



University of Arkansas Division of Agriculture

An Agricultural Law Research Project

Applicator Certification & Education Statutes & Regulations

Minnesota

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Applicator Certification & Education

STATE OF MINNESOTA

- 1) Minn. Stat. §§ 18C.121, 205; Minn. R. 1505.2200–1505.2800
- 2) Minn. R. 18C.432; Manure Applicator Education
- 3) Minn. R. 18C.430; Commercial Animal Waste Technician Licensing

The statutes and Constitution are current through the 2018 regular and special legislative sessions. The statutes are subject to changes by the Minnesota Revisor's Office.

1) Minn. Stat. §§ 18C.121, 205; Minn. R. 1505.2200–1505.2800

§ 18C.121. RULES.

Subdivision 1. Administration. The commissioner may adopt rules necessary to implement and enforce this chapter. The rules must conform to national standards in a manner that is practicable and consistent with state law.

Subd. 2. Liming materials. The commissioner may adopt rules governing the labeling, registration, and distribution of liming materials sold for agricultural purposes.

Subd. 3. Certification of laboratories. The commissioner may adopt rules establishing procedures and requirements for certification of soil and plant food testing laboratories operating in or outside of the state for the benefit of state residents. The rules shall include but not be limited to standardization of procedures and recommendations relating to application of plant food materials. Basic data and reference material for establishment of rules will include but not be limited to findings of the University of Minnesota soil testing laboratory.

Subd. 4. Hearings. Hearings authorized or required by law must be conducted by the commissioner or an officer, agent, or employee the commissioner designates.

§ 18C.205. CHEMIGATION.

Subdivision 1. Authorization. The commissioner may issue chemigation permits for irrigation to be used to apply fertilizers on crops and land, including agricultural, nursery, turf, golf course, and greenhouse sites.

Subd. 2. Permit required. A person may not apply fertilizers through an irrigation system without a chemigation permit from the commissioner. A chemigation permit is required

for one or more wells or other sources of irrigation water that are protected from contamination by the same devices as required by rule.

Subd. 3. Application.

(a) A person must apply for a chemigation permit on forms prescribed by the commissioner.

(b) A person initially applying for a chemigation permit must pay a nonrefundable application fee of \$50. A person who holds a valid pesticide chemigation permit as required in chapter 18B is exempt from the fee in this subdivision.

Subd. 4. Permit requirements. An irrigation system operating under a chemigation permit must be fitted with effective antisiphon devices or check valves that prevent the backflow of fertilizers or fertilizer-water mixtures into water supplies or other materials during times of irrigation system failure or equipment shutdown. The devices or valves must be installed between:

(1) the irrigation system pump or other source discharge and the point of fertilizer injection; and

(2) the point of fertilizer injection and the fertilizer supply.

Subd. 5. Rules. The commissioner shall adopt rules prescribing conditions and restrictions for applying fertilizers by irrigation.

Agricultural Chemical Chemigation Safety Regulations

1505.2200. APPLICATION; PERMIT; FEE AND APPLICATION RENEWAL; ALTERNATION; INSPECTION.

Subpart 1. Permit required. A person shall comply with parts 1505.2100 to 1505.2800 before applying agricultural chemicals through an irrigation system. An applicant is considered to be permitted-by-rule if the applicant is in compliance with parts 1505.2100 to 1505.2800.

Subp. 2. Initial fee; application renewal. The application fee for an initial chemigation system permit established by Minnesota Statutes, section 18B.08, subdivision 4, or section 18C.205, subdivision 3, must be submitted with the initial chemigation system permit application. An updated chemigation system permit application must be submitted to the commissioner on forms provided by the commissioner every two years from the date of the applicant's initial submission of their permit application. No additional fee is required.

Subp. 3. *Permits previously granted under repealed parts 1505.2000 to 1505.2080.* An applicant previously granted a permit under repealed parts 1505.2000 to 1505.2080 shall submit an updated permit application every two years from the effective date of parts 1505.2100 to 1505.2800. No additional fee is required.

Subp. 4. *Application.* An applicant for a chemigation system permit shall apply on forms supplied by the commissioner. The application must include, at a minimum:

- A. the name, address, and telephone number of the applicant to whom a permit is to be issued;
- B. the number and location, by legal description, of well heads, surface water supply withdrawal points, or the public water supply that will be used in the chemigation process;
- C. the estimated amounts and types of agricultural chemicals to be applied through the irrigation system;
- D. diagrams or photographs of the irrigation system detailing the required antipollution devices;
- E. diagrams, drawings, and calculations detailing the required safeguards of agricultural chemical storage containers at the chemigation site, if applicable;
- F. the number of the applicant's Department of Natural Resources water appropriation permit, if applicable;
- G. the applicant's or applicant's agent's private applicator certification or noncommercial certification number, if applicable; and
- H. a description of the chemigation system inspection procedures and time frames for inspection.

Subp. 5. *Chemigation system alteration.* Before substantially altering a chemigation system, an applicant shall submit a permit application form to the commissioner describing the changes to be made to the chemigation system. No additional fee is required. An applicant is considered to be permitted-by-rule for the substantial alteration if the applicant complies with parts 1505.2100 to 1505.2800.

Subp. 6. *Inspection.* Chemigation systems are subject to inspection by the commissioner or the commissioner's agent under Minnesota Statutes, section 18D.201.

1505.2300. AGRICULTURAL CHEMICAL APPLICATION; SETBACKS AND SAFEGUARDING; ANTIPOLLUTION DEVICES; PURGING; POSTING.

Subpart 1. *Application of agricultural chemicals through irrigation systems.*

A. A pesticide may be applied through an irrigation system only if the pesticide is labeled for the method and device specified for application, the crop, and application site.

B. Fertilizers may be applied through irrigation systems.

Subp. 2. *Setbacks and safeguarding.*

A. Agricultural chemical storage areas and supply tanks, the end of the discharge hose for check valve drain lines, and agricultural chemical mixing and loading areas must not be located closer to a water supply well than the distance specified in chapter 4725. If not specified in chapter 4725, the minimum setback distance for agricultural chemical storage areas and supply tanks, the end of the discharge hose for check valve drain lines, and mixing and loading areas from the water supply must be the same as the minimum setback distance specified in chapter 4725 for agricultural chemical supply tanks and agricultural chemical mixing and loading areas used for chemigation.

B. An agricultural chemical supply tank must be safeguarded if the tank storage meets at least two of the following conditions:

- (1) the supply tank has a rated capacity of more than 1,500 United States gallons;
- (2) the supply tank is located within 100 feet of a water supply; or
- (3) the supply tank is located at a chemigation site for more than 30 consecutive days.

C. If required, agricultural chemical supply tanks must be confined to a safeguard that is adequate in the event of a release to prevent movement of the agricultural chemical to the water supply. The safeguard must consist of a wall and liner or prefabricated basin as specified in item E.

D. The capacity of the safeguard for an agricultural chemical supply tank must be at least equal to the sum of all of the following:

- (1) the volume of the largest agricultural chemical supply tank or other container within the safeguard;
- (2) 25 percent of the capacity of the largest agricultural chemical supply tank or other container within the safeguard for an unroofed safeguard, or ten percent of the capacity of the largest agricultural chemical supply tank or other container within the safeguard covered by a roof; and

(3) the total volume of released liquid that would be displaced by the portions of all other containers with the safeguard to the height of the safeguard wall and all other fixtures and materials located within the safeguard.

E. The walls and base of a safeguard may be made of ferrous metal, reinforced concrete, solid reinforced masonry, synthetic lined earth, or prefabricated ferrous metal or synthetic materials. The safeguard must be designed according to standard engineering practices to be leakproof and to withstand a full hydrostatic head of released liquid to the height of the safeguard.

(1) Masonry walls must be reinforced, capped with concrete, and parged on the interior. The joint between any masonry wall and any floor or liner must use internal waterstops or similar materials to make the joint leakproof. Control joints protected with waterstops or similar materials must be used for the base. The interior base and walls must be coated with a material resistant to agricultural chemicals. Cracks and seams must be sealed.

(2) The joints between a reinforced concrete wall and any floor or liner must use internal waterstops or similar materials to make the joint leakproof. Control joints protected with waterstops or similar materials must be used for the base. The interior base and walls must be coated with a material resistant to agricultural chemicals. Cracks and seams must be sealed.

(3) Synthetic liners must have a minimum thickness of 30 mils (0.8 millimeters), be chemically compatible with the materials being stored within the safeguard, photo resistant, and puncture resistant. The earthen base of a synthetic liner must be free of large rocks, angular stones, sticks, or other materials that may puncture the liner.

(4) A prefabricated safeguard must be composed of rigid walls and a base of ferrous metal or synthetic materials that are resistant to corrosion, puncture, or cracking. Materials used for the safeguard must be chemically compatible with the materials being stored within the safeguard. Synthetic materials must be photo- and puncture-resistant.

(5) The base and walls of a safeguard may not contain a drain or similar opening.

Subp. 3. Antipollution devices. Chemigation systems must be filled with antipollution devices as detailed in this subpart. The devices must be designed and built of materials suitable for those purposes, including agricultural chemical compatibility, and must be kept functional during chemigation. Antipollution devices may be installed as portable

devices for use on other permitted chemigation systems, except that portable devices are not allowed for use on systems connected to the public water supply.

A. A mainline irrigation system supply reduced pressure zone backflow preventer or two check valves in a series must be provided for systems directly connected to a water supply, and must be located in the irrigation system supply pipeline between the irrigation system water supply pump or source of irrigation water and the point of injection of the agricultural chemical. The following additional conditions apply:

(1) Mainline check valves:

- (a) a single mainline check valve may be used for the application of fertilizer;
- (b) mainline check valve backflow prevention devices must meet the design and equipment standards in item B;
- (c) mainline check valve backflow prevention devices must be tested and certified by an independent testing laboratory to meet the performance standards in item B; and
- (d) mainline check valves must be stamped, tagged, or otherwise marked to indicate working pressure, flow rate, and direction, and date, month, and year of manufacture.

(2) Reduced pressure zone backflow preventers:

- (a) a reduced pressure zone backflow preventer must be used when the source of irrigation water is potable water; and
- (b) a reduced pressure zone backflow preventer must be approved under chapter 4714, and applicants must install and maintain a reduced pressure zone backflow preventer under chapter 4714. Mainline check valves approved by the commissioner under repealed parts 1505.2000 to 1505.2080 may continue to be used after October 12, 1992, if the mainline check valves comply with item B and the department has been notified of any changes in design or materials.

B. If a single irrigation system supply check valve or two irrigation system supply check valves in a series are used, each check valve must be equipped with an inspection port or similar device and be immediately preceded in the irrigation system by a vacuum relief valve and automatic low pressure drain valve.

The inspection port must be installed on the horizontal irrigation pipeline on the supply side of each check valve in a manner that the inlet to the automatic low pressure drain can be easily observed during irrigation system shutdown.

The vacuum relief valve must be installed on the top of the horizontal irrigation pipeline on the supply side of the check valve. The valve must have an orifice size of at least a three-quarter inch diameter for a four-inch pipe; a one inch diameter for a five-inch to eight-inch pipe; and a two inch diameter for a ten-inch or 12-inch pipe.

The automatic low pressure drain must be provided on the bottom of the horizontal irrigation pipeline on the supply side of the check valve. The device must have an internal and external orifice size of at least a three-quarter inch diameter. If two check valves in a series are required to be used, the check valve located in line nearest to the pivot or irrigation system must meet one of the following specifications:

(1) the check valve must use a spring-loaded, automatic, low pressure drain or an automatic low pressure drain with similar operating characteristics; or

(2) the check valve must use an automatic low pressure drain that will drain the supply side of the body of the check valve within three minutes of system shutdown.

The drain may not extend beyond the inside surface of the bottom of the irrigation pipeline or conduit and must be at least two inches above grade. The device must be positioned, or the location of the grade adjusted, so that liquid will discharge away from a water supply when draining occurs.

An irrigation system supply check valve must be of heavy duty construction with all materials, including internal parts, resistant to corrosion or protected to resist corrosion. It must be rated a minimum of 150 pounds per square inch working pressure and be quick closing by spring action and tight sealing so that no leakage occurs at joints or the valve seat when subjected to an internal hydrostatic pressure test of at least 300 pounds per square inch for one minute. There must be no leakage at joints or the valve seat when the check valve is subjected to an internal hydrostatic pressure equivalent to the head of a column of water five feet high, retained within the downstream portion of the valve body for 16 hours.

Irrigation system supply check valves, when installed, must be level except that a deviation of not more than ten degrees from the horizontal is permitted.

C. An injection line check valve that is resistant to agricultural chemicals must be provided on the agricultural chemical injection line between the point of agricultural chemical injection into the irrigation system and the agricultural chemical injection unit, pump, or solution tank, and be functional to prevent the flow of liquid from the irrigation line to the agricultural chemical injection device and the flow of liquid or material from the agricultural chemical supply tank to the irrigation line.

D. An interlock, such as electrical, pressure, mechanical, or water motor, must be provided between the irrigation system or water pump and the agricultural chemical injection unit. If interruption of the irrigation water flow occurs, the interlock must, at a minimum, cause the shutdown of the agricultural chemical injection unit.

E. A low pressure shutdown device must be used with the irrigation system that will shut down the irrigation system if the water pressure decreases to the point when an incident may occur.

Subp. 4. *Purging system.* The irrigation system must be operated as necessary on each and every occasion after an agricultural chemical injection is terminated to allow for a complete purging of the agricultural chemical from the system.

Subp. 5. *Posting of sites.* Sites being treated with pesticides through chemigation systems must be posted with signs during pesticide treatment. The posting of signs is governed by items A to D.

A. Signs must be in compliance with subitems (1) to (3).

(1) Signs must be at least eight and one-half inches by 11 inches, highly visible, with contrasting colors for letters and background.

(2) Letters must be at least three-eighths of an inch tall.

(3) Signs must contain at least:

(a) the signal word from the pesticide label;

(b) the name of the pesticide;

(c) the date of treatment; and

(d) the reentry date as described on the pesticide label.

B. Signs must be conspicuously placed at usual points of entry for all sites and at property corners for nongreenhouse sites that are immediately adjacent to public transportation routes or other public or private nonagricultural property, except

that signs must be placed no greater than 100 feet apart for a field chemigation site that is located immediately adjacent to a public area such as a park, school, or residential area.

C. Signs must be removed after the reentry date expires unless signs are of a more permanent nature, such as laminated signs, in which case information must be updated as necessary.

D. If more restrictive instructions for posting exist on the label of the pesticide being used in chemigation, the label instructions must be totally followed.

1505.2400. RECORDS AND REPORTS.

Pesticide chemigation system application records and fertilizer chemigation system mix and application records must be kept by the chemigation system applicant for five years from the date of application. Records detailing dates of chemigation system inspection, names of persons performing the inspection, and condition of the chemigation unit must be kept on forms provided by the commissioner. System inspection and equipment maintenance records must be retained by the chemigation system permit holder for five years.

1505.2500. RESPONSIBILITY; CALIBRATION AND OPERATION; INSPECTION; OFF-TARGET APPLICATION; INCIDENT PREVENTION; INCIDENT REPORTING.

A chemigation system applicant or the applicant's agent shall:

A. calibrate and operate each chemigation system in a manner that prevents an agricultural chemical incident or nonlabelled application of a pesticide;

B. inspect each chemigation system as necessary while agricultural chemicals are being applied;

C. prevent operation of a chemigation system in such a manner that agricultural chemicals are applied to an area other than an area targeted to receive an agricultural chemical application;

D. not clean agricultural chemical chemigation application, storage, pumping, or injection equipment in surface waters of the state, or fill or clean agricultural chemical chemigation application, storage, pumping, or injection equipment adjacent to surface waters, ditches, or wells where, because of the slope or other conditions, agricultural chemicals or materials contaminated with agricultural chemicals could enter or contaminate the surface waters, groundwater, or wells, as a result of overflow, leakage, or other causes; and

E. upon discovering that an incident has occurred, immediately report the incident to the commissioner.

1505.2600. COMMISSIONER'S RESPONSIBILITY.

The commissioner shall annually provide chemigation safety information to each chemigation system applicant.

1505.2700. INSTALLATION; MAINTENANCE; MODIFICATION.

Subpart 1. *Proper installation and maintenance.* Irrigation systems, antipollution devices and valves, and agricultural chemical injection units, pumps, and solution tanks used for chemigation purposes must be installed and maintained to ensure proper functioning during chemigation. Maintenance necessary to assure proper functioning of the device must be performed before introduction of agricultural chemicals.

Subp. 2. *Modification.* If modification or changes in design, technology, irrigation practices, or other similar reasons warrant the use or placement of equipment other than that specified in parts 1505.2100 to 1505.2800, the commissioner may allow the changes if protection to the water supply is at least equal to that provided by the equipment or equipment placement required in parts 1505.2100 to 1505.2800.

1505.2800. PROHIBITED ACTS.

It is a violation of Minnesota Statutes, chapters 18B and 18C, for a person to apply an agricultural chemical to land, crops, or plants in or with irrigation water in violation of parts 1505.2100 to 1505.2800. Parts 1505.2100 to 1505.2800 are enforceable under Minnesota Statutes, chapter 18D.

2) Minn. R. 18C.432; Manure Applicator Education

§ 18C.432. MANURE APPLICATOR EDUCATION AND TRAINING.

Subdivision 1. *Education and training.*

(a) The commissioner shall develop, in conjunction with the University of Minnesota Extension Service, innovative educational and training programs addressing manure applicator concerns, including water quality protection and the development of manure management plans.

(b) The commissioner shall appoint educational planning committees which must include representatives of industry.

(c) Specific current regulatory concerns must be discussed and, if appropriate, incorporated into each training session.

(d) The commissioner may approve programs from private industry and nonprofit organizations that meet minimum requirements for education, training, and certification.

(e) The commissioner shall report to the house of representatives and senate agriculture policy and funding committees by January 30, 2001, with recommendations for training, examination, certification, and costs of a private applicator manure certification program.

Subd. 2. *Training manual and examination development.*

The commissioner, in conjunction with the University of Minnesota Extension Service, shall continually revise and update manure applicator training manuals and examinations. Questions in the examinations must be determined by the commissioner. Manuals and examinations must include manure management practices that discuss prevention of manure occurrence in waters of the state.

Minnesota Department of Agriculture

[Manure Applicator Education](#)

3) Minn. R. 18C.430; Commercial Animal Waste Technician Licensing

§ 18C. 430. COMMERCIAL ANIMAL WASTE TECHNICIAN.

Subdivision 1. *Requirement.*

(a) A person may not manage or apply animal wastes to the land for hire:

(1) without a valid commercial animal waste technician applicator license;

(2) without a valid commercial animal waste technician site manager license; or

(3) as a sole proprietorship, company, partnership, or corporation unless a commercial animal waste technician company license is held and a commercial animal waste technical site manager is employed by the entity.

(b) A person managing or applying animal wastes for hire must have a valid license identification card when managing or applying animal wastes for hire and must display it upon demand by an authorized representative of the commissioner

or a law enforcement officer. The commissioner shall prescribe the information required on the license identification card.

(c) A commercial animal waste technician applicator must have a minimum of two hours of certification training in animal waste management and may only manage or apply animal waste for hire under the supervision of a commercial animal waste technician site manager. The commissioner shall prescribe the conditions of the supervision and the form and format required on the certification training.

(d) This section does not apply to a person managing or applying animal waste on land managed by the person's employer.

Subd. 2. *Responsibility.* A person required to be licensed under this section who performs animal waste management or application for hire or who employs a person to perform animal waste management or application for compensation is responsible for proper management or application of the animal wastes.

Subd. 3. *License.*

(a) A commercial animal waste technician license, including applicator, site manager, and company:

(1) is valid for one year and expires on December 31 of the year for which it is issued, unless suspended or revoked before that date;

(2) is not transferable to another person; and

(3) must be prominently displayed to the public in the commercial animal waste technician's place of business.

(b) The commercial animal waste technician company license number assigned by the commissioner must appear on the application equipment when a person manages or applies animal waste for hire.

Subd. 4. *Application.*

(a) A person must apply to the commissioner for a commercial animal waste technician license on forms and in the manner required by the commissioner and must include the application fee. The commissioner shall prescribe and administer an examination or equivalent measure to determine if the applicant is eligible for the commercial animal waste technician license, site manager license, or applicator license.

(b) The commissioner of agriculture, in cooperation with University of Minnesota Extension and appropriate educational institutions, shall establish and implement a program for training and licensing commercial animal waste technicians.

Subd. 5. *Renewal application.*

(a) A person must apply to the commissioner of agriculture to renew a commercial animal waste technician license and must include the application fee. The commissioner may renew a commercial animal waste technician applicator or site manager license, subject to reexamination, attendance at workshops approved by the commissioner, or other requirements imposed by the commissioner to provide the animal waste technician with information regarding changing technology and to help ensure a continuing level of competence and ability to manage and apply animal wastes properly. The applicant may renew a commercial animal waste technician license within 12 months after expiration of the license without having to meet initial testing requirements. The commissioner may require additional demonstration of animal waste technician qualification if a person has had a license suspended or revoked or has had a history of violations of this section.

(b) An applicant who meets renewal requirements by reexamination instead of attending workshops must pay a fee for the reexamination as determined by the commissioner.

Subd. 6. *Financial responsibility.*

(a) A commercial animal waste technician license may not be issued unless the applicant furnishes proof of financial responsibility. The financial responsibility may be demonstrated by

(1) proof of net assets equal to or greater than \$ 50,000, or

(2) a performance bond or insurance of the kind and in an amount determined by the commissioner of agriculture.

(b) The bond or insurance must cover a period of time at least equal to the term of the applicant's license. The commissioner shall immediately suspend the license of a person who fails to maintain the required bond or insurance.

(c) An employee of a licensed person is not required to maintain an insurance policy or bond during the time the employer is maintaining the required insurance or bond.

(d) Applications for reinstatement of a license suspended under paragraph (b) must be accompanied by proof of satisfaction of judgments previously rendered.

Subd. 7. *Application fee.*

(a) A person initially applying for or renewing a commercial animal waste technician applicator license must pay a nonrefundable fee of \$ 25. A person initially applying for or renewing a commercial animal waste technician site manager license must pay a nonrefundable application fee of \$ 50. A person initially applying for or renewing a commercial animal waste technician company license must pay a nonrefundable application fee of \$ 100.

(b) A license renewal application received after March 1 in the year for which the license is to be issued is subject to a penalty fee of 50 percent of the application fee. The penalty fee must be paid before the renewal license may be issued.

(c) An application for a duplicate commercial animal waste technician license must be accompanied by a nonrefundable fee of \$ 10.

Department of Agriculture

[Commercial Animal Waste Technician Licensing](#)