rate rules | al        |  |
|             |   |  |              |  | son       |  |
|             |   |  |              |  | rpersonal |  |
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|                       | Subsurfac   | e Sew     | age Treatment System Profes                              | sional N             | leed-to-Know: Maintainer  |
|-----------------------|---|-----------|--|----------------------|---|
| N                     | innesota Pollution<br>Control Agency  | V. Se     | ervice sewage tank(s) and syst                           | em con               | nponents  |
|                       | List sequenced order of steps to<br>complete the master task  |           | Identify knowledge necessary to<br>complete the subtasks |                      | Describe how you must behave to<br>complete the subtasks  |
| 2<br>3<br>4<br>5<br>6 | Access tank(s)<br>Evaluate tank contents<br>Remove all tank contents through<br>maintenance hole<br>Assess condition of tank(s) and system<br>components<br>Determine if operation, repair, replacement,<br>or upgrade is recommended or required<br>Complete service visit | ge        | NAWT Onsite Code of Practice                             | Attitudes            |   |
| Subtasks              |   | Knowledge |  | Interpersonal Skills | Identify the skills necessary for<br>interacting with other people in<br>order to complete the subtasks |

|                                       | Subsurface Sewage Treatment System Professiona   |           |   |                      |  |  |  |
|---------------------------------------|--|-----------|---|----------------------|--|--|--|
| Minnesota Pollution<br>Control Agency |  |           | V.A Access tank(s)                                    |                      |  |  |  |
|                                       | List sequenced order of steps to<br>complete the master task<br>Locate tank(s) on property<br>Locate and expose maintenance hole<br>cover(s)<br>Remove maintenance hole cover(s) and<br>secure when finished | Knowledge | Identify knowledge necessary to complete the subtasks | Attitudes            |  |  |  |
| Sub                                   |  | Knov      |   | Interpersonal Skills |  |  |  |

| leed-to-Know: Maii | ntainer |
|--------------------|---------|
|--------------------|---------|

Describe how you must behave to complete the subtasks

|          | Subsurface   | e Sew     | age Treatment System Profes                              | sional N                       |
|----------|--|-----------|--|--------------------------------|
|          | Minnesota Pollution<br>Control Agency  | V.B E     | Evaluate tank contents                                   |                                |
| Subtasks | List sequenced order of steps to<br>complete the master task<br>Evaluate contents for non-sewage sources,<br>referring to laboratory characteriziation for<br>unusual wastes<br>2 Identify non-domestic/non-hazardous waste<br>that is suitable for groundwater discharge<br>4 Identify non-domestic/non-hazardous waste<br>that is not suitable for groundwater discharge<br>5 Identify hazardous waste<br>6 Evaluate liquid levels and stratification<br>7 Measure scum and sludge levels<br>8 Determine necessity and value of content<br>removal | Knowledge | Identify knowledge necessary to<br>complete the subtasks | Interpersonal Skills Attitudes |

| leed-to-Know: Maintainer  |
|---|
|   |
| Describe how you must behave to complete the subtasks           |
|   |
|   |
|   |
|   |
|   |
|   |
| Identify the skills necessary for                               |
| interacting with other people in order to complete the subtasks |
|   |
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|          | Subsurfac   | e Sew     | age Treatment System Profes                           | sional N               |
|----------|---|-----------|---|------------------------|
| N        | Innesota Pollution<br>Control Agency  | V.C F     | Remove all tank contents throu                        | igh mair               |
| 2334     | List sequenced order of steps to<br>complete the master task<br>Break apart scum layer<br>Backflush or agitate septage for complete ren<br>Evacuate septage<br>Use dewatering, solid separating equipment t<br>Remove septage from Type IV or Type V<br>sewage tanks according to service<br>provider, operating permit, and<br>manufacturer requirements<br>Remove septage from external gravity<br>grease interceptor (EGGI) in adherance |           | Identify knowledge necessary to complete the subtasks | Attitudes              |
| Subtasks | y grease interceptor (EGGI) in adherance<br>with Minnesota Septage and Restaurant<br>Waste Management Guidelines<br>(Document ID wq-wwists-4-20)  | Knowledge |   | Interpersonal Skills A |

itenance hole

Describe how you must behave to complete the subtasks

|          |    | Subsurface  | e Sew     | age Treatment System Profes                              | sional               |
|----------|----|---|-----------|--|----------------------|
|          |    | nesota Pollution<br>ontrol Agency   | V.D A     | Assess condition of tank(s) and                          | d syste              |
|          |    | List sequenced order of steps to<br>complete the master task  |           | Identify knowledge necessary to<br>complete the subtasks |                      |
|          | 1  | Assess and certify sewage tank(s) as structurally sound and watertight  |           |  |                      |
|          | 2  | Assess and certify maintenance hole risers and covers as structurally sound and safe  |           |  | SS                   |
| Subtasks |    | Assess system operation based on use and<br>design<br>Identify cesspools, seepage pits, leaching<br>pits and drywells<br>Assess building sewer<br>Assess building sewer<br>Assess baffles<br>Assess effluent screen(s)<br>Assess effluent screen(s)<br>Assess tank inspection pipe(s)<br>Assess pump(s)<br>Assess supply pipe(s)<br>Assess valve box(es), drop box(es), and<br>distribution box(es) for leakage | Knowledge |  | Attitudes            |
| 0)       | 13 | Assess distribution pipes   | K         |  | Interpersonal Skills |

### >m components

Describe how you must behave to complete the subtasks

|          |             | Subsurfa  | ice Sewa  | age Treatment System Profes     | sional               |
|----------|-------------|---|-----------|---------------------------------|----------------------|
|          |             | V.E Determine if operation, repair, replacen  |           |                                 |                      |
|          |             | ontrol Agency List sequenced order of steps to  | recomm    | Identify knowledge necessary to |                      |
|          |             | complete the master task  |           | complete the subtasks           |                      |
|          | 1           | Delegate unauthorized work to appropriately licensed designer, installer, inspector, or service provider  |           |                                 |                      |
|          | 2           | Comply with various repair, replacement, and upgrade requirements in local ordinances   |           |                                 |                      |
|          | 3<br>4<br>5 | Properly abandon system with no future<br>intent for use<br>Properly abandon tank(s)<br>Properly dispose or cover contaminated<br>materials   |           |                                 | Attitudes            |
|          | 6           | Complete, sign, and submit a record of abandonment to local program within 90 days  |           |                                 | Atti                 |
| Subtasks | 10<br>11    | Repair, replace, or upgrade maintenance<br>hole riser and cover<br>Clean, steam, or jet building sewer, supply<br>pipe, and distribution pipes<br>Repair, replace, or upgrade baffle<br>Clean, repair, replace, or upgrade effluent<br>screen<br>Repair, replace, or upgrade tank inspection<br>pipe<br>Clean, repair or replace pump | Knowledge |                                 |                      |
|          | 13          | Repair or replace siphon  |           |                                 | Interpersonal Skills |

| Need-to-Know: Maintainer          |
|-----------------------------------|
|                                   |
| nent, or upgrade is               |
| Describe how you must behave to   |
| complete the subtasks             |
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| Identify the skills necessary for |
| interacting with other people in  |
| order to complete the subtasks    |
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| Subsurface Sewage Treatment System Profession |  |                            |   |                      |  |  |
|---|--|----------------------------|---|----------------------|--|--|
| ,   | Ainnesota Pollution<br>Control Agency  | V.F Complete service visit |   |                      |  |  |
| 2   | List sequenced order of steps to<br>complete the master task<br>Close tank(s)<br>Restore property<br>Submit required information to system owner<br>within 30 days of matinenance work | Knowledge                  | Identify knowledge necessary to complete the subtasks | Attitudes            |  |  |
| Sub   |  | Knov                       |   | Interpersonal Skills |  |  |

Describe how you must behave to complete the subtasks

| Subsurface Sewage Treatment System Professional Need-to-Know: Maintainer |  |           |   |                    |   |
|--|--|-----------|---|--------------------|---|
|  | innesota Pollution<br>Control Agency   | VI. Se    | ervice toilet waste treatment d   | evice              |   |
| 2<br>3<br>4<br>5<br>6<br>7   | List sequenced order of steps to<br>complete the master task<br>Service portable restroom facilities<br>Transport equipment safely<br>Maintain accurate records<br>Provide facilities appropriate to customer<br>needs<br>Maintain sanitary condition of all facilities<br>Properly manage spills<br>Follow PSAI Code of Excellence<br>Service composting, incinerating,<br>chemical, and other non-flushing toilets<br>in accordance with state and local<br>requirements and manufacturer<br>recommendations | Knowledge | Identify knowledge necessary to<br>complete the subtasks<br>PSAI Code of Excellence | Attitudes          | Describe how you must behave to<br>complete the subtasks  |
| S  |  | Kno       |   | terpersonal Skills | Identify the skills necessary for<br>interacting with other people in<br>order to complete the subtasks |

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|          | (  | Subsurfa  | ce Se     | wage Treatment System Profe                              | ssiona    | I Need-to-Know: Maintainer                               |
|----------|----|---|-----------|--|-----------|--|
|          |    | on<br>ota Pollution<br>rol Agency   | VII. D    | Pistribute septage                                       |           |  |
|          |    | List sequenced order of steps to<br>complete the master task  |           | Identify knowledge necessary to<br>complete the subtasks |           | Describe how you must behave to<br>complete the subtasks |
|          | 1  | Comply with local septage management requirements   |           |  |           |  |
|          | 2  | Haul septage to approved public sewage treatment facility   |           |  |           |  |
|          | 3  | Haul septage to approved private sewage treatment works   |           |  |           |  |
|          | 4  | Prepare and land apply septage in compliance<br>with Minnesota Guidelines and 40 CFR, Part<br>503   |           |  |           |  |
|          | 5  | Employ pathogen control measures of site use restrictions and lime stabilization  |           |  | 9<br>S    |  |
|          | 6  | Employ vector attraction reduction strategy of injection, immediate incorporation, or lime stabilization  |           |  | Attitudes |  |
|          | 7  | Add appropriate type and amount of lime to septage  |           |  | ∖tti      |  |
|          | 8  | Measure pH of septage and correct for temperature   | Ð         |  | 4         |  |
| Subtasks | 9  | Spread septage in compliance with daily, winter, and agronomic application rate limits  | Knowledge |  |           |  |
| ubté     | 10 | Calibrate truck to comply with application rate limits  | MO        |  |           |  |
| Ś        | 11 | Adhere to Minnesota Septage and<br>Restaurant Waste Management Guidelines<br>(Document ID wq-wwists-4-20) for land<br>application of restaurant grease trap waste | Kn        |  |           |  |

|  |  | Identify the skills necessary for<br>interacting with other people in<br>order to complete the subtasks |
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| (   | Subsurface Sewage Treatment System Professional Need-to-Know: Maintaine  |           |  |           |  |
|---|--|-----------|--|-----------|--|
| Minnesota Pollution, OCT Not Network Control Agency |  |           |  | ecords    |  |
|   | List sequenced order of steps to<br>complete the master task   |           | Identify knowledge necessary to<br>complete the subtasks |           | Describe how you must behave to<br>complete the subtasks           |
| 1   | Complete daily hauling record  |           |  |           |  |
| 2   | Complete site specific record  |           |  |           |  |
| 3   | Record and submit management information to system owner within 30 days of performing work                             |           |  |           |  |
| 4   | Record and submit pump-out date, reason for pumping, access point, gallons removed, method of septage disposal         |           |  | es        |  |
| 5   | Record and submit any tank leakage; both above and below tank operating depth;   |           |  | tud       |  |
| 6   | Record and submit any troubleshooting or<br>repairs conducted and any safety concerns with<br>maintenance hole cover   |           |  | Attitudes |  |
| s <sup>7</sup>                                      | Provide certified signature for any sewage tank certification of compliance  | ge        |  |           |  |
| Subtasks  | Provide written reports of noncompliance to<br>homeowner within 30 days<br>Maintain pumping records for a period of at | ed        |  |           |  |
| bta   | least five years<br>Maintain written agreements for any sewage   | M         |  |           |  |
| ns <sup>10</sup>                                    | treatment facilities that accept septage   | Knowledge |  |           |  |
|   |  | <u> </u>  |  |           | Identify the skills necessary for                                  |
|   |  |           |  | lls       | interacting with other people in<br>order to complete the subtasks |
|   |  |           |  | Skills    |  |
|   |  |           |  | <u>เ</u>  |  |