CHAPTER 7105
MINNESOTA POLLUTION CONTROL AGENCY
UNDERGROUND STORAGE TANKS

TRAINING AND CERTIFICATION

7105.0010 DEFINITIONS.

Subpart 1. **Scope.** For the purposes of this chapter, the following terms and abbreviations have the meanings given them. Terms that are not specifically defined have the meanings given them in Minnesota Statutes, sections 115.01, 115C.02, and 116.46.

Subp. 2. **Agency.** "Agency" means the Minnesota Pollution Control Agency.

Subp. 3. **Approved training provider.** "Approved training provider" means a person approved by the commissioner to provide the installer training course or the final examination.

Subp. 4. **Certificate.** "Certificate" means a document issued by the agency to a person who has met the certification requirements of this chapter.

Subp. 5. **Certified contractor.** "Certified contractor" means a contractor that has been certified by the agency under the requirements of this chapter to engage in the business of installing, repairing, or closing underground storage tank systems.

Subp. 6. **Certified supervisor or supervisor.** "Certified supervisor" or "supervisor" means an individual certified by the agency under the requirements of this chapter to perform one or more storage tank projects. This individual provides supervision and direction to workers engaged in a storage tank project.

Subp. 7. **Closure or removal.** "Closure" or "removal" means permanently taking an underground storage tank out of service by either closing it in place, removing it from the ground, or converting it to store a nonregulated substance, as required by Code of Federal Regulations, title 40, part 280, or its counterpart in Minnesota rules when adopted.

Subp. 8. **Commissioner.** "Commissioner" means the commissioner of the agency.

Subp. 9. **Contractor.** "Contractor" means a corporation, partnership, or duly constituted individual proprietorship that holds itself as being qualified to engage in storage tank projects.

Subp. 10. **Critical junctures.**

A. "Critical junctures" in the case of an installation means the steps in the installation of an underground storage tank system that are important to the prevention of releases, including but not limited to:

(1) preparation of the excavation immediately before receiving backfill and the tank;

(2) setting of the tank and the piping, including placement of anchoring devices, backfill to the level of the tank, and strapping, if any;

(3) any time during the installation in which components of the piping are connected, field coated, or cathodically protected;

(4) all pressure testing of the tank system, including associated piping, performed during the installation; and

(5) completion of backfill and filling of the excavation.

B. "Critical junctures" in the case of a tank removal means the steps in the removal project that are important to the prevention of releases, including but not limited to:

(1) the cleaning and purging of the tank system;

(2) the actual excavation and removal of the tank system;

(3) all testing associated with the cleaning and purging processes; and

(4) any time during the removal in which components of the tank are disconnected or capped.

C. "Critical junctures" in the case of a repair means the steps in the repair project that are comparable to the steps listed for item A in terms of their importance in the prevention of releases, including but not limited to:

(1) the actual excavation of existing tanks or piping;

(2) the actual performance of the repairs to the tank system;

(3) any time during the repair project in which components of the piping are connected; and

(4) any time during the repair project in which the tank or its associated piping is tested.

Subp. 11. **Day.** "Day," when used to describe a day of training, equals eight hours including breaks and lunch.

Subp. 12. **Diploma.** "Diploma" means a document verifying the successful completion of the required training course.

Subp. 13. **Disciplines of certification or disciplines.** "Disciplines of certification" or "disciplines" means the categories of tank projects within which a person may be certified under the requirements of this chapter. Each discipline includes the storage tank projects listed in items A to C.

A. The discipline of "installation" includes installations as defined in subpart 15, as well as the correction, restoration, modification, or upgrading of tank system piping or appurtenances.

B. The discipline of "repair" includes the correction restoration, modification, or upgrading of the tank vessel itself, for example, repairing a hole in a tank or relining a tank. The discipline of repair does not include other storage tank projects defined as "repair" in subpart 21 which do not involve the tank vessel itself.

C. The discipline of "closure" includes the storage tank projects defined in subpart 7.

Subp. 14. **EPA.** "EPA" means the United States Environmental Protection Agency.

Subp. 15. **Installation.** "Installation" means the work involved in placing an underground storage tank in position and preparing it to be placed in service or the movement of an underground storage tank to a new position and preparing it to be placed in service.

Subp. 16. **Installer.** "Installer" means a person who installs, repairs, or closes an underground storage tank.

Subp. 17. **Operator.** "Operator" means a person in control of, or having responsibility for, the daily operation of a tank, and who was in control of, or had responsibility for, the daily operation of the tank immediately before discontinuation of its use.

Subp. 18. **Owner.** "Owner" means a person who holds title to, controls, or possesses an interest in a tank and who held title to, controlled, or possessed an

interest in a tank immediately before discontinuation of its use. Owner does not include a person who holds an interest in a tank solely for financial security, unless through foreclosure or other related actions the holder of a security interest has taken possession of the tank.

Subp. 19. **Person.** "Person" means an individual, partnership, association, public or private corporation, or other legal entity, including the United States government, an interstate commission or other body, the state, or any agency, board, bureau, office, department, or political subdivision of the state, but does not include the Pollution Control Agency.

Subp. 20. **Regulated substance.** "Regulated substance" means:

A. a hazardous material listed in Code of Federal Regulations, title 49, section 172.101; or

B. petroleum, including:

(1) gasoline and fuel oil as defined in Minnesota Statutes, section 296.01, subdivisions 3 and 4;

(2) crude oil or a fraction of crude oil that is liquid at a temperature of 60 degrees Fahrenheit and a pressure of 14.7 pounds per square inch absolute;

(3) constituents of gasoline and fuel oil under subitem (1) and constituents of crude oil under subitem (2); and

(4) petroleum-based substances that are comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading, and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, and used oils.

Subp. 21. **Repair.** "Repair" means the correction, restoration, modification, or upgrading of a tank system, including but not limited to the addition of cathodic protection systems; the replacement of piping, valves, fill pipes, or vents; the lining of a tank through the application of materials such as epoxy resins; and other similar activities that may affect the integrity of the tank system.

Subp. 22. **State.** "State" means the state of Minnesota.

Subp. 23. **Storage tank project.** "Storage tank project" means the installation, repair, or closure of an underground storage tank.

Subp. 24. **Tank or tank system.** "Tank" or "tank system" has the same meaning as underground storage tank.

Subp. 25. **Underground storage tank.** "Underground storage tank" means any one or a combination of containers including tanks, vessels, enclosures, or structures and underground appurtenances connected to them, that is used to contain or dispense an accumulation of regulated substances and the volume of which, including the volume of the underground pipes connected to them, is ten percent or more beneath the surface of the ground.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0020 PURPOSE.

This chapter implements the requirement of Minnesota Statutes, section 116.491, that the agency require a person who installs, repairs, or takes an underground storage tank permanently out of service to first obtain a certificate of competency from the agency.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0030 GENERAL PROVISIONS.

Subpart 1. **Certification requirements and deadlines.** No person may install, repair, or close a tank system after July 9, 1990, unless:

A. a supervisor certified in the appropriate discipline is physically present on site at all critical junctures during the storage tank project; and

B. the certified supervisor in item A is also a certified contractor or is in the employ of a certified contractor.

Subp. 2. **Certificate availability.** A copy of the contractor's current certificate must be at the work location and posted in a conspicuous place. Certified supervisors must have copies of current certificates issued by the agency at the location where they are supervising work.

Subp. 3. **Tank owner or operator requirements.** Owners or operators of an underground storage tank must not allow a storage tank project to be performed on their tank system, except in compliance with subpart 1.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0040 EXCLUSIONS.

The following underground storage tanks are excluded from the requirements of this chapter:

A. a wastewater treatment tank system that is part of a wastewater treatment facility regulated under United States Code, title 33, section 1317 or 1342;

B. equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tank systems and electrical equipment tank systems;

C. tank systems with a capacity of 110 gallons or less;

D. tank systems that contain a de minimus concentration of regulated substances;

E. an emergency spill or overfill containment tank system that is expeditiously emptied after use;

F. farm or residential tank systems of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;

G. tank systems of 1,100 gallons or less capacity used for storing heating oil for consumptive use on the premises where stored;

H. septic tanks;

I. pipeline facilities, including gathering lines, regulated under United States Code, title 49, chapter 24 or 29;

J. surface impoundments, pits, ponds, or lagoons;

K. storm water or waste water collection systems;

L. flow-through process tank systems;

M. tank systems located in an underground area such as a basement, cellar, mine working, drift, shaft, or tunnel if the tank is located on or above the surface of the floor;

N. wastewater treatment tank systems;

O. tank systems containing radioactive material that is regulated under the Atomic Energy Act of 1954, United States Code, title 42, sections 2011 to 2296;

P. a tank system that is part of an emergency generator system at nuclear power generator facilities regulated by the Nuclear Regulatory Commission under Code of Federal Regulations, title 10, section 50, Appendix A;

Q. airport hydrant fuel distribution systems; and

R. underground storage tank systems with field constructed tanks.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0050 CONTRACTOR CERTIFICATION.

Subpart 1. **Contractor certification requirements.** To obtain certification from the commissioner, an applicant for a contractor's certificate shall:

A. be, or have in its employ, a certified supervisor who will exercise responsible supervisory control over a given storage tank project and who will be physically present on site at the critical junctures in the tank project;

B. submit documentation showing that it has comprehensive general liability insurance, surety bonds, or liquid company assets that, in combination, represent a value of not less than five times the value of the largest storage tank project contract performed by the contractor during the previous two years; and

C. complete the application procedures in subpart 3 or 4.

Subp. 2. **Disciplines of contractor certification.** A contractor may be certified in one or more of the following disciplines providing it employs supervisors that are certified in the disciplines for which the contractor seeks certification, as defined in part 7105.0010, subpart 13:

A. installation;

B. repair; and

C. closure.

Subp. 3. **Application procedures for contractor certification.** To apply for certification as a certified contractor, the following information must be submitted to the agency on a form provided by the agency:

A. the full name, address, and telephone number of the firm;

B. any names held by the firm within the previous five years;

C. the discipline for which the applicant wishes certification;

D. the nature of the storage tank projects to be conducted;

E. a summary of the project history of the firm over the two-year period immediately preceding the application;

F. documentation that the contractor meets the financial responsibility requirements in subpart 1, item B;

G. identification of industry or government licenses held by the firm related to underground storage tanks;

H. the names of employees certified by the agency to perform and supervise storage tank projects, including identification of the specific disciplines for which they are certified, certification numbers, and expiration dates;

I. a statement signed and notarized by at least one active officer, partner, owner, or designated managerial representative of the contractor that certifies that:

(1) the person signing has obtained a copy of the applicable laws and rules pertaining to the regulation of underground storage tanks in the state, including the standards of performance in part 7105.0070;

(2) the person signing has read and understands the regulations in subitem (1) and will direct the employees and principals of the company to perform the storage tank projects rendered by the company in a manner that is consistent with their requirements; and

(3) on all storage tank projects a certified supervisor will exercise responsible supervisory control over the work and will be physically present on site at all critical junctures during the storage tank project; and

J. remittance of the contractor certification fee.

The application must be specific to one contractor, but may include a request to be certified in more than one discipline.

Subp. 4. **Application procedures for contractor certification renewals and upgrades.** Certification renewals and upgrades must be applied for as outlined in

subpart 3. In addition, a copy of the applicant's most recent contractor certificate must also accompany the application. Completed renewal applications should be submitted no later than 30 days before the expiration date.

Subp. 5. **Length of contractor certification.** Contractor certificates expire two years after the date of issuance.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0060 SUPERVISOR CERTIFICATION.

Subpart 1. **Supervisor certification requirements.** To obtain certification from the commissioner, an applicant for a supervisor's certificate shall:

A. in the two-year period immediately before making an initial or renewal application, have successfully completed an approved five-day training course as outlined in parts 7105.0080 and 7105.0090, or a course approved by the commissioner under subpart 7;

B. have at least two years of tank service experience and have actively participated in the field on a minimum of five underground storage tank projects during the two-year period immediately before making an initial or renewal application, with at least four of these projects being in the discipline for which the individual wishes to be certified. Any experience obtained after July 9, 1990, for the purposes of obtaining initial certification, must be in the employ of a certified contractor and under the immediate and personal supervision of a certified supervisor; and

C. complete the application procedures in subpart 4 or 5.

Subp. 2. **Successful completion of a training course.** Successful completion of a training course includes attending all training hours and passing the final examination.

Subp. 3. **Disciplines of supervisor certification.** An individual, with the appropriate training and experience, may be certified in one or more of the following disciplines, as defined in part 7105.0010, subpart 13:

A. installation;

B. repair; and

C. closure.

Subp. 4. **Application procedures for supervisor certification.** To apply for certification as a certified supervisor, the following information must be submitted to the agency on a form provided by the agency:

A. the applicant's full name, social security number, job title, name of business, business address, and business phone number;

B. a copy of the most recent training course diploma;

C. the date of the final examination and documentation that a passing score was received, if not included on the course diploma;

D. the discipline for which the applicant wishes certification;

E. documentation that the experience requirements in subpart 1 have been met; and

F. a signed, notarized statement that the applicant has obtained a copy, read, understands, and will comply with all applicable laws and rules pertaining to the regulation of underground storage tanks in the state, including the standards of performance in part 7105.0070.

The application must be specific to one individual, but may include a request to be certified in more than one discipline.

Subp. 5. **Additional application procedures for supervisor certification renewals and upgrades.** Certification renewals and upgrades must be applied for as outlined in subpart 4. In addition, a copy of the applicant's most recent certificate

must accompany the application. Completed renewal applications should be submitted no later than 30 days before the expiration date.

Subp. 6. **Length of supervisor certification.** Supervisor certificates expire two years after the applicant successfully completes the final training course examination.

Subp. 7. **Reciprocity.** The commissioner shall approve a tank installer certification course sponsored by a state or organization other than an approved training provider if the commissioner determines that the course is comparable to the program outlined in parts 7105.0080 and 7105.0090. Persons seeking reciprocity under this subpart shall be required by the commissioner to pass an examination to verify their familiarity with Minnesota's laws pertaining to underground storage tank systems if the commissioner finds that their courses did not adequately address Minnesota's statutes and rules. This examination may be taken any time after the completion of the approved training course and before applying for certification. However, the certificate expires two years after the final day of the approved training course.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0070 STANDARDS OF PERFORMANCE.

Subpart 1. **Standards of performance for contractors and supervisors.** Certified contractors and supervisors shall comply with the standards of performance in items A and B.

A. Certified contractors and supervisors shall perform or undertake only those storage tank projects that conform to accepted industry standards and federal, state, and local laws and safeguard the public life, health, safety and welfare, and the environment.

B. Certified contractors and supervisors must not offer, give, solicit, or receive, either directly or indirectly, any commission, gift, or other valuable consideration to secure work, and shall not make any political contribution with the intent to influence the award of a contract by public authority.

Subp. 2. **Additional standards of performance for supervisors.** In addition to the standards in subpart 1, certified supervisors:

A. shall perform all storage tank projects so that there is no release of the contents of the tank;

B. must not affix the supervisor's signature or certification number to a storage tank project unless it was accomplished under the supervisor's direct control and personal supervision and the supervisor was present at all critical junctures during the storage tank project; and

C. must not certify to an owner that a storage tank project is complete unless it complies with Minnesota Statutes, sections 116.46 to 116.50, Code of Federal Regulations, title 40, part 280, subparts A to G, and state technical tank rules adopted under Minnesota Statutes, section 116.49, subdivision 1, when adopted. Where storage tank projects are being performed for an owner or operator on a contract basis, both the certified supervisor and the certified contractor for whom the supervisor works are responsible for the accuracy of the representations made.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0080 TRAINING COURSE REQUIREMENTS.

Subpart 1. **Storage tank installer training course requirements.** The storage tank installer training course must be at least five days in length and must include lectures, demonstrations, four hours of hands-on training, course review, and a

final written examination. Publications cited are incorporated by reference in part 7105.0130. The following topics must be included in the course:

A. regulatory review providing familiarity with the following codes, statutes, rules, and recommended practices and how they relate to the other course requirements, with particular emphasis on subitem (9):

(1) PEI's Recommended Practices for Installation of Underground Liquid Storage Systems (PEI/RP 100);

(2) API's Installation of Underground Petroleum Storage Systems (API Recommended Practice 1615);

(3) API's Removal and Disposal of Used Underground Petroleum Storage Tanks (API Recommended Practice 1604);

(4) EPA's Underground Storage Tanks - Technical Requirements at Code of Federal Regulations, title 40, part 280, subparts A to G;

(5) parts 7510.3120 and 7510.3240, incorporating by reference and amending Article 79 of the Uniform Fire Code;

(6) parts 7001.0580, 7045.0020, 7045.0528, 7045.0580, 7045.0628, and 7045.0629, relating to hazardous waste tanks;

(7) Minnesota Statutes, sections 116.46 to 116.50;

(8) Minnesota Statutes, chapter 115C; and

(9) state technical tank rules adopted under Minnesota Statutes, section 116.49, subdivision 1, when adopted;

B. legal liabilities and defenses:

(1) responsibilities of the contractor;

(2) a discussion of comprehensive general liability policies, claims-made and occurrence policies, and environmental and pollution liability policy clauses;

(3) state tank contractor liability insurance requirements;

(4) bonding and the relationship of insurance availability to bond availability;

(5) a discussion of EPA's Underground Storage Tanks Containing Petroleum - Financial Responsibility Requirements at Code of Federal Regulations, title 40, part 280, subpart H; and

(6) third party liabilities and defenses;

C. safety aspects, including discussions on:

(1) OSHA's Safety and Health standards relating to excavations, trenching, and shoring at Code of Federal Regulations, title 29, part 1926, subpart P;

(2) Minnesota Department of Labor and Industry Employee Right-to-Know training standards in part 5206.0700;

(3) fire and explosion hazards;

(4) working around heavy equipment, excavations, hazardous materials, vehicular traffic, overhead and underground obstacles such as power and sewer lines, and other hazardous situations;

(5) personal protective equipment and its proper use; and

(6) safety considerations and precautions, including erecting physical barriers and signs, and trench shoring;

D. underground storage tank installation:

(1) project management:

(a) establishing lines of responsibility;

(b) financial parameters;

(c) planning and mobilization, including lining up work crews and tools, calling subcontractors, and picking up materials;

(d) site visit before bidding;

(e) project team, assigning a project leader;

(f) timing, including completion date and schedules for equipment, materials, and crews;

(g) subcontractors and material suppliers, including coordination of schedules and ordering materials, with consideration given to material compatibility between other equipment and product to be stored;

(h) job site management and allocation of work areas, including areas to safely stockpile materials such as backfill, tanks, and piping, and safe and effective traffic flow for heavy equipment as well as civilian traffic;

(i) safety, including assessing hazards and planning for proper safety equipment;

(j) employee training, including informal field training and formal in-house or outside training;

(k) contingency planning;

(l) progress reports; and

(m) plans and specifications, as-built drawings;

(2) material handling:

(a) transportation, unloading, lifting, lowering, and storage;

(b) steel, fiberglass, and composite tanks and pipe handling requirements; and

(c) single-wall versus double-wall;

(3) preinstallation inspection and testing:

(a) inspection of tanks, pipes, and other materials for size, as well as scratches, dents or other damages, and minor repairs;

(b) preinstallation "soap test" on single-wall and double-wall tanks, including proper soaping techniques, selection of gauges, and proper pressures;

(c) preinstallation testing of tanks shipped under a vacuum;

(d) holiday testing techniques for composite tanks;

(e) isolating and soap testing pipe runs before backfilling;

(f) inspection and testing of impervious liners before backfilling; and

(g) testing and visual inspection of cathodic protection systems, secondary containment, monitoring systems, and overfill prevention systems before placing the tank facility into operation;

(4) excavating and trenching:

(a) excavation size, depth, bedding, and backfill;

(b) filter fabrics, sloping, and water problems;

(c) storage and disposal of excavated materials, contaminated versus uncontaminated;

(d) adjacent structures;

(e) safety considerations, including properly sized equipment; and

(f) piping trench slope and depth considerations;

(5) supplemental restraints:

(a) reasons for supplemental restraints;

(b) types and proper installation of supports, foundations, and anchorage;

(c) water table, flooding, and weather considerations; and

(d) factors influencing buoyancy, including flotation and anchorage calculation exercises;

(6) backfilling and compaction:

(a) ballasting;

(b) types and sizes of backfill materials suitable for composite tanks and steel and fiberglass tanks and piping;

(c) placement of tanks and piping, including bedding depth and distances between tanks or pipes;

(d) backfilling and compaction procedures, including the special compaction requirements of sand;

(e) measuring tank deflection;

(f) prevention of backfill migration using filter fabrics; and

(g) grading and paving precautions;

(7) secondary containment:

(a) types, including double-walled tanks and piping, impervious liners, catchment basins, piping sumps, and concrete vaults;

(b) installation methods and considerations; and

(c) material compatibility;

E. piping:

(1) leak statistics concerning improperly installed piping;

(2) installation methods:

(a) types and specific installation requirements, including galvanized steel, fiberglass, coated, and single-walled and double-walled;

(b) piping layout and design;

(c) pipe trenches, backfilling, compaction, and paving;

(d) pipefitting, including curing times for fiberglass adhesives, compatibility of product with pipe dope, minimizing fittings, tightness, and pipe support;

(e) swing joints and flexible connectors;

(f) emergency shutoff valves;

(g) tank fittings and bushings;

(h) vent capacity, location, arrangement, and height; and

(i) visual inspections;

(3) material compatibility;

(4) manifolded tanks; and

(5) vapor recovery systems;

F. electrical installation:

(1) regulatory review, including:

(a) parts 7510.3120 and 7510.3240, incorporating by reference and amending Article 79 of the Uniform Fire Code; and

(b) API's Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems (API Recommended Practice 1632);

(2) Class I locations, Divisions I and II, requirements and restrictions as described in parts 7510.3120 and 7510.3240, incorporating by reference and amending Article 79 of the Uniform Fire Code;

(3) definitions, including explosion proof apparatus and intrinsically safe equipment and wiring;

(4) general installation considerations, including trenching, cover, grounding, backfill, seals, bushings, supports, and stray currents;

(5) circuit disconnects;

(6) accessibility of circuit breakers for monitoring devices and impressed cathodic protection systems by unauthorized personnel; and

(7) as-built drawings;

G. ancillary equipment placement and installation:

(1) fuel dispensing systems;

(2) emergency power cutoffs;

(3) suction and remote pumping systems;

(4) fill-pipe and spill catchment basin;

(5) tank fittings;

(6) observation and monitoring wells, including a discussion of Minnesota Department of Health's Water Well Construction Code in chapter 4725;

(7) interstitial tank and piping monitors; and

(8) identification of wells, manholes, and fill pipes;

H. tank system testing:

(1) methods and appropriate uses:

(a) a detailed discussion of how to conduct a proper "soap" or air test;

(b) hydrostatic pressure, tightness, or precision tests;

(c) spark testing for holidays on composite steel tanks;

(d) testing of new cathodic protection systems for continuity and isolation;

(e) vapor testing during tank closure;

(f) testing impervious liners according to the manufacturers' instructions; and

(g) testing of other associated equipment for proper installation and operation;

(2) testing considerations:

(a) new versus existing tanks or piping;

(b) single-wall versus double-wall tanks or piping;

(c) manufacturers' instructions;

(d) safeguards;

(e) tank deflection; and

(f) variables specific to certain tests, such as pressure, temperature, and vapor traps; and

(3) documentation and record keeping requirements;

I. release detection:

(1) leak detection:

(a) interstitial monitoring;

(b) observation wells located in the excavation zone and collection sumps of secondary containment systems;

(c) automatic tank gauging;

(d) vapor monitoring;

(e) groundwater monitoring;

(f) inventory control; and

(g) line pressure monitoring;

(2) spill and overfill prevention:

(a) catchment basins;

(b) automatic shutoff devices; and

(c) ball float valves; and

(3) identification and security considerations for monitoring systems;

J. corrosion protection:

(1) requirements for external corrosion protection in Code of Federal Regulations, title 40, part 280, subparts A to G, and state technical tank rules adopted under Minnesota Statutes, section 116.49, subdivision 1, when adopted;

(2) a discussion of API's Cathodic Protection of Underground Storage Tanks and Piping Systems (API Recommended Practice 1632);

(3) coatings for external corrosion protection:

(a) desirable characteristics;

(b) handling, inspection, and installation; and

(c) minor, on-site repairs according to the manufacturers' instructions;

(4) cathodic protection:

(a) sacrificial anode versus impressed current;

(b) isolation of tank and piping;

(c) rule of thumb and mathematical determination of adequate corrosion protection;

(d) periodic inspections and testing;

(e) considerations when choosing a cathodic protection system;

(f) stray current corrosion;

(g) proper installation of a cathodic protection system, including an in-depth discussion of the installation of the factory-installed cathodic protection systems; and

(h) installation and use of test cells and monitoring ports;

K. tank closure and removal:

(1) regulatory discussion:

(a) requirements for external corrosion protection in EPA's Underground Storage Tanks - Technical Requirements at Code of Federal Regulations, title 40, part 280, subparts A to G;

(b) API's Removal and Disposal of Used Underground Petroleum Storage Tanks (API Recommended Practice 1604);

(c) API's Cleaning Petroleum Storage Tanks (API Recommended Practice 2015);

(d) NFPA's Cleaning Small Tanks and Containers (NFPA Standard 327);

(e) requirements for tank closure in parts 7510.3120 and 7510.3240, incorporating by reference and amending Article 79 of the Uniform Fire Code; and

(f) state technical tank rules adopted under Minnesota Statutes, section 116.49, subdivision 1, when adopted;

(2) temporary and permanent closure requirements;

(3) tank cleaning methods:

(a) purging procedures, pros and cons:

i. inert gas: carbon dioxide (CO_2) or nitrogen (N_2);

ii. solid carbon dioxide (dry ice);

iii. compressed air;

iv. diffused air;

v. water; and

vi. steam;

(b) compatibility of method with product;

(c) safety procedures and equipment; and

(d) proper disposal of residues and sludge;

(4) testing for flammable and combustible vapors and oxygen content;

(5) closure in place, filling with inert substances such as sand, concrete slurries, or polyurethane-type foams;

(6) tank removal;

(7) site assessment requirements:

(a) sampling equipment and methods;

(b) reporting requirements; and

(c) records; and

(8) disposal of tanks;

L. role of other consultants, including corrosion experts, environmental contamination consultants, and engineers;

M. contract specifications and discussion of key elements that are included in contract specifications;

N. demonstrations and hands-on training that gives actual experience performing tasks associated with tank projects:

(1) soap testing and leak detection procedures;

(2) cathodic protection demonstrations;

(3) tank and piping installation procedures; and

(4) safety considerations for installation, repair, and removal;

O. record keeping:

(1) records required by state and federal regulations in item A;

(2) records recommended for legal and insurance purposes; and

(3) use of photographs for installation and removal records;

P. supervisory techniques for tank activities to enforce and reinforce the required work practices and discourage unsafe work practices;

Q. a discussion of the possible environmental consequences resulting from improper installation, repair, and closure of underground storage tank systems;

R. course review covering the key aspects of the training course; and

S. other subjects that the commissioner determines should be taught to reflect advances in tank installation, repair, and removal methods or safety practices.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0090 EXAMINATIONS AND DIPLOMAS.

Subpart 1. **Administration of examinations.** Examinations must be conducted by the agency, or by personnel of colleges or educational institutes selected and designated by the agency.

Subp. 2. **Examination specifications.** The final examination administered under this chapter must be a written, comprehensive examination consisting of 100 multiple choice questions, covering the topics discussed in the training course.

Subp. 3. **Examination requirements.** A person seeking certification as a certified supervisor shall participate in all course requirements and pass a written final examination. An applicant shall score 75 percent or higher to pass the final examination. The final examination must be passed within ten days after completing the training course.

Subp. 4. **Retest.** If a person fails to pass the final examination, one retest may be taken. If a person fails to pass the retest, the full course must be attended again before further testing.

Subp. 5. **Diplomas.** The training provider shall issue a numbered diploma to each student who completes the training course and successfully passes the examination. The following information must be included on the diploma:

A. the name of the student;

B. the name of the course completed;

C. the dates of the course and the examination;

D. a statement indicating that the student attended the course and passed the examination;

E. an expiration date for accreditation that is two years after the date on which the student passed the examination; and

F. a diploma number.

If the person administering the examination is not the same person administering the course, both persons shall sign the diploma.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0100 APPROVAL OF TRAINING COURSE.

Subpart 1. **Application procedures for training course approval.** The commissioner may approve training courses developed by persons other than the agency staff. The commissioner shall approve a course that meets the requirements of this part and parts 7105.0080 and 7105.0090. To apply for agency approval of a tank installer training course, the following information must be submitted to the commissioner:

A. the course sponsor's name, address, and phone number;

B. a list of states that currently approve the training course;

C. the course curriculum;

D. a letter from the training course sponsor that clearly indicates how the course meets parts 7105.0080 and 7105.0090, including:

(1) length of training in days;

(2) amount and type of hands-on training;

(3) examination, including length, format, and passing score; and

(4) topics covered in the course;

E. a copy of all course materials, such as student manuals, instructor notebooks, and handouts;

F. a detailed statement about development of the examination used in the course;

G. the names and qualifications of course instructors, as outlined in subpart 2; and

H. a description and an example of numbered diplomas issued to students who attend the course and pass the examination.

Subp. 2. **Experience requirements for instructors.** To be considered qualified, course instructors shall meet the following requirements:

A. field experience in storage tank installation, repair, and removal equal to a total of at least 4,000 hours, which may be met by just one instructor, or through a combination of experience held by a number of instructors; and

B. after meeting the requirement in item A, any additional instructors shall have directly related experience or academic credentials in a related field.

Subp. 3. **Suspension or revocation of course approval.** The agency shall suspend or revoke approval of a training course if the commissioner finds that the course is not providing training that meets the requirements of this chapter.

Subp. 4. **Renewal of course approval.** Except as provided in subpart 3, approval of a training course shall remain in effect until the agency notifies

approved trainers that changes in the course are required. At that time, the training providers shall submit the revised course to the agency for approval.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0110 SANCTIONS.

Subpart 1. **Criteria.** The commissioner may refuse to issue, renew, or reinstate a certificate or suspend or revoke a certificate for any of the following reasons:

A. submission of false or misleading information or credentials to obtain or renew a certificate;

B. failure to meet the requirements to obtain or renew a certificate in this chapter;

C. failure to meet the technical requirements of Code of Federal Regulations, title 40, part 280, or its counterpart in Minnesota rules when adopted, the requirements of this chapter including the Standards of Performance in part 7105.0070, or other law relating to storage tank projects; or

D. negligence in the performance of storage tank projects.

Subp. 2. **Investigation.** The commissioner may initiate an investigation upon receiving a signed written complaint alleging the existence of grounds for sanctions against a certified person or an applicant for certification, or whenever the commissioner has reason to believe that sanctions may be warranted.

Subp. 3. **Procedures.** Prior to revoking or suspending a certificate and subsequent to a refusal to issue, reissue, or reinstate a certificate, the person against whom the sanction is being imposed shall be given notice of the sanction, and the reasons for it, and the person shall have ten days from the date of receiving the notice to request that a contested case hearing be held on the matter. The commissioner shall not revoke or suspend a certificate until the contested case hearing has been completed or until the request for a hearing has been considered at an agency meeting and denied. If no request for a contested case hearing is received by the commissioner within the ten days, the sanction set forth in the notice shall go into effect, in the case of a certificate suspension or revocation, or shall become final, in the case of a refusal to issue, reissue, or reinstate a certificate.

Subp. 4. **Contested case requests.** Upon receipt of a contested case hearing request, the commissioner shall either grant the request and schedule a hearing or put the matter on the agenda for consideration at an agency meeting under part 7000.0500, subpart 6. If the matter is considered at an agency meeting, the provisions of part 7000.1000, subpart 3, shall govern whether a hearing request is granted. Contested case hearings under this part must comply with the contested case provisions of chapter 7000 and Minnesota Statutes, chapter 14.

Subp. 5. **Return of certificate.** Upon revocation or suspension, certified persons shall return to the agency their original certificate and current renewal certificates.

Subp. 6. **Recertification.** A person whose certificate has been revoked shall not be entitled to apply for recertification until at least one year following the effective date of revocation or for any longer period of time specified in the revocation order.

Subp. 7. **Reinstatement after suspension.** The commissioner shall reinstate a suspended certificate if the person whose certificate has been suspended fulfills the terms of the suspension order and meets all applicable requirements of the rules for obtaining a certificate.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0120 FEES.

Subpart 1. **Certification fee.** The fee for each new, modified, or renewal application for contractor or supervisor certification is $50.

Subp. 2. **Refund of fees.** The agency commissioner shall only return fees received from individuals who are rejected for certification.

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*

7105.0130 INCORPORATION BY REFERENCE.

Subpart 1. **Scope.** For purposes of this chapter, the documents in subparts 2 to 4 are incorporated by reference. They can be found at the Minnesota Law Library, Ford Building, 117 University Avenue, Saint Paul, Minnesota 55155. They are subject to frequent change. If any of the documents in subparts 2 to 4 are amended, and if the amendments are incorporated by reference or otherwise made a part of state or federal law applicable to the installation, repair, or closure of storage tank systems, then the amendments to the documents are also incorporated by reference into this chapter.

Subp. 2. **API documents.** The following documents are also available from the American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005:

A. American Petroleum Institute, Removal and Disposal of Used Underground Petroleum Storage Tanks, API/RP 1604 (December 1987);

B. American Petroleum Institute, Installation of Underground Petroleum Storage Systems, API/RP 1615 (November 1987);

C. American Petroleum Institute, Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems, API/RP 1632 (December 1987); and

D. American Petroleum Institute, Cleaning Petroleum Storage Tanks, API/RP 2015 (September 1985).

Subp. 3. **NFPA document.** The following document is also available from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269: National Fire Protection Association, Cleaning Small Tanks and Containers, NFPA 327 (1987).

Subp. 4. **PEI document.** The following document is also available from the Petroleum Equipment Institute, P.O. Box 2380, Tulsa, Oklahoma 74101: Petroleum Equipment Institute, Recommended Practices for the Installation of Liquid Storage Systems, PEI/RP 100 (1987).

Statutory Authority: *MS s 116.491*

History: *14 SR 1718*