CHAPTER 7020
MINNESOTA POLLUTION CONTROL AGENCY
ANIMAL FEEDLOTS

7020.0100 [Repealed, 25 SR 834]

GENERALLY

7020.0200 SCOPE.

This chapter governs the storage, transportation, disposal, and utilization of animal manure and process wastewaters and the application for and issuance of permits for construction and operation of animal manure management and disposal or utilization systems for the protection of the environment. This chapter does not address wastes from fish. This chapter does not preempt the adoption or enforcement of zoning ordinances or plans by counties, townships, or cities.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.0205 INCORPORATION BY REFERENCE.

For the purposes of parts 7001.0020 and 7020.0200 to 7020.2225, the documents in items A to L are incorporated by reference. These documents are not subject to frequent change.

A. Annual Book of American Society for Testing and Materials (ASTM), Part 4, ASTM D 1557, Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb (4.54-kg) Rammer and 18-in. (457-mm) Drop. 1978 Edition. This publication is available through the Minitex interlibrary loan system.

B. Annual Book of American Society for Testing and Materials (ASTM), Part 4, ASTM D 4318, Test Method for Liquid Limit, and Plasticity Index of Soils. 1984 Edition. This publication is available through the Minitex interlibrary loan system.

C. Annual Book of American Society for Testing and Materials (ASTM), Part 4, ASTM D 422, Method for Particle-Size Analysis of Soils. 1972 Edition. This publication is available through the Minitex interlibrary loan system.

D. Annual Book of American Society for Testing and Materials (ASTM), Part 4, ASTM D 698, Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate

Mixtures Using 5.5-1b (2.49-kg) Rammer and 12-in. (304.8-mm) Drop. 1978 Edition. This publication is available through the Minitex interlibrary loan system.

E. Code of Federal Regulations, title 40, part 412, Feedlots Point Source Category. This publication is available through the Minitex interlibrary loan system.

F. Code of Federal Regulations, title 40, section 122.23, Concentrated Animal Feeding Operations. This publication is available through the Minitex interlibrary loan system.

G. Protected Waters and Wetlands Maps, 1999. Minnesota Department of Natural Resources, Division of Waters. These maps are available through the Minnesota Bookstore, 117 University Ave., St. Paul, MN 55155. These maps are available for viewing at the County Auditor's offices, County Soil and Water Conservation District offices, Watershed District offices, Minnesota Department of Natural Resources offices, and through the Minitex interlibrary loan system at the Minnesota Department of Natural Resources Internet site at the following address: http://www.dnr.state.mn.us/waters/wetlands/pwi/index.html.

H. United States Geological Survey Quadrangle Maps, 7.5- and 15-minute maps, United States Department of the Interior Geological Survey, 1999. These maps are available through the Minitex interlibrary loan system from the Minnesota Pollution Control Agency library. They are available for viewing at the Minnesota Department of Administration and county offices, and may be ordered from the United States Geological Survey Internet site at the following address: http://mappings.usgs.gov/mac/findmaps.html.

I. Minnesota Natural Resources Conservation Service Practice Standard, Waste Storage Pond (Code No. 425), November 1991, or Waste Storage Facility (Code No. 313), January 1998. This publication is available through the Minitex system.

J. Feedlot Inventory Guidebook, Minnesota Board of Water and Soil Resources, June 1991. This publication is available through the Minitex interlibrary loan system.

K. Annual Book of American Society for Testing Materials (ASTM), part 4, ASTM D 2922, Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth). 1996 Edition. This publication is available through the Minitex interlibrary loan system.

L. An Evaluation System to Rate Feedlot Pollution Potential, United States Department of Agriculture, Agricultural Research Service, April 1982. This publication is available through the Minitex interlibrary loan system.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.0250 SUBMITTALS AND RECORDS.

Subpart 1. **Accuracy of submittals.** An owner who fails to submit relevant facts or who has submitted incorrect information in a submittal shall, upon becoming aware of the failure or incorrect information, promptly submit to the commissioner or county feedlot pollution control officer the supplementary facts or corrected information.

Subp. 2. **Record retention, access to records, and inspections.**

A. A person required to keep records under this chapter shall maintain at the animal feedlot or manure storage area, or at the person's business address, for three years from the date the record was made, unless otherwise specified, all information required to be recorded under applicable state and federal rules. The person shall make these records available for examination and copying upon request of the commissioner, county feedlot pollution control officer, or agent of the commissioner and shall, upon request, submit these records to the commissioner, county feedlot pollution control officer, or agent of the commissioner within 30 days.

B. A person storing, transporting, disposing, or utilizing animal manure or process wastewaters shall provide the commissioner, county feedlot pollution control officer, or agent of the commissioner access to the animal feedlot, the animal holding area, the manure

storage area, or other areas where manure or process wastewaters are stored, in transport, or utilized, including allowing the collection of samples, and records to the extent provided under Minnesota Statutes, section 115.04, or other law, upon presentation of credentials.

C. Nothing in this subpart limits the commissioner's or agency's authority under Minnesota Statutes, section 115.04, or other law.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.0300 DEFINITIONS.

Subpart 1. **Scope.** All terms employed in this chapter for which definitions are given in Minnesota Statutes, sections 115.01 and 116.06, have the meanings given in those sections. For the purposes of this chapter, the terms specified in this part have the meanings ascribed to them.

Subp. 1a. **Aboveground manure storage area.** "Aboveground manure storage area" means a manure storage area for which all portions of the liner are located at or above the elevation of the natural ground level.

Subp. 2. **Agency.** "Agency" means the Minnesota Pollution Control Agency as established in Minnesota Statutes, chapter 116.

Subp. 3. **Animal feedlot.** "Animal feedlot" means a lot or building or combination of lots and buildings intended for the confined feeding, breeding, raising, or holding of animals and specifically designed as a confinement area in which manure may accumulate, or where the concentration of animals is such that a vegetative cover cannot be maintained within the enclosure. For purposes of these parts, open lots used for the feeding and rearing of poultry (poultry ranges) shall be considered to be animal feedlots. Pastures shall not be considered animal feedlots under these parts.

Subp. 4. **Animal manure or manure.** "Animal manure" or "manure" means poultry, livestock, or other animal excreta or a mixture of excreta with feed, bedding, precipitation, or other materials.

Subp. 5. **Animal unit.** "Animal unit" means a unit of measure used to compare differences in the production of animal manure that employs as a standard the amount of manure produced on a regular basis by a slaughter steer or heifer for an animal feedlot or a manure storage area, calculated by multiplying the number of animals of each type in items A to I by the respective multiplication factor and summing the resulting values for the total number of animal units. For purposes of this chapter, the following multiplication factors shall apply:

A. dairy cattle:

(1) one mature cow (whether milked or dry):

(a) over 1,000 pounds, 1.4 animal unit; or

(b) under 1,000 pounds, 1.0 animal unit;

(2) one heifer, 0.7 animal unit; and

(3) one calf, 0.2 animal unit;

B. beef cattle:

(1) one slaughter steer or stock cow, 1.0 animal unit;

(2) one feeder cattle (stocker or backgrounding) or heifer, 0.7 animal unit;

(3) one cow and calf pair, 1.2 animal unit; and

(4) one calf, 0.2 animal unit;

C. one head of swine:

(1) over 300 pounds, 0.4 animal unit;

(2) between 55 pounds and 300 pounds, 0.3 animal unit; and

(3) under 55 pounds, 0.05 animal unit;

D. one horse, 1.0 animal unit;

E. one sheep or lamb, 0.1 animal unit;

F. chickens:

(1) one laying hen or broiler, if the facility has a liquid manure system, 0.033 animal unit; or

(2) one chicken if the facility has a dry manure system:

(a) over five pounds, 0.005 animal unit; or

(b) under five pounds, 0.003 animal unit;

G. one turkey:

(1) over five pounds, 0.018 animal unit; or

(2) under five pounds, 0.005 animal unit;

H. one duck, 0.01 animal unit; and

I. for animals not listed in items A to H, the number of animal units is the average weight of the animal in pounds divided by 1,000 pounds.

Subp. 5a. **Concentrated animal feeding operation or CAFO.** "Concentrated animal feeding operation" or "CAFO" means animal feedlots meeting the definition of a CAFO in Code of Federal Regulations, title 40, section 122.23.

Subp. 6. **Certificate of compliance.** "Certificate of compliance" means a letter from the commissioner or the county feedlot pollution control officer to the owner of an animal feedlot or manure storage area stating that the feedlot or manure storage area meets agency requirements.

Subp. 6a. **Commencement of construction.** "Commencement of construction" means to begin or cause to begin, as part of a continuous program, the placement, assembly, or installation of facilities or equipment; or to conduct significant site preparation work, including clearing, excavation, or removal of existing buildings, structures, or facilities, necessary for the placement, assembly, or installation of facilities or equipment at:

A. a new or expanded animal feedlot; or

B. a new, modified, or expanded manure storage area.

Subp. 7. [Repealed, 25 SR 834]

Subp. 7a. **Commissioner.** "Commissioner" means the commissioner of the Minnesota Pollution Control Agency whose duties are defined in Minnesota Statutes, section 116.03.

Subp. 7b. **Composite liner.** "Composite liner" means a manure storage area liner which is designed to achieve a theoretical seepage rate of 1/560 inch per day or less and consists of a geomembrane liner, geosynthetic clay liner, or other comparable material, laid over a constructed cohesive soil liner having a thickness of two feet or greater.

Subp. 7c. **Compost.** "Compost" means a humus-like product derived from the controlled microbial degradation of organic material. Only manure that has completed the composting processes described in part 7020.2150, subpart 2, is compost.

Subp. 8. **Corrective or protective measure.** "Corrective or protective measure" means a practice, structure, condition, or combination thereof which prevents or reduces the discharge of pollutants from an animal feedlot or manure storage area to a level in conformity with agency rules.

Subp. 8a. **Construction short-form permit.** "Construction short-form permit" means a permit issued for an animal feedlot or manure storage area according to parts 7020.0505 and 7020.0535.

Subp. 9. **County feedlot pollution control officer.** "County feedlot pollution control officer" means an employee or officer of a delegated county who is knowledgeable in agriculture and who is designated by the county board to perform the duties under part 7020.1600.

Subp. 9a. **Delegated county.** "Delegated county" means a county that has applied for and received authorization pursuant to part 7020.1600, subpart 3a, item C, to implement an animal feedlot program.

Subp. 9b. **Design engineer.** "Design engineer" means a professional engineer licensed in the state of Minnesota or a Natural Resources Conservation Service (NRCS) staff person having NRCS approval authority for the project.

Subp. 9c. **Discharge.** "Discharge" means the addition of a pollutant to waters of the state, including a release of animal manure, manure-contaminated runoff or process wastewater from an animal feedlot, a manure storage area, or an animal manure land application site by leaking, pumping, pouring, emitting, emptying, dumping, escaping, seeping, leaching, or any other means. Discharge includes both point source and nonpoint source discharges.

Subp. 10. [Repealed by amendment, L 1987 c 186 s 15]

Subp. 11. **Domestic fertilizer.** "Domestic fertilizer" means:

A. animal manure that is put on or injected into the soil to improve the quality or quantity of plant growth; or

B. animal manure that is used as compost, soil conditioners, or specialized plant beds.

Subp. 11a. **Expansion or expanded.** "Expansion" or "expanded" means construction or any activity that has resulted or may result in an increase in the number of animal units that an animal feedlot is capable of holding or an increase in storage capacity of a manure storage area.

Subp. 12. **Floodplain.** "Floodplain" means the areas adjoining a watercourse which have been or hereafter may be covered by a large flood known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 100 year recurrence interval.

Subp. 12a. **Flow distance.** "Flow distance" means the distance runoff travels from the source of the runoff to waters of the state.

Subp. 13. **Interim permit.** "Interim permit" means a permit issued by the commissioner or the county feedlot pollution control officer in accordance with parts 7020.0505 and 7020.0535.

Subp. 13a. **Intermittent streams.** "Intermittent streams" means all water courses identified as intermittent streams on United States Geological Survey quadrangle maps.

Subp. 13b. **Manure-contaminated runoff.** "Manure-contaminated runoff" means a liquid that has come into contact with animal manure and drains over land from any animal feedlot, manure storage area, or animal manure land application site.

Subp. 14. **Manure storage area.** "Manure storage area" means an area where animal manure or process wastewaters are stored or processed. Short-term and permanent stockpile sites and composting sites are manure storage areas. Animal manure packs or mounding within the animal holding area of an animal feedlot that are managed according to part 7020.2000, subpart 3, are not manure storage areas.

Subp. 15. **New animal feedlot.** "New animal feedlot" means an animal feedlot or manure storage area:

A. constructed, established, or operated at a site where no animal feedlot or manure storage area existed previously; or

B. that existed previously and has been unused for five years or more.

Subp. 15a. **New technology.** "New technology" means an alternative construction or operating method to those provided in parts 7020.2000 to 7020.2225. New technology construction or operating methods must achieve equivalent environmental results to the requirements in parts 7020.2000 to 7020.2225.

Subp. 16. **National pollutant discharge elimination system permit or NPDES permit.** "National pollutant discharge elimination system permit" or "NPDES permit" means a permit issued by the agency for the purpose of regulating the discharge of pollutants from point sources including concentrated animal feeding operations (CAFOs).

Subp. 17. **Owner.** "Owner" means all persons having possession, control, or title to an animal feedlot or manure storage area.

Subp. 18. **Pastures.** "Pastures" means areas where grass or other growing plants are used for grazing and where the concentration of animals is such that a vegetation cover is maintained during the growing season except in the immediate vicinity of temporary supplemental feeding or watering devices.

Subp. 18a. **Permanent stockpiling site.** "Permanent stockpiling site" means a manure storage area where manure is stored or processed that does not meet the requirements of part 7020.2125, subpart 2.

Subp. 19. **Permit.** "Permit" means a document issued by the agency or county animal feedlot pollution control officer which may contain requirements, conditions, or schedules for achieving compliance with the discharge standards and requirements for management of animal manure construction or operation of animal holding areas or manure storage areas. Permits issued under this chapter are NPDES, state disposal system, interim, and construction short-form permits.

Subp. 19a. **Pollution hazard.** "Pollution hazard" means an animal feedlot or manure storage area that:

A. does not comply with the requirements of parts 7020.2000 to 7020.2225 and has not been issued an SDS or NPDES permit establishing an alternative construction or operating method; or

B. presents a potential or immediate source of pollution to waters of the state as determined by inspection by a county feedlot pollution control officer or agency staff taking into consideration the following:

(1) the size of the animal feedlot or manure storage area;

(2) the amount of pollutants reaching or that may reach waters of the state;

(3) the location of the animal feedlot or manure storage area relative to waters of the state;

(4) the means of conveyance of animal manure or process wastewater into waters of the state; and

(5) the slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal manure or process wastewater into waters of the state.

Subp. 19b. **Process wastewaters.** "Process wastewaters" means waters and/or precipitation, including rain or snow, which comes into contact with manure, litter, bedding, or other raw material or intermediate or final material or product used in or resulting from the production of animals, poultry, or direct products, such as milk or eggs.

Subp. 20. [Repealed, 25 SR 834]

Subp. 20a. **Separation distance to bedrock.** "Separation distance to bedrock" means the distance between stored manure and fractured bedrock.

Subp. 21. **Shoreland.** "Shoreland" means land, as defined in Minnesota Statutes, section 103F.205, subdivision 4, located within the following distances from the ordinary high water elevation of public waters:

A. land within 1,000 feet from the normal high water mark of a lake, pond, or flowage; and

B. land within 300 feet of a river or stream or the landward side of floodplain delineated by ordinance on such a river or stream, whichever is greater.

Subp. 21a. **Short-term stockpiling site.** "Short-term stockpiling site" means a manure storage area where manure is stored or processed according to part 7020.2125, subparts 1 to 3.

Subp. 22. **Sinkhole.** "Sinkhole" means a surface depression caused by a collapse of soil or overlying formation above fractured or cavernous bedrock.

Subp. 23. **Special protection area.** "Special protection area" means land within 300 feet of all:

A. protected waters and protected wetlands as identified on Department of Natural Resources protected waters and wetlands maps; and

B. intermittent streams and ditches identified on United States Geological Survey quadrangle maps, excluding drainage ditches with berms and segments of intermittent streams which are grassed waterways.

Subp. 24. **State disposal system permit or SDS permit.** "State disposal system permit" or "SDS permit" means a state permit that may be processed in accordance with parts 7001.0040; 7001.0050; 7001.0100, subparts 4 and 5; and 7001.0110.

Subp. 25. **Unpermitted or noncertified liquid manure storage area.** "Unpermitted or noncertified liquid manure storage area" means a liquid manure storage area that is in operation and:

A. the owner does not have an agency or delegated county permit or certificate of compliance for the manure storage area and was required to apply for and obtain a permit or certificate of compliance prior to the construction or operation of the manure storage area; or

B. the owner has not complied with the preoperational requirements of part 7020.2100 or permit requirements, if applicable.

Subp. 26. **Waters of the state.** "Waters of the state" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portions of the state.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *L 1987 c 186 s 15; 25 SR 834*

REGISTRATION PROGRAM

7020.0350 REGISTRATION REQUIREMENTS FOR ANIMAL FEEDLOTS AND MANURE STORAGE AREAS.

Subpart 1. **Registration data.** After January 1, 2002, the agency and all delegated counties shall maintain registration data for animal feedlots and manure storage areas. The registration data must include the information required in a Level II feedlot inventory as described in the Feedlot Inventory Guidebook and must contain the following:

A. date the registration form was completed;

B. name and address of all owners of the animal feedlot, manure storage area, or pasture;

C. facility location according to township, county, section, and quarter section;

D. permit or certificate number for owners who have been issued an agency or delegated county feedlot permit or certificate of compliance;

E. types of animal holding areas including pastures, confinement barns, and open lots;

F. number and types of animals in the areas listed in item E;

G. identity of surface waters within 1,000 feet of the facility;

H. presence and type of manure storage areas;

I. shortest distance from an animal holding area or manure storage area to a well; and

J. the name of the person that completed the registration form.

Subp. 2. **Owners required to register.**

A. Owners of the following facilities are required to register with the commissioner or delegated county, except as provided in item B:

(1) an animal feedlot capable of holding 50 or more animal units, or a manure storage area capable of holding the manure produced by 50 or more animal units; and

(2) an animal feedlot capable of holding ten or more and fewer than 50 animal units, or a manure storage area capable of holding the manure produced by ten or more and fewer than 50 animal units, that is located within shoreland.

B. An owner of a livestock facility located on county fairgrounds is not required to register, in accordance with Laws 2000, chapter 435, section 10, paragraph (c), clause (6).

Subp. 3. **Initial registration schedule and requirements.** Owners required to register under subpart 2 shall comply with at least one of the following by January 1, 2002:

A. the owner shall submit the information in subpart 1, on a form provided by the commissioner, to the commissioner or delegated county feedlot pollution control officer;

B. the owner shall submit a permit application to the commissioner or delegated county after October 23, 2000; or

C. the owner shall be listed on a feedlot inventory that:

(1) is a Level II or Level III inventory as described in the Feedlot Inventory Guidebook that contains the information under subpart 1, items A and E to J;

(2) is current as of October 1, 1997;

(3) contains the information required under subpart 1, items B to D; and

(4) has been submitted to the commissioner.

Subp. 4. **Registration requirements after January 1, 2002.** Owners of animal feedlots and manure storage areas who are required to register under subpart 2 shall comply with items A and B, as applicable.

A. Owners of facilities not in operation prior to January 1, 2002, shall register with the commissioner or delegated county prior to or upon commencement of operation. Owners shall comply with at least one of the following:

(1) the owner shall submit the information in subpart 1, on a form provided by the commissioner; or

(2) the owner shall submit a permit application to the commissioner or delegated county.

B. Owners shall update their registrations prior to the registration update deadlines which shall be established by adding four-year increments to the initial registration deadline of January 1, 2002. Owners shall register at least once during each of the four-year registration update intervals by meeting one of the following:

(1) the owner shall comply with item A, subitem (1) or (2); or

(2) the owner shall be listed on a feedlot inventory that:

(a) is a Level II or Level III inventory as described in the Feedlot Inventory Guidebook that contains the information under subpart 1, items A and E to J;

(b) has been updated within the applicable four-year registration interval;

(c) contains the information required under subpart 1, items B to D and K; and

(d) in its updated form has been submitted to the commissioner, including the information in unit (c).

Subp. 5. **Notification.** The agency or delegated county shall:

A. notify owners at least 90 days prior to the scheduled registration update deadlines about reregistration; and

B. send a receipt of registration to owners within 30 days of receipt of the registration by the agency or the delegated county.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

PERMIT PROGRAM

7020.0355 PERMITS AND CERTIFICATES ISSUED PRIOR TO OCTOBER 23, 2000.

Subpart 1. **SW-A permits.** All owners with SW-A permits shall comply with the permitting requirements in parts 7020.0355 to 7020.0535. Upon application for a permit under parts 7020.0405 to 7020.0535, the SW-A permit must be reconsidered pursuant to this chapter and chapter 7001. Any SW-A permit terms and conditions that are inconsistent with the requirements of parts 7020.2000 to 7020.2225 are superseded as of October 23, 2000.

Subp. 2. **Certificates of compliance.** All owners with certificates of compliance shall comply with the permitting requirements in parts 7020.0355 to 7020.0535.

Subp. 3. **Interim A and interim B permits.** An owner with an Interim A or Interim B permit that has not expired on October 23, 2000, shall comply with items A and B.

A. If the requirements for which an Interim A permit was issued are not complete on October 23, 2000, the owner shall apply, prior to the expiration date of the Interim A permit, for a construction short-form, SDS, or NPDES permit as required under part 7020.0405.

B. If the requirements for which an Interim B permit was issued are not complete on the expiration date of the Interim B permit, the owner shall comply with part 7020.0535, subpart 5, except that the owner shall complete the notification requirement prior to the expiration date of the Interim B permit.

Subp. 4. **NPDES and SDS permits.** NPDES and SDS permits issued prior to October 23, 2000, remain in effect to the extent provided by the issued permit terms and conditions.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

NOTE: This part was originally adopted at 25 SR 834 as 7020.0400. It was renumbered editorially.

7020.0400 [Repealed, 25 SR 834]

7020.0405 PERMIT REQUIREMENTS.

Subpart 1. **Permit required.** Four types of permits are issued under this chapter and chapter 7001: interim permits, construction short-form permits, SDS permits, and NPDES permits. The owner shall apply for a permit as follows:

A. an NPDES permit for the construction and operation of an animal feedlot that meets the criteria for CAFO;

B. unless required to apply for a permit under item A, an SDS permit under the following conditions:

(1) the construction and operation of an animal feedlot or manure storage area that has been demonstrated not to meet the criteria for CAFO and is capable of holding 1,000 or more animal units or the manure produced by 1,000 or more animal units;

(2) the facility does not comply with all applicable requirements of parts 7020.2000 to 7020.2225 and the pollution hazard cannot be, or has not been, corrected under the conditions in part 7020.0535 applicable to interim permits;

(3) the owner is proposing to construct or operate a new technology. An SDS permit is required for new technology operational methods while these operational methods are employed; or

(4) the facility is one for which conditions or requirements other than those in parts 7020.2000 to 7020.2225 were assumed:

(a) as a mitigation measure in an environmental impact statement; or

(b) in obtaining a negative declaration in an environmental assessment worksheet;

C. unless required to obtain a permit under items A and B, an interim permit for:

(1) facilities identified as a pollution hazard; or

(2) an animal feedlot or a manure storage area with a capacity of 300 or more animal units prior to applying manure or process wastewater:

(a) on land where the soil phosphorus test levels exceed the levels in part 7020.2225, subpart 3, item C;

(b) on land in special protection areas with slopes exceeding six percent; or

(c) in a drinking water supply management area where the aquifer is designated vulnerable under chapter 4720; or

D. unless required to obtain a permit under items A to C, a construction short-form permit for an animal feedlot or manure storage area proposing to construct or expand to a capacity of 300 animal units or more, or the manure produced by 300 animal units or more. However, if a facility is determined to be a pollution hazard and the owner is proposing to expand to a capacity of 300 animal units or more, or the manure produced by 300 animal units or more, the owner shall apply for an interim permit under item C.

Subp. 2. **Expansion and stocking limitations.** Prior to expansion, an owner required to apply for a construction or operating permit under subpart 1 shall have obtained the permit, or permit modification, as applicable. An owner issued an interim permit that authorizes construction for an expansion shall not stock the expansion prior to the fulfillment of all permit conditions related to the correction of the pollution hazard for which the interim permit was issued.

Subp. 3. **No permit required.** The owner of an animal feedlot or manure storage area is not required to apply for a permit for:

A. a feedlot or manure storage area that meets the requirements of part 7020.2003, subparts 4 to 6;

B. a short-term stockpile or compost site if the owner is not an owner of an animal feedlot or manure storage area other than a short-term stockpile or composting site;

C. a livestock facility located on county fairgrounds; or

D. a change in an existing facility that consists solely of a change in ownership of the building, grounds, or feedlot.

Subp. 4. **Change of ownership.** Prior to the change in the ownership or control of an animal feedlot or manure storage area issued a permit under this chapter, the new owner shall submit to the commissioner or county feedlot pollution control officer the information

required in item A or B, as applicable. If the commissioner or county feedlot pollution control officer determines that the new owner meets the requirements for obtaining the permit, then the commissioner or the county feedlot pollution control officer shall issue the permit to the new owner. The new owner shall submit:

A. a request for permit modification according to part 7001.0190 for facilities covered under an SDS or NPDES permit; or

B. a change of ownership form provided by the commissioner.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.0500 [Repealed, 25 SR 834]

7020.0505 PERMIT APPLICATIONS AND PROCESSING PROCEDURES.

Subpart 1. **Submittals.** Permit applications must be submitted according to items A and B. An application is complete when all applicable information in subpart 4 and application fees under parts 7002.0250 and 7002.0310 have been received by the commissioner or the county feedlot pollution control officer, as appropriate. Incomplete permit applications must not be processed by the commissioner or delegated county feedlot pollution control officer.

A. NPDES and SDS permit applications must be submitted to the agency in accordance with this part and chapter 7001, with a copy submitted to the delegated county.

B. Interim permit and construction short-form permit applications must be submitted to the agency or delegated county in accordance with this part and part 7020.0535.

Subp. 2. **Permit application submittal schedule.** An owner of an animal feedlot or a manure storage area required to apply for a permit under part 7020.0405, subpart 1, shall apply in accordance with the following schedule:

A. the following facilities that are in existence on or before October 23, 2000, must submit a permit application by June 1, 2001:

(1) a CAFO; and

(2) an animal feedlot capable of holding 1,000 animal units or more or a manure storage area capable of holding the manure produced by 1,000 animal units or more for which the owner has demonstrated that the facility does not meet the CAFO criteria;

B. a CAFO as determined through the case-by-case determination process under Code of Federal Regulations, title 40, section 122.23(c), shall submit a permit application by the submittal deadline established by the commissioner's written request. The owner has at least 30 days to submit the permit application;

C. an animal feedlot or a manure storage area that is new or expands after October 23, 2000, and required to apply for an SDS or NPDES permit, shall submit a permit application at least 180 days prior to the planned date of commencement of construction or expansion;

D. an animal feedlot or a manure storage area that is new or expanding after October 23, 2000, and is required to apply for a construction short-form permit, shall submit a permit application at least 90 days prior to the planned date of commencement of construction or expansion; and

E. a facility determined to be a pollution hazard shall submit a permit application by the submittal deadline established by the commissioner or the county feedlot pollution control officer's written request. The owner has at least 15 days to submit the permit application.

Subp. 3. **Permit application format.** A permit application for an NPDES, SDS, interim, or construction short-form permit must be on a form provided by the commissioner or the county feedlot pollution control officer.

Subp. 4. **Content of permit application.**

A. An application for a permit must contain the following:

(1) the names and addresses of the owners and the signature of at least one of the owners;

(2) the legal name and business address of the facility, if different than the owner;

(3) the location of the facility by county, township, section, and quarter section;

(4) a list of all animal types, and the maximum number of animals of each animal type that can be confined within each lot, building, or area at the animal feedlot;

(5) a list of all existing and proposed manure storage areas, including plans and specifications as required in part 7020.2100 for proposed liquid manure storage areas and part 7020.2125 for permanent stockpile sites;

(6) the total number of animal units the facilities listed in subitems (4) and (5) will be capable of holding after completing construction or expansion;

(7) the soil type or texture and depth to saturated soils at the facility as identified in the USDA Soil Survey Manual or a site-specific soils investigation. If applicable, submittal of the soils investigation information required in parts 7020.2100 to 7020.2225 meets this requirement;

(8) an aerial photograph showing the location of all wells, buildings, surface tile intakes, lakes, rivers, and watercourses within 1,000 feet of the proposed facility;

(9) the number of acres available for land application of manure;

(10) if applying for an SDS or NPDES permit or interim permit under part 7020.0405, subpart 1, item C, subitem (2), a manure management plan that meets the requirements under part 7020.2225, subpart 4;

(11) if applicable, a description of all conditions that make the facility a pollution hazard and a description of the corrective and protective measures proposed to correct the pollution hazard;

(12) if applying for an NPDES permit, a supplemental federal application form.

B. In addition to the requirements of item A, a permit application for an animal feedlot capable of holding 1,000 animal units or more or a manure storage area capable of holding the manure produced by 1,000 animal units or more must contain:

(1) an air emission plan that includes:

(a) methods and practices that will be used to minimize air emissions resulting from animal feedlot or manure storage area operations including manure storage area start-up practices, loading, and manure removal;

(b) measures to be used to mitigate air emissions in the event of an exceedance of the state ambient hydrogen sulfide standard; and

(c) a complaint response protocol describing the procedures the owner will use to respond to complaints directed at the facility, including:

i. a list of each potential odor source at the facility;

ii. a determination of the odor sources most likely to generate significant amounts of odors; and

iii. a list of anticipated odor control strategies for addressing each of the significant odor sources; and

(2) an emergency response plan that includes a description of the procedures that will:

(a) contain, minimize, and manage an unauthorized discharge;

(b) provide notification to the proper authorities; and

(c) mitigate any adverse effects of an unauthorized discharge.

C. In addition to the requirements of items A and B, an owner proposing to construct or expand an animal feedlot or a manure storage area shall also submit, on a form provided by the commissioner, certification and documentation that the owner has notified the local zoning authority, as required under part 7020.2000, subpart 5, of the proposed new or expanded animal feedlot or manure storage area, or that no such local zoning controls exist.

D. In addition to the requirements of items A to C, an owner proposing to construct or expand an animal feedlot with the capacity of 500 animal units or more or a manure storage area with the capacity to hold the manure produced by 500 animal units or more shall also certify and document, on forms provided by the commissioner, that the notification requirements under part 7020.2000, subpart 4, have been met.

E. The owner of an animal feedlot or a manure storage area shall submit additional information relating to the facility design, construction, or operation as requested by the commissioner or county feedlot pollution control officer to evaluate compliance with applicable federal and state rules.

Subp. 5. **Application processing.** Permit applications must be processed according to items A to C.

A. NPDES and SDS permits must be processed according to the procedures under this part and part 7001.0020, item F.

B. The agency and delegated county shall issue, reissue, revoke and reissue, or modify a permit according to part 7001.0140 and other applicable agency rules.

C. Construction short-form and interim permit applications must be processed in accordance with parts 7020.0505 and 7020.0535. County feedlot pollution control officers shall also process permit applications according to part 7020.1600, subpart 4a.

Subp. 6. **Application for variance.** Any person may apply for a variance from any requirement of parts 7020.2000 to 7020.2225 in order to avoid undue hardship. A variance must be applied for and acted upon by the agency according to Minnesota Statutes, section 116.07, subdivision 5, and other applicable statutes and rules.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.0535 CONSTRUCTION SHORT-FORM AND INTERIM PERMITS.

Subpart 1. **Applicability.** This part applies to owners who apply for construction short-form and interim permits required under part 7020.0405.

Subp. 2. **Permit applications submitted prior to October 23, 2000.** If an owner has submitted a complete permit application for construction of an animal feedlot or a manure storage area prior to October 23, 2000, and is eligible for a construction short-form permit, the owner may request to have the original application voided, returned, or, upon receipt of a construction short-form permit application by the commissioner or county feedlot pollution control officer, to have the original application submittals incorporated into the construction short-form permit application. Complete construction short-form permit applications submitted under this subpart must be considered received by the commissioner or county feedlot pollution control officer on the date the original completed permit application for an agency permit was received.

Subp. 3. **Delegated county procedures for denial and revocation.**

A. In the case of a denial of a permit application by the county feedlot pollution control officer, the applicant must be informed in writing by the county of the reasons for denial and must be informed of appeal procedures under chapter 7001. The applicant shall retain all rights of fundamental fairness afforded by law and the applicant may make an appeal to the agency to review the county's action. The denial by a county shall be without

prejudice to the applicant's right to an appearance before the agency to request a public hearing or to file a further application after revisions are made to meet objections specified as reasons for denial.

B. In order for a delegated county to revoke a permit, a copy of the permit together with a written justification for revocation must be submitted to the commissioner for review. The commissioner shall, after receipt of the justification for revocation from the county, review the matter within 60 days to determine compliance with applicable agency rules. The county must receive written approval of the permit revocation from the commissioner before taking action. If a revocation has been approved by the commissioner, the applicant must be informed in writing by the county of the reasons for revocation and the applicant shall retain all rights of appeal afforded under chapter 7001. Revocation without reissuance of the permit must follow the requirements under part 7001.0180.

Subp. 4. **No circumvention.** An owner who obtains a construction short-form or interim permit is subject to enforcement action for construction or operation without a permit if the commissioner or county feedlot pollution control officer later determines that the animal feedlot or a manure storage area does not qualify for the construction short-form or interim permit that was issued and that the owner is required to apply for and obtain an SDS or NPDES permit.

Subp. 5. **Duration of construction short-form and interim permits.** All construction short-form and interim permits expire within 24 months of the date of issuance. If the work for which a construction short-form permit was issued is not complete upon expiration of the permit, the expiration date of the permit may be extended by no more than 24 months if the owner complies with items A and B. If the pollution hazard for which an interim permit was issued is not corrected upon expiration of the permit, the expiration date may be extended by no more than 90 days if:

A. the facility is currently eligible for the same permit; and

B. the owner notifies the commissioner or county feedlot pollution control officer at least 90 days prior to the expiration of the permit. The notification shall include:

(1) the name of the owner, and the name of the facility if different from the owner;

(2) the permit number;

(3) the reason the work may not be completed prior to expiration of the permit;

(4) the estimated amount of time required to complete the work; and

(5) if the animal feedlot under construction or expansion will be capable of holding 500 animal units or more, or the manure storage area under construction or expansion will be capable of holding the manure produced by 500 animal units or more when completed, the notification requirements under part 7020.2000, subpart 4, on a form provided by the commissioner, submitted to the commissioner or delegated county feedlot pollution control officer. In addition to the information required under part 7020.2000, subpart 4, the notification must include the date on which the original permit was issued and the new proposed completion date.

Subp. 6. **Construction short-form permit content.** A construction short-form permit issued by the commissioner or county feedlot pollution control officer must state: "The permittee shall comply with Minnesota Rules, parts 7020.2000 to 7020.2225, and all applicable requirements." The permit must also identify at least the following information:

A. the permit number;

B. the owners' names and addresses;

C. the legal name of the animal feedlot, or manure storage area if different from that of the owner;

D. the location of the facility by county, township, section, and quarter section;

E. the existing and proposed animal types and types of animal holding areas;

F. the maximum number of animal units authorized at the facility after construction or expansion is complete; and

G. the types of existing and proposed manure storage areas. Design plans and specifications for proposed manure storage areas shall be incorporated by reference into the permit.

The general conditions in part 7001.0150, excluding subpart 3, item P, must be incorporated by reference in all construction short-form permits.

Subp. 7. **Interim permit content.** An interim permit issued by the commissioner or county feedlot pollution control officer must include at least the information in subpart 6 and the following:

A. the corrective and protective measures required to bring the facility into compliance with parts 7020.2000 to 7020.2225;

B. the schedule under which the corrective and protective measures must be completed; and

C. additional requirements related to the specific site or operation as determined necessary to ensure compliance with applicable rules and requirements.

Subp. 8. **Expansion stocking limitations.** An owner issued an interim permit that authorizes construction for an expansion shall not stock the expansion prior to the fulfillment of all permit conditions related to the correction of the pollution hazard for which the interim permit was issued.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.0600 [Repealed, 25 SR 834]

7020.0700 [Repealed, 25 SR 834]

7020.0800 [Repealed, 25 SR 834]

7020.0900 [Repealed, 25 SR 834]

DELEGATED COUNTY PROGRAM

7020.1500 SCOPE.

Any Minnesota county board may, by resolution, assume responsibility for processing applications for animal feedlot permits as authorized by Minnesota Statutes, section 116.07, subdivision 7. The provisions of parts 7020.1500 to 7020.1900 shall govern the exercise of approval and supervising authority by the agency with respect to the processing of animal feedlot permit applications by a county.

Statutory Authority: *MS s 116.07*

7020.1600 AUTHORITIES AND REQUIREMENTS FOR DELEGATED COUNTIES.

Subpart 1. **Scope.** A county delegation process consists of the following:

A. the county board resolution;

B. commissioner authorization;

C. a delegation agreement signed by the county board and commissioner;

D. periodic review of the delegation agreement; and

E. when applicable, withdrawal from the program by the county board or revocation of authorization to administer the program by the commissioner.

Subp. 2. **County feedlot pollution control officer requirements.** A delegated county animal feedlot program shall require the county feedlot pollution control officer to:

A. administer animal feedlots and manure storage areas registration programs according to part 7020.0350;

B. locate and register all animal feedlots and manure storage areas that remain unregistered by the date required under part 7020.0350;

C. distribute permit application and registration forms to owners required to make application for a permit. Permit application forms must contain the information required in part 7020.0505, subpart 3;

D. review permit applications and issue construction short-form and interim permits in accordance with part 7020.0535, and in the approved delegation agreement;

E. inspect all animal feedlots and manure storage areas in accordance with the approved delegation agreement;

F. review and process complaints;

G. provide assistance to owners in completing permit applications;

H. maintain a record of all correspondence and material relating to permit applications, inspections, and complaints;

I. maintain a record of all notifications received from livestock production facility operators claiming the hydrogen sulfide ambient air quality standard exemption, including the days the exemption was claimed and the cumulative days used, as provided in Minnesota Statutes, section 116.0713, paragraphs (b) and (c);

J. submit an annual report to the commissioner by April 1 of each year, in a format requested by the commissioner, that includes the following:

(1) all newly acquired and updated registration information required under part 7020.0350;

(2) inspection summary information from the previous year;

(3) permitting summary information from the previous year, including information regarding permits for facilities with fewer than 1,000 animal units that are CAFOs under Code of Federal Regulations, title 40, part 122, appendix B(b);

(4) complaint and complaint response summary information from the previous year;

(5) outreach and education summary information from the previous year; and

(6) summary of the progress toward achieving the goals identified in the approved delegation agreement and, if applicable, proposed adjustments to the goals or plans to meet the goals in the approved delegation agreement;

K. complete the required county feedlot pollution control officer training necessary to perform the duties described under this part assigned to the county feedlot pollution control officer; and

L. forward to the commissioner all permit applications, inspection reports, and all other applicable documents for the facilities identified in subpart 4, item B.

Subp. 3. [Repealed, 25 SR 834]

Subp. 3a. **Resolutions and delegation agreements.** To assume responsibility for administering the delegated county feedlot program under this part, a Minnesota county board shall complete the requirements in items A to D. Counties that have received delegation authorization from the commissioner prior to October 23, 2000, may administer the delegated county feedlot program provided that the requirements of item B are completed by June 1, 2001. Delegation agreements must be reviewed and revised by the commissioner and the

county annually to determine if the requirements of item B are being fulfilled and to establish new goals.

A. Submit to the commissioner a resolution duly adopted by the county board requesting permission to administer the animal feedlot program in the county.

B. Submit to the commissioner, for review and approval, a delegation agreement that contains:

(1) inspection goals for facilities capable of holding fewer than 300 animal units or the manure produced by fewer than 300 animal units:

(a) at existing facilities for the purposes of identifying pollution hazards;

(b) at new and expanding facilities for which construction activities have commenced; and

(c) for determining compliance with discharge standards and schedules for existing open lot facilities eligible under part 7020.2003, subparts 3 to 6;

(2) inspections conducted at facilities capable of holding 300 to 999 animal units or the manure produced by 300 to 999 animal units for the facilities meeting the conditions under subitem (1), units (a) and (b);

(3) permitting goals;

(4) registration goals, including locating and registering facilities that remain unregistered after the date required under part 7020.0350;

(5) scheduled compliance goals, coordinated with county local water plans, for bringing feedlot operations into compliance with the applicable standards under parts 7020.2000 to 7020.2225, including the compliance dates of part 7020.2003, subparts 5, item B, and 6, item A, considering the following:

(a) type and extent of the pollution hazard at feedlot operations;

(b) availability of private and public financial resources for cost-share grants and low-interest loans; and

(c) availability of private and public technical and administrative assistance;

(6) complaint response and resolution goals;

(7) owner assistance goals; and

(8) staffing levels available to achieve the stated goals.

C. Receive written authorization from the commissioner to administer the program identified in subpart 1.

D. Designate a county feedlot pollution control officer as having the primary responsibility for the animal feedlot permit program and charge the person with the duties in subpart 2.

Subp. 4. [Repealed, 25 SR 834]

Subp. 4a. **Permit application processing procedures.** The processing of permit applications by a delegated county shall be conducted according to the procedures in items A to D.

A. The county feedlot pollution control officer shall process permit applications and issue construction short-form and interim permits according to this part and part 7020.0535, except as directed in item B.

B. The county feedlot pollution control officer shall forward to the commissioner for issuance all permit applications and all other applicable documents, comments, and recommendations for the following:

(1) all facilities that are required to apply for a permit under part 7020.0405, subpart 1, item A or B;

(2) all facilities where all animal manure is not used as domestic fertilizer;

(3) all facilities capable of holding 500 or more animal units or the manure produced by 500 or more animal units that are proposing liquid manure storage areas within 1,000 feet of an open or filled sinkhole, a known cave, a resurgent spring, a disappearing stream, a karst window, or a blind valley;

(4) all facilities with 500 or more animal units that are within a vulnerable drinking water supply management area, as described on a Minnesota Department of Health approved wellhead protection plan; and

(5) all facilities for which an application for a variance under part 7020.0505, subpart 6, is submitted.

C. The county feedlot pollution control officer may forward to the commissioner any permit application when technical assistance or permit issuance by the commissioner is desired with a statement of the action desired from the agency. The commissioner shall process all complete permit applications forwarded by the county with a request to issue a permit, and shall notify the county of the status of the review and of any intended action.

D. The county feedlot pollution control officer shall forward to the commissioner permit applications for facilities that are eligible for the exemption under part 7020.2100, subpart 2, item C, for review and approval before a permit can be issued by the county feedlot pollution control officer.

Subp. 5. [Repealed, 25 SR 834]

Subp. 6. **Withdrawal by county from review process.** A delegated county no longer wishing to have delegation authority shall submit a resolution to the commissioner stating its reasons for withdrawal and the effective date of withdrawal.

Subp. 7. **Revocation of county review authority.** If the agency finds that a county program is not meeting the requirements of this chapter, the agency may, after giving the county written notice and an opportunity to respond, revoke its approval of the county's delegation.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *L 1987 c 186 s 15; 17 SR 1279; 25 SR 834*

NOTE: Subparts 3a and 4a were originally adopted at 25 SR 834 as subparts 3 and 4. They were renumbered editorially.

7020.1700 PROCEDURAL RULES AND APPEALS.

All requests for hearings, appeals, and other procedural matters not specifically provided for herein shall be governed by the agency rules of procedure, the rules of the Office of Administrative Hearings, and other applicable statutes and rules.

Statutory Authority: *MS s 116.07*

7020.1800 SEVERABILITY.

If any provision of parts 7020.1500 to 7020.1900 or the application thereof to any person or circumstances is held to be invalid, such invalidity shall not affect other provisions of parts 7020.1500 to 7020.1900 or application of any other part which can be given effect without application of the invalid provision. To this end the provisions of all parts and subparts herein and the various applications thereof are declared to be severable.

Statutory Authority: *MS s 116.07*

7020.1900 VARIANCES.

Any person may apply for a variance from any requirements of parts 7020.1500 to 7020.1900. Such variances shall be applied for and acted upon by the agency in accordance with Minnesota Statutes, section 116.07, subdivision 5, and other applicable statutes and rules.

Statutory Authority: *MS s 116.07*

STANDARDS FOR DISCHARGE, DESIGN, CONSTRUCTION, OPERATION, AND CLOSURE

7020.2000 OVERVIEW.

Subpart 1. **In general.** An owner of an animal feedlot or a manure storage area, and any person storing, transporting, disposing, or utilizing animal manure, or process wastewaters, shall comply with parts 7020.2000 to 7020.2225.

Subp. 2. **Animal manure and wastewaters not used as domestic fertilizer.** Animal manure or process wastewaters not used as domestic fertilizer must be treated or disposed of in accordance with applicable rules. An owner not using manure or process wastewaters as domestic fertilizer shall apply for a permit according to part 7020.0405, subpart 1, item A or B.

Subp. 3. **Manure packs and mounding.** Manure accumulations created by manure packs or mounding must be managed such that a pollution hazard is not created or maintained. Land application must be in accordance with part 7020.2225.

Subp. 4. **Notification of proposed construction or expansion.** An owner of an animal feedlot or manure storage area proposing to construct or expand an animal feedlot capable of holding 500 or more animal units, or a manure storage area capable of holding the manure produced by 500 or more animal units, shall no later than ten business days after the application is submitted to the agency or delegated county, provide notice to each resident and each owner of real property within 5,000 feet of the perimeter of the proposed feedlot by:

A. publishing in a newspaper of general circulation within the affected area a notification containing the following information:

(1) the names of the owners or the legal name of the facility;

(2) the location of the facility by county, township, section, and quarter section;

(3) species of livestock and total animal units;

(4) types of confinement buildings, lots, and areas at the animal feedlot; and

(5) the types of manure storage areas;

B. sending a written notice to them containing the information in item A, subitems (1) to (5), delivered by first class mail or in person; or

C. providing equal or greater notification required as part of obtaining a county conditional use permit.

Subp. 5. **Government notifications of proposed construction or expansion.** An owner proposing to construct or expand an animal feedlot or manure storage area shall notify the government authorities listed in items A and B. Notification must be on a form provided by the commissioner and include the information in subpart 4, item A, subitems (1) to (5).

A. The commissioner, or in a delegated county the county feedlot pollution control officer, at least 30 days prior to commencement of construction of a new animal feedlot or manure storage area or an expansion of an existing animal feedlot capable of holding fewer than 300 animal units or a manure storage area capable of holding the manure produced by fewer than 300 animal units after construction. Notification under this item is complete if the owner is proposing construction or modification of a liquid manure storage area and has submitted plans and specifications in accordance with part 7020.2100, subpart 4.

B. All local zoning authorities, including county, town, and city zoning authorities, of the proposed construction or expansion at least 30 days prior to commencement of construction of a new feedlot or manure storage area or an expansion of an existing animal feedlot or manure storage area.

Subp. 6. **Record of livestock owners and manure sources.** Owners of animal feedlots or manure storage areas that raise livestock that are not owned by them or store manure not produced at their facilities must record and retain on file the names of the livestock or manure source owners for at least the most recent three years.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2002 AMBIENT AIR QUALITY STANDARD APPLICABILITY.

The owner of an animal feedlot is exempt from the state ambient air quality standards during the removal of manure from barns or manure storage facilities pursuant to the limitations in Minnesota Statutes, section 116.0713, paragraphs (b) and (c). Nothing in this part limits the emergency powers authority of the Minnesota Pollution Control Agency in Minnesota Statutes, section 116.11.

The operator of a livestock production facility that claims exemption from the state ambient air quality standards shall notify the commissioner or county feedlot pollution control officer. Notification must include:

A. the names of the owners or the legal name of the facility;

B. the location of the facility by county, township, section, and quarter section;

C. the facility's permit number, if applicable; and

D. the anticipated start date and the anticipated number of days of removal of manure from barns or manure storage facilities.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2003 WATER QUALITY DISCHARGE STANDARDS.

Subpart 1. **Animal feedlots and manure storage areas.** Animal manure, manure-contaminated runoff, or process wastewater from any animal feedlot, including CAFOs, or manure storage area is prohibited from flowing into a sinkhole, fractured bedrock, well, surface tile intake, mine, or quarry.

Subp. 2. **CAFOs and facilities with 1,000 animal units or more.** An owner of an animal feedlot that is a CAFO or is capable of holding 1,000 animal units or more, or a manure storage area capable of holding the manure produced by 1,000 animal units or more, shall comply with the effluent limitation requirements of Code of Federal Regulations, title 40, part 412.

Subp. 3. **Other facilities.** An owner of an animal feedlot or a manure storage area shall comply with the effluent limitations in part 7050.0215 unless the animal feedlot or the manure storage area is subject to the effluent limitation requirements in subpart 2 or if the owner of the animal feedlot is subject to and meets all of the requirements in subpart 4.

Subp. 4. **Eligible open lot feedlots capable of holding fewer than 300 animal units.** Owners of animal feedlots capable of holding fewer than 300 animal units and having open lots meeting the eligibility requirements in items A to D shall comply with subparts 5 and 6. If the facility expands to a capacity of 300 or more animal units, the facility is not eligible under this subpart. This subpart applies only to open lots that existed on October 23, 2000; discharges from other parts of the animal feedlot, including manure storage areas, must comply with the effluent limitations in part 7050.0215 and other applicable federal and state requirements.

A. The animal feedlot is not a new animal feedlot.

B. The animal feedlot has manure-contaminated runoff from one or more open lots that discharge to waters of the state and:

(1) the manure-contaminated runoff does not create or maintain an immediate threat to human health or the environment; and

(2) the facility has not been designated a CAFO.

C. The owner has registered the animal feedlot in accordance with part 7020.0350.

D. The owner has submitted a certification, on a form provided by the commissioner, agreeing to comply with subparts 5 and 6. The certification form shall contain a provision for a conditional waiver of civil penalties for past violations of part 7050.0215 caused solely by passive manure-contaminated runoff from open lots and for failure to apply for a permit provided the owner maintains compliance with subparts 5 and 6.

Subp. 5. **Interim corrective measures for eligible open lots.** An owner meeting the eligibility requirements of subpart 4 shall:

A. operate and manage the animal feedlot to minimize discharges from eligible open lots at all times; and

B. comply with the following by October 1, 2005:

(1) install and have operational:

(a) diversions that prevent precipitation and snowmelt from building roofs and upslope land from flowing onto or through the animal feedlot or manure storage area; and

(b) vegetated buffer areas or filter strips that have 100 feet or more of nonchannelized flow through perennial grasses or forages for all runoff from the open lots; or

(2) install and have operational interim corrective and protective measures that have been demonstrated, through completion of "An Evaluation System To Rate Feedlot Pollution Potential" (the model) by a person who has completed training in use of the model, to achieve a 50 percent or greater reduction in discharges of phosphorus and biochemical oxygen demand loading. The percent reduction in discharges must be based on a comparison of the corrective and protective measures in operation at the facility on October 23, 2000, and the proposed interim corrective and protective measures and practices. The owner shall maintain records of the model results until completing the requirements of subpart 6, and make the model results available to the commissioner or county feedlot pollution control officer upon request.

Subp. 6. **Final corrective measures for eligible open lots.** An owner meeting the requirements of subpart 4 shall:

A. except as required in item B, comply with part 7050.0215 for all eligible open lots by October 1, 2010; and

B. if the owner is proposing an expansion, comply with subpart 2 or 3, as applicable, prior to an increase in the number of animal units at the animal feedlot.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2005 LOCATION RESTRICTIONS AND EXPANSION LIMITATIONS.

Subpart 1. **Location restrictions.** Except as provided in items A and B, a new animal feedlot or a manure storage area must not be constructed within shoreland, a floodplain, 300 feet of a sinkhole, 100 feet of a private well, or 1,000 feet of a community water supply well or other wells serving a public school as defined under Minnesota Statutes, section 120A.05, a private school excluding home school sites, or a licensed child care center where the well is vulnerable according to part 4720.5550, subpart 2.

A. An animal feedlot or a manure storage area located in shoreland meeting the requirements of part 7020.0300, subpart 15, item B:

(1) that has been unused for less than ten years is a pollution hazard and may resume operation after applying for and obtaining an interim permit under part 7020.0405, subpart 1, item C; or

(2) that has been unused for ten years or more must not resume operation.

B. A new animal feedlot or manure storage area may be constructed within 1,000 feet of a community water supply well or other well serving a public school as defined under Minnesota Statutes, section 120A.05, a private school excluding home school sites, or a licensed child care center if the following three conditions are met:

(1) the Minnesota Department of Health has approved a drinking water supply management area for the well under part 4720.5360;

(2) the animal feedlot or manure storage area is not within the drinking water supply management area; and

(3) the animal feedlot or manure storage area is not within 200 feet of the well.

Subp. 2. **Shoreland expansion limitations.** An existing animal feedlot or manure storage area located in shoreland may not expand to a capacity of 1,000 animal units or more or the manure produced by 1,000 animal units or more. An existing animal feedlot or a manure storage area expanding in shoreland shall not locate any portion of the expanded animal feedlot or the manure storage area closer to the ordinary high water mark than any existing portion of the animal feedlot or the manure storage area.

Subp. 3. **Floodplain expansion limitations.** An existing animal feedlot or a manure storage area located in a floodplain may not expand.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2010 TRANSPORTATION OF MANURE.

Animal manure hauled on federal, state, or local highways, roads, or streets must be hauled in such a way as to prevent manure from leaking, spilling, or otherwise being deposited in the right-of-way. Manure deposited on a public roadway must be removed and properly disposed of by the hauler of the manure.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2015 LIVESTOCK ACCESS TO WATERS RESTRICTION.

Subpart 1. **CAFOs and facilities capable of holding 1,000 or more animal units.** Animals of a CAFO or of a facility capable of holding 1,000 or more animal units must not be allowed to enter waters of the state.

Subp. 2. **Non-CAFO animal feedlots.** Except as required in subpart 1, by October 1, 2001, animals of a non-CAFO animal feedlot must be fenced to prohibit entry to, and must not be allowed to enter, a lake classified by the Minnesota Department of Natural Resources as a natural environment lake, recreational development lake, or a general development lake, as defined in part 6120.3000.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2025 ANIMAL FEEDLOT OR MANURE STORAGE AREA CLOSURE.

The owner of an animal feedlot or a manure storage area is responsible for closure and shall:

A. within one year of ceasing operation, remove and land apply manure and manure-contaminated soils from manure storage areas and animal holding areas in accordance with part 7020.2225;

B. as soon as practicable after completing the requirements of item A, reduce soil nitrogen by growing alfalfa, grasses, or other perennial forage for at least five years; and

C. within 60 days after final closure, submit a certified letter to the commissioner or county feedlot pollution control officer stating that the animal feedlot or the manure storage area has been closed according to the requirements in this part. The letter must

identify the location of the animal feedlot or the manure storage area by county, township, section, and quarter section.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2100 LIQUID MANURE STORAGE AREAS.

Subpart 1. **General.** This part describes site restrictions and requirements for design, construction, maintenance, and operation of liquid manure storage areas. An owner shall submit a permit application, as applicable, under part 7020.0405, subparts 1 and 2. Except as required in subpart 2, all liquid manure storage areas must be designed, constructed, and operated in accordance with subparts 3 to 7. An owner of a liquid manure storage area that has been unused for a period of three years or more shall, prior to using the structure for storing manure or process wastewaters, have a design engineer evaluate and prepare a report on the condition of the liner and include this report with a permit application submitted according to part 7020.0405.

Subp. 2. **Site restrictions.** Except as provided in item C, the construction or expansion of a liquid manure storage area is prohibited in the areas identified under part 7020.2005 and items A and B.

A. A manure storage area with a capacity of more than 250,000 gallons in an area where geologic conditions are suitable for sinkhole development and where four or more sinkholes exist within 1,000 feet of the proposed site.

B. In areas which are susceptible to soil collapse or sinkhole formation, the minimum separation distance to bedrock and the manure storage area liner design standards under subpart 3, item B, and prohibitions must be in accordance with subitems (1) to (3).

(1) Animal feedlots capable of holding fewer than 300 animal units or manure storage areas capable of holding manure produced by fewer than 300 animal units that contribute to liquid manure storage areas at the facility must comply with the following:

(a) where the separation distance to bedrock is less than five feet, construction of a liquid manure storage area is prohibited; and

(b) where the separation distance to bedrock is five feet or more and less than 20 feet, the manure storage area liner must be concrete-lined, aboveground, or composite-lined according to subpart 3, item B, subitem (2) or (3).

(2) Animal feedlots capable of holding 300 or more and fewer than 1,000 animal units and manure storage areas capable of holding the manure produced by 300 or more and fewer than 1,000 animal units that contribute to liquid manure storage areas at the facility shall comply with the following:

(a) except as provided in unit (c), where the separation distance to bedrock is less than ten feet, construction of a liquid manure storage area is prohibited;

(b) where the separation distance to bedrock is ten feet or more and less than 30 feet, the manure storage area liner must be concrete-lined, aboveground, or composite-lined according to subpart 3, item B, subitem (2) or (3); and

(c) where the separation distance to bedrock is five feet or more and less than ten feet, the manure storage area must be:

i. an aboveground manure storage area;

ii. concrete-lined with a secondary liner consisting of a synthetic liner, HDPE liner, or one foot or greater cohesive soil liner; or

iii. composite-lined with at least a three-foot compacted cohesive soil liner under the synthetic liner.

(3) Animal feedlots capable of holding 1,000 or more animal units or manure storage areas capable of holding the manure produced by 1,000 or more animal units that contribute to liquid manure storage areas at the facility shall comply with the following:

(a) except as provided in unit (c), where the separation distance to bedrock is less than 15 feet, construction of a liquid manure storage area is prohibited;

(b) where the separation distance to bedrock is 15 feet or more and less than 40 feet, the manure storage area liner must be concrete-lined, aboveground, or composite-lined according to subpart 3, item B, subitem (2) or (3); and

(c) where the separation distance to bedrock is ten feet or more and less than 15 feet, the manure storage area must be:

i. an aboveground manure storage area;

ii. concrete-lined with a secondary liner consisting of a synthetic liner, HDPE liner, or one foot or greater cohesive soil liner; or

iii. composite-lined with at least a three-foot compacted cohesive soil liner under the synthetic liner.

C. Where construction or modification is required to correct a pollution hazard at an existing animal feedlot capable of holding fewer than 300 animal units, construction or modification is not prohibited. Construction or modification under this item must not result in an expansion of the animal feedlot capacity to hold more than 300 animal units or the manure storage area capacity to hold the manure produced by 300 animal units or greater.

Subp. 3. **Design standards.**

A. A new or modified liquid manure storage area at an animal feedlot capable of holding 1,000 animal units or more or the manure storage area capable of holding the manure produced by 1,000 animal units or more must be designed to provide a minimum of nine months of storage capacity.

B. Liquid manure storage area liners must comply with the following:

(1) non-concrete-lined manure storage areas must be designed and constructed to achieve a maximum theoretical seepage rate of not more than 1/56 inch per day throughout the design life of the manure storage area;

(2) concrete-lined manure storage areas must be designed and constructed with: water stops or joint sealant materials at all construction joints; sealing of all cracks which may extend through the concrete liner with appropriate sealing materials; and a floor having a concrete thickness of not less than five inches. The floors must have:

(a) steel reinforcing based on subgrade drag theory in American Concrete Institute, Slabs on Grade, ACI-360; or

(b) fiber reinforcing, for which the design engineer must specify the type of fibers and the dosage rate in subpart 4, item F;

(3) composite-lined or aboveground manure storage areas must be designed and constructed to achieve a maximum theoretical seepage rate of not more than 1/560 inch per day throughout the design life of the manure storage area; and

(4) aboveground manure storage areas located in areas not subject to the site restrictions under subpart 2, may be designed and constructed according to seepage standards under subitem (1) or (2), as applicable.

C. Water supply systems, fuel lines, electrical conduit, or other equipment not solely functioning as part of the manure handling or transfer system must not be designed or constructed to penetrate the liner of a liquid manure storage area. Piping and equipment functioning as part of the manure handling or transfer system which penetrates the liner of a liquid manure storage area must be identified in the design plans and specifications. The design plans and specifications must include details on the location and purpose of the penetrations, dimensions of the penetrations, and the methods and materials used to provide a seal between each penetration and the liner.

Subp. 4. **Design plans and specifications.** The owner shall prepare and submit to the commissioner or county feedlot pollution control officer design plans and specifications meeting the requirements of items A to N with a permit application or at least 90 days prior to the commencement of construction. Design plans and specifications, except plans and specifications for concrete-lined manure storage areas having a capacity of 20,000 gallons or less, must be prepared and signed by a design engineer.

A. Results and interpretation of a site and soils investigation that includes the information and requirements in subitems (1) to (10).

(1) An analysis of foundation soils for suitability for the proposed manure storage area including conditions that may lead to failure of constructed dikes or walls.

(2) Soil profile information in subitem (5) that must be obtained and recorded at a minimum of two locations within the boundaries of the proposed manure storage area for the first one-half acre of surface area. A minimum of one additional location is required for each additional one acre of surface area for the manure storage area.

Sufficient soil records must be obtained to represent the range of soil conditions throughout the proposed manure storage area site.

(3) Except as required in subitem (4), the information in subitem (5) must be recorded to a depth of at least five feet below the bottom of the proposed liquid manure storage area and to a depth that allows verification of separation to bedrock requirements in accordance with subpart 2, item B. Each borehole completed under this item must be sealed throughout the entire depth by a method that will ensure that the borehole does not become a preferential flow path for vertical groundwater transport.

(4) In areas that are susceptible to soil collapse or sinkhole formation, the information in subitem (5) must be recorded to a depth of at least ten feet below the bottom of the proposed liquid manure storage area, or until bedrock is encountered.

(5) Each soils record must identify the soil texture, depth to the regional water table, and depth to the seasonal high water table.

(6) The soil profile information must be obtained by a method that can identify abrupt changes in soil texture and sand lenses throughout the soil profile.

(7) In areas susceptible to soil collapse or sinkhole formation, a map of the proposed site showing the location of all open and filled sinkholes, depression areas in the landscape, known caves, resurgent springs, disappearing streams, karst windows, and blind valleys within one-half mile of the proposed site location.

(8) An evaluation of potential for groundwater intrusion and damage to the storage area liner.

(9) Where a perimeter drainage tile system is required to control the elevation of the water table or saturated soils in accordance with item J, the design plans and specifications for the drain tile system must include provisions to:

(a) lower the elevation of the water table or saturated soils to below the bottom of the manure storage area liner;

(b) locate the drainage tile a horizontal distance of at least one foot outside the footing of a concrete-lined manure storage area;

(c) install a dedicated drain tile system for each manure storage area; and

(d) install a dedicated tile riser, manhole, or other access which allows collection of tile-water samples for each dedicated drain tile system.

(10) Additional information relating to the proposed manure storage area as requested by the commissioner to evaluate compliance with federal and state rules.

B. The following information if the proposed manure storage area is located in a Minnesota Department of Health approved drinking water supply management area as delineated according to chapter 4720:

(1) the location of the animal feedlot, manure storage area, and land application sites on a map of the Minnesota Department of Health approved drinking water supply management area;

(2) a copy of the vulnerability assessment of the drinking water supply management area from an approved wellhead protection plan according to part 4720.5210, subparts 2 and 3;

(3) a description of the vulnerability of the specific sites for manure storage areas and land application as described in the vulnerability assessment; and

(4) a copy of all parts of the drinking water supply management area plan which pertain to animal feedlots, manure storage areas, and land application of manure.

C. The estimated storage capacity by volume and time period based on the volume of manure, manure-contaminated runoff, and process wastewaters generated.

D. In addition to the designed storage volume in item C, allowance for the greater capacity of the following for manure storage areas open to precipitation or subject to discharge of runoff into the manure storage area:

(1) a volume capacity for precipitation and runoff without overflow for a 25-year, 24-hour or greater precipitation or rainfall event; or

(2) a freeboard depth of not less than one foot.

E. A plan for a preconstruction conference that includes the design engineer, contractors, the owner, and the inspector required under subpart 6.

F. Specifications for the liquid manure storage area liner according to the applicable liner design standard identified under subparts 2 and 3.

G. When soil is used as a liner material, location and volume of liner soil available, testing protocol, and predesign test results for soil plasticity index, sieve analysis, and optimal moisture content.

H. A site plan that identifies the locations of predesign soil investigations conducted under item A relative to the proposed manure storage area.

I. Plan details and specifications for all liner penetrations according to subpart 3, item C.

J. Measures for control of water table or saturated soils.

K. A quality assurance and quality control plan that includes specifications for inspections and ASTM testing methods and frequencies.

L. Specifications for liner material protection from damage during construction or subsequent facility operation resulting from the following:

(1) drying and cracking during and after liner construction;

(2) manure agitation and pumping;

(3) freezing and thawing;

(4) hot and cold weather construction;

(5) erosion; and

(6) other physical damage.

M. Special site considerations.

N. A plan for operation, periodic inspection, and maintenance of the manure storage area including schedules and descriptions of:

(1) routine inspections, maintenance, and record keeping to be completed to identify and document damage to the liner from the factors listed in item L;

(2) methods to be used to repair areas of damaged liner;

(3) methods used to monitor the liquid level in the basin to evaluate proper operation and adequate available storage capacity; and

(4) routine inspections of perimeter tile line outlets and inspection manholes to ensure proper operations of the system.

Subp. 5. **Construction and notification requirements.**

A. The owner shall construct the manure storage area according to the design plans and specifications submitted to the commissioner or the county feedlot pollution control officer. Proposed engineering changes or modifications to the design plans and specifications, related to the liner specifications, location, depth, or separation distance to bedrock, must be submitted to the commissioner or county feedlot pollution control officer prior to commencement of construction related to the proposed change.

B. An owner shall notify the commissioner or county feedlot pollution control officer and the design engineer of intent to construct a minimum of three business days prior to commencement of construction. Notification must be completed by letter, telephone, or facsimile and include:

(1) the permit number, if applicable;

(2) the owner's name, and the name of the facility if different than the owner;

(3) the site location by county, township, section, and quarter section;

(4) the design engineer's name; and

(5) the name of the contractor responsible for installing the liner.

C. An owner shall notify the commissioner or county feedlot pollution control officer within three business days following completion of construction of the manure storage area liner. Notification for vertical concrete-lined walls under this item must be completed before backfilling the walls. Notification information must meet the requirements in item B.

D. The owner shall submit a construction report to the commissioner or county feedlot pollution control officer within 60 days of the completion of any new or modified manure storage area. The report must be prepared and signed by the design engineer and must contain an assessment of whether the completed manure storage area conforms to the design plans and specifications submitted to the commissioner or county feedlot pollution control officer. The commissioner may require manure removal from the manure storage area and corrective actions if the construction report indicates that the completed manure storage area does not conform to the design plans and specifications.

Subp. 6. **Inspections of liquid manure storage areas.** An owner constructing a liquid manure storage area, except for a concrete-lined manure storage area with a capacity of 20,000 gallons or less, shall have inspections completed during the construction process which comply with items A to D.

A. The inspector must be one or more of the following:

(1) a professional engineer licensed in the state of Minnesota or a person working under the professional engineer's direct supervision;

(2) a qualified Natural Resources Conservation Services staff person; or

(3) if the manure storage area has a concrete liner, an American Concrete Institute or Minnesota Department of Transportation concrete field testing technician grade/level I certified and concrete field inspector level II certified.

B. During construction of each manure storage area under this subpart, the inspector shall record on a form provided by the commissioner, observations related to conformance to the design plans and specifications and construction standards of the following:

(1) subgrade conditions prior to liner placement including soil texture, strength and moisture content, and presence of any frozen soils;

(2) location and proper functioning of the perimeter drainage tile system, if required, and inspection/monitoring access;

(3) for all concrete-lined manure storage areas:

(a) reinforcing steel size, grade, spacing, cover, and that steel is free of loose rust, oil, or other debris;

(b) concrete quality including air entrainment, temperature, and strength;

(c) handling, placement, consolidation, and finishing of concrete;

(d) curing and protection of concrete after placement, including hot and cold weather protective measures;

(e) location, forming, and surface preparation of construction, contraction, and expansion joints;

(f) placement of flexible waterstop materials in joints; and

(g) application of surface applied or injected crack and joint sealant materials;

(4) repair of construction defects; and

(5) conformance to the liner penetration prohibitions under subpart 3, item C.

C. The contractor responsible for installation of the liner shall certify on a form provided by the commissioner that the manure storage area was constructed in conformance with the design plans and specifications and construction standards for all applicable stages of construction in item B.

D. The owner shall ensure that the following information is submitted to the design engineer for incorporation into the construction report required in subpart 5, item D:

(1) the name and qualifications of the inspector;

(2) the inspection form required in item B; and

(3) the liner contractor's certification form required in item C.

Subp. 7. **Operation and maintenance.** The owner of a manure storage area shall operate and maintain the manure storage area according to the operation and maintenance plan submitted in accordance with subpart 4, item N.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2110 UNPERMITTED OR NONCERTIFIED LIQUID MANURE STORAGE AREAS.

Subpart 1. **Schedule for facilities capable of holding 1,000 animal units or more or construction after June 3, 1991.** An owner who has a facility capable of holding 1,000 or more animal units and who uses an unpermitted or noncertified liquid manure storage area, or who uses an unpermitted or noncertified liquid manure storage area for which construction commenced after June 3, 1991, shall, by October 1, 2001:

A. reconstruct the manure storage area according to part 7020.2100;

B. complete closure of the manure storage area according to part 7020.2025 and notify the commissioner or county feedlot pollution control officer at least three days prior to the date when the manure storage area will be closed. Notification must be completed by letter, telephone, or facsimile and include:

(1) the permit number, if applicable;

(2) the owner's name, and the name of the facility if different than the owner;

(3) the site location by county, township, section, and quarter section; and

(4) the dates when closure will take place;

C. except as provided in item D, submit a copy of the original design plans and specifications for the manure storage area that were prepared by a design engineer prior to the actual time of construction and a construction certification report signed by a design engineer that certifies that the liquid manure storage area was designed and constructed according to applicable rules and regulations and standard engineering principles and practices at the time of construction;

D. if the original plans and specifications for a Natural Resources Conservation Service (NRCS) or Soil Conservation Service (SCS) designed liquid manure storage area are no longer available, the owner must submit a certification by the manager of the NRCS office which was responsible for the design and oversight of the project, that the project was constructed according to the NRCS or SCS design plans and specifications and construction oversight; or

E. conduct and submit the results of a water balance test that demonstrate the manure storage area is properly sealed to achieve a seepage rate of 1/56 inch per day or less.

Subp. 2. **Schedule for facilities with capacity to hold fewer than 1,000 animal units.** Except as required in subpart 1 or as provided in subpart 3, an owner who uses an unpermitted or noncertified liquid manure storage area with the capacity to hold fewer than 1,000 animal units or the manure produced by fewer than 1,000 animal units shall, by October 1, 2005:

A. complete one of the provisions under subpart 1, items A to C; or

B. have a design engineer or professional soil scientist licensed in the state of Minnesota conduct a soils investigation and submit a soils investigation report to the commissioner or county feedlot pollution control officer that complies with the following:

(1) the soils report must demonstrate that the liquid manure storage area meets Minnesota Natural Resources Conservation Service Practice Standard, Code No. 425, November 1991, or Code No. 313, January 1998, design and construction criteria for:

(a) sealing and lining waste storage ponds;

(b) vertical separation to groundwater; and

(c) vertical separation to bedrock;

(2) the soil profile information in subitem (5) must be obtained and recorded for at least two equally spaced locations around the perimeter of the liquid manure storage area for each quarter acre of manure storage surface area or portion thereof, and be within a horizontal distance of not more than 50 feet outside the top of the manure storage area sidewall;

(3) except as required in subitem (4), the information in subitem (5) must be recorded to a depth of at least five feet below the bottom of the liquid manure storage area;

(4) in areas that are susceptible to soil collapse or sinkhole formation, the information in subitem (5) must be recorded to a depth of at least ten feet below the bottom of the liquid manure storage area, or until bedrock is encountered;

(5) each soils record must identify the soil texture, depth to the regional water table, and depth to the seasonal high water table; and

(6) the soil profile information must be obtained by a method that can identify abrupt changes in soil texture and sand lenses of one-half inch or greater throughout the soil profile.

Subp. 3. **Schedule for open lot feedlots with fewer than 300 animal units.** Owners meeting the eligibility requirements under part 7020.2003, subpart 4, that must complete

closure or reconstruction of the manure storage area according to subpart 1, item A or B, shall comply with items A and B.

A. By October 1, 2005, the owner shall notify the commissioner or county feedlot pollution control officer that the manure storage area will be closed or reconstructed by October 1, 2010. Notification must be completed by letter, telephone, or facsimile and also include:

(1) the owner's name, and the name of the facility if different than the owner; and

(2) the site location by county, township, section, and quarter section.

B. By October 1, 2010, the owner shall complete closure or reconstruction.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2120 POULTRY BARN FLOORS.

Subpart 1. **General.** This part describes the requirements for construction and record keeping for poultry barn floors. Owners of poultry barns at which abandonment of the facility exposes the barn floor shall remove and land apply all manure and manure-contaminated soil according to part 7020.2225.

Subp. 2. **Construction requirements for concrete-lined or asphalt-lined floors.** All new concrete-lined or asphalt-lined poultry barn floors must be constructed and maintained according to the following:

A. the floor thickness must be a minimum of 3.5 inches for concrete and a minimum of two inches for asphalt;

B. the floors must be inspected by the owner or operator after each cleaning of the poultry barn floors; and

C. cracks and joints, which may extend through the concrete-lined or asphalt-lined floor, must be sealed.

Subp. 3. **Construction requirements for soil-lined floors.** All new soil-lined poultry barn floors must be constructed and maintained according to items A to E.

A. The completed thickness of the constructed soil liner must be:

(1) 12 inches or more of compacted soil; or

(2) eight inches or more of compacted soil placed over an underlayment that consists of:

(a) three inches of sand consisting of at least 80 percent particles passing a number 4 sieve, less than ten percent particles passing a number 200 sieve, and no particles greater than one inch. Particle size analyses must be performed according to ASTM D-422; or

(b) a geo-textile fabric that weighs at least 12 ounces per square yard and has a minimum hydraulic conductivity of 0.30 cm/sec.

B. Soils used for construction of the floor must meet the following requirements:

(1) have at least 30 percent particles passing a number 200 sieve, less than 20 percent retained on a number 4 sieve, and no rocks greater than three inches in diameter. Particle size analyses must be performed according to ASTM D-422;

(2) have a plasticity index greater than seven percent according to ASTM D-4318;

(3) be placed in a minimum of two lifts, each lift being a minimum of four inches of in-place thickness;

(4) be maintained at a moisture content of zero to five percent above optimum as determined by ASTM D-698 or ASTM D-1557 during construction; and

(5) be compacted:

(a) with at least three passes of a sheepsfoot or padfoot-type compaction equipment with feet that extend through the loose lift of soil into the previous lift; or

(b) until achievement of 90 percent of standard proctor density. The density must be verified according to ASTM 2922, at a frequency of one sample per 3,000 square feet.

C. The poultry barn floor must be placed at least three feet above bedrock or the water table.

D. The soil liner must be refurbished with at least a two-inch lift of soils meeting the requirements of item B, prior to the floor thickness being diminished by two inches from the thickness required in item A.

E. Cracks that may extend through the floor must be repaired.

F. The floor must not be saturated at any time during the service life of the floor.

Subp. 4. **Construction requirements for polyvinyl chloride (PVC) lined floors.**

A. A seamless or factory seamed PVC liner having a thickness of not less than 30 mils must be placed at a depth of at least six inches below the final elevation of the poultry barn floor.

B. The upper six inches of the floor must be constructed of protective material that meets manufacturer's recommendations and provides adequate protection of the PVC liner. This protective layer must not consist of any particles that will inflict damage to the liner.

Subp. 5. **Record keeping.** The owner shall record and retain on permanent file the results of all testing required in subpart 3 and make these records available to the commissioner or county feedlot pollution control officer upon request.

Subp. 6. **Notifications of construction.** An owner shall notify the commissioner or county feedlot pollution control officer of intent to construct a minimum of three business days prior to commencement of construction and within three business days following completion of construction. Notification must be completed by letter, telephone, or facsimile and include:

A. the permit number, if applicable;

B. the owner's name, and the name of the facility if different than the owner;

C. the site location by county, township, section, and quarter section; and

D. the name of the contractor responsible for installing the floor.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2125 MANURE STOCKPILING SITES.

Subpart 1. **General.** This part describes requirements for permitting, design, construction, location, operation, and maintenance of short-term and permanent stockpiling sites. Stockpiling sites must comply with part 7020.2005 and items A to D.

A. Manure stockpiling sites must be located and constructed such that manure-contaminated runoff from the site does not discharge to waters of the state.

B. Manure must not be placed on a stockpiling site unless a three-to-one horizontal-to-vertical ratio can be maintained or the manure has, at least, a 15 percent solids content.

C. The use of rock quarries, gravel or sand pits, bedrock, and any mining excavation sites for stockpiling manure is prohibited.

D. The size of a short-term stockpile must not exceed a volume based on agronomic needs of the crops on 320 acres of fields and must not exceed the agronomic needs

of the crops on the tract of land on which the stockpile is to be applied. The agronomic needs of the crops must comply with the application rates in part 7020.2225.

Subp. 2. **Additional requirements for short-term stockpiling.** By October 1, 2001, all short-term stockpile sites must:

A. have the manure removed from the site and land applied in accordance with part 7020.2225, within one year of the date when the stockpile was initially established;

B. have a vegetative cover established on the site for at least one full growing season prior to reuse as a short-term stockpiling site except for the following:

(1) sites located within the confines of a hoofed-animal open lot at a facility having the capacity to hold fewer than 100 animal units; and

(2) sites where manure is stockpiled for fewer than ten consecutive days and no more than six times per calendar year;

C. not be located within:

(1) 300 feet of flow distance and at least 50 feet horizontal distance, to waters of the state, sinkholes, rock outcroppings, open tile intakes, and any uncultivated wetlands which are not seeded to annual farm crops or crop rotations involving perennial grasses or forages;

(2) 300 feet of flow distance to any road ditch that flows to the features identified in subitem (1) or 50 feet of any road ditch where subitem (1) does not apply;

(3) 100 feet of any private water supply or unused and unsealed well and 200 feet from any private well with less than 50 feet of watertight casing and that is not cased through a confining layer at least ten feet thick; and

(4) 100 feet from field drain tile that is three feet or less from the soil surface;

D. maintain a minimum distance of two feet between the base of the stockpile and the seasonal high water table or saturated soils, as identified in the most recent USDA/NRCS soil survey manual or based on a site-specific soils investigation; and

E. be prohibited:

(1) on land with greater than six percent slope;

(2) on land with slopes between two and six percent, except where clean water diversions and erosion control practices are installed; and

(3) on soils where the soil texture to a depth of five feet is coarser than a sandy loam as identified in the most recent USDA/NRCS soil survey manual or based on a site-specific soils investigation.

Subp. 3. **Record keeping for short-term stockpile sites.** The owner of the short-term stockpile site shall maintain records for each stockpile site containing the information in items A to E. Records must be kept on file for at least three years for all short-term stockpiling by the owner of the animal feedlot at which the manure was produced and be made available to the commissioner or county feedlot pollution control officer upon request. The records must include:

A. the location of the stockpile;

B. the date on which each stockpile was established;

C. the volume of manure stockpiled;

D. the nutrient analysis of the manure; and

E. when the stockpiled manure was land applied.

Subp. 4. **Additional requirements for permanent stockpile sites.** By October 1, 2001, all permanent stockpile sites must comply with this part. The owner shall also install a liquid manure storage area according to part 7020.2100 to collect and contain manure-

contaminated runoff, if necessary to comply with the requirements of part 7020.2003. An owner shall submit a permit application, as applicable, under part 7020.0405, subpart 1.

A. The owner shall comply with part 7020.2005.

B. The stockpile site liner must:

(1) have a completed thickness of at least two feet and be constructed of soils having a hydraulic conductivity of 1 x 10^{-7} cm/sec or less upon completion of construction; or

(2) have other liner materials which achieve a hydraulic conductivity less than 1 x 10^{-7} cm/sec.

C. The site must be constructed using diversion structures, elevated platform construction, or other devices to prevent surface waters from entering and passing through the stockpile site. Where upgradient slopes are greater than two percent, clean water diversions must be constructed that surround at least the three upgradient sides of the stockpile site. Diversions must be of sufficient height to prevent outside water from passing over them during snowmelt or rainfall events less than the 25-year, 24-hour storm event.

D. A permanent stockpile site must be operated and maintained in a manner so as to protect the integrity and structural reliability of the manure storage area.

E. An owner shall notify the commissioner or county feedlot pollution control officer of intent to construct a minimum of three days prior to commencement of construction and within three days following completion of construction. Notification must be completed by letter, telephone, or facsimile and include:

(1) the permit number, if applicable;

(2) the owner's name, and the name of the facility if different than the owner;

(3) the site location by county, township, section, and quarter section; and

(4) the name of the contractor responsible for installing the permanent stockpile liner.

F. The owner shall comply with subpart 2, item D.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2150 MANURE COMPOST SITES.

Subpart 1. **General.** An owner composting only manure at a manure compost site shall comply with subparts 2 and 3. An owner composting manure and solid wastes shall comply with part 7035.2836, subparts 4 to 7. An owner composting dead animals shall comply with part 1719.4000.

Subp. 2. **Operational requirements.** An owner of a manure compost site meeting the requirements of subpart 1 shall comply with items A to C.

A. The owner shall comply with part 7020.2125.

B. If operating a compost site under part 7020.2125, subparts 1 to 3, the owner shall comply with part 7020.2125, subpart 4, item C.

C. The owner shall produce finished compost by a process to further reduce pathogens (PFRP). The temperature and retention time for the material being composted must be monitored and recorded each day. The owner shall comply with one of the PFRP methods in subitems (1) to (3).

(1) The windrow method for reducing pathogens consists of an unconfined composting process involving periodic aeration and mixing. Aerobic conditions must be maintained during the compost process. A temperature of 55 degrees Celsius must be maintained in the windrow for at least three weeks. The windrow must be turned at least once every three to five days.

(2) The static aerated pile method for reducing pathogens consists of an unconfined composting process involving mechanical aeration of insulated compost piles. Aerobic conditions must be maintained during the compost process. The temperature of the compost pile must be maintained at 55 degrees Celsius for at least seven days.

(3) The enclosed vessel method for reducing pathogens consists of a confined compost process involving mechanical mixing of compost under controlled environmental conditions. The retention time in the vessel must be at least 24 hours with the temperature maintained at 55 degrees Celsius. A stabilization period of at least seven days must follow the enclosed vessel retention period. Temperature in the compost pile must be maintained at least at 55 degrees Celsius for three days during the stabilization period.

Subp. 3. **Record keeping and reporting requirements.** An owner of a manure compost site that is required to apply for and obtain a permit under part 7020.0405, subpart 1, item A or B, must:

A. analyze mature manure compost and maintain records of the results for:

(1) pH;

(2) moisture content;

(3) particle size;

(4) NPK ratio; and

(5) soluble salt content; and

B. if the owner's NPDES or SDS permit requires submittal of an annual report, include the following information in the annual report:

(1) the quantities and sources of manure and bulking agents delivered to the facility;

(2) temperature and retention time data for all compost produced; and

(3) the information recorded under item A.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*

7020.2225 LAND APPLICATION OF MANURE.

Subpart 1. **In general.**

A. Manure and process wastewater must not be applied to land in a manner that will:

(1) result in a discharge to waters of the state during the application process, except that manure and process wastewater application is allowed onto seasonally saturated soils that are seeded to annual farm crops or crop rotations of perennial grasses or legumes; or

(2) cause pollution of waters of the state due to manure-contaminated runoff.

B. Manure and process wastewater application into road ditches is prohibited.

C. All manure and process wastewater applications to land must meet the requirements of this part except where specifically exempted.

D. When ownership of manure or process wastewater is transferred from an animal feedlot with capacity of 300 or more animal units or a manure storage area capable of holding the manure produced by 300 or more animal units for application to land not owned or leased by the owner of the animal feedlot or the manure storage area, any person receiving the manure or the process wastewater shall:

(1) comply with the manure management plan completed by the owner of the animal feedlot where the manure or process wastewater was produced; and

(2) complete the manure management plan requirements in subpart 4, item D, except for provisions that were completed by the owner of the animal feedlot where the manure or process wastewater was produced.

Subp. 2. **Manure nutrient testing requirements.** Manure from all manure storage areas storing manure produced from more than 100 animal units must be tested by the owner of the animal feedlot for nitrogen and phosphorus content in accordance with items A to E, except that item A is not required for manure storage areas storing manure produced by fewer than 300 animal units.

A. For manure storage areas storing manure from 300 or more animal units, the manure must initially be tested once per year for at least three years.

B. Manure must be retested following changes in conditions affecting manure nutrient content including unusual climatic conditions, or changes in manure storage and handling, livestock types, or livestock feed.

C. Ongoing testing must continue at least once every four years unless more frequent testing is required under item B or in a permit.

D. The nutrient analysis must be conducted using a laboratory certified by the Minnesota Department of Agriculture or commissioner-approved on-farm sampling and analysis.

E. Sampling must be conducted so that a representative sample is obtained in accordance with University of Minnesota Extension Service recommendations.

Subp. 3. **Nutrient application rate standards.** Items A and B apply to all manure and process wastewater application sites. Item C applies only to animal feedlots with a capacity of 300 or more animal units and manure storage areas capable of holding the manure produced by 300 or more animal units.

A. Manure and process wastewater application rates must be limited as described in subitems (1) to (3) so that the estimated plant available nitrogen from all nitrogen sources does not exceed expected crop nitrogen needs for nonlegume crops and expected nitrogen removal for legumes.

(1) Expected crop nitrogen needs, crop nitrogen removal rates, and estimated plant available nitrogen from manure and legumes must be based on the most recent published recommendations of the University of Minnesota Extension Service or of another land grant college in a contiguous state.

(2) Estimated plant available nitrogen from organic nitrogen sources, including manure, may deviate up to 20 percent from University of Minnesota Extension Service, or of another land grant college in a contiguous state, estimates where site nutrient management history, soil conditions, or cool weather warrant additional nitrogen application. When crop nitrogen deficiencies are visible or measured, remedial nitrogen applications above the 20 percent deviation can be made.

(3) Nitrogen sources include commercial fertilizer nitrogen, soil organic matter, irrigation water, legumes grown during previous years, biosolids, process wastewater, and manure applied for the current year and previous years.

B. Nutrient application rate standards for land in special protection areas must meet the requirements in subpart 6, item B, subitem (2), if applicable.

C. For land receiving manure or process wastewater from animal feedlots capable of holding 300 or more animal units or manure storage areas capable of holding the manure produced by 300 or more animal units, soil samples from the upper six inches must be collected at a minimum frequency of once every four years and analyzed for phosphorus using the Bray P1 or Olsen test. If soil phosphorus levels exceed the levels in subitems (1) and (2), then the owner must complete a manure management plan in accordance with

subpart 4, item D, and submit it with a permit application to the agency or delegated county for review in accordance with subpart 4, item B, subitem (1).

(1) Fields in special protection areas or within 300 feet of open tile intakes that have an average soil phosphorus test level exceeding 75 ppm using the Bray P1 test or 60 ppm using the Olsen test.

(2) Fields outside the special protection areas and more than 300 feet from open tile intakes that have an average soil phosphorus test level exceeding 150 ppm using the Bray P1 test or 120 ppm using the Olsen test.

Subp. 4. **Manure management plan requirements.** Item A indicates who must prepare a manure management plan and when the plan must be prepared. Item B lists when manure management plans must be submitted to the agency or delegated county for review. Item C describes when the manure management plan must be reviewed and revised. Item D lists the required elements of a manure management plan. Item E describes exceptions to manure management plans when manure ownership is transferred.

A. An owner or operator of an animal feedlot shall prepare and retain on file a manure management plan that complies with item D according to the following schedule:

(1) upon application for an NPDES, SDS, interim, or construction short-form permit for a facility capable of holding 100 or more animal units;

(2) an owner of an animal feedlot capable of holding 300 or more animal units that is not required to obtain an NPDES, SDS, interim, or construction short-form permit shall prepare or update a manure management plan prior to January 1, 2005, when a manure management plan does not meet the requirements of this part or reflect current operations and the manure is applied by someone other than a commercial animal waste technician or a certified private manure applicator; and

(3) once a manure management plan is required for a facility, a plan that meets the requirements under this subpart must be retained on file at the animal feedlot or manure storage area.

B. A manure management plan that complies with the requirements of item D must be submitted to the commissioner or delegated county when any one of the following conditions applies:

(1) when an owner submits a permit application to the commissioner for an NPDES, SDS, or an interim permit under part 7020.0405, subpart 1, item C, subitem (2); or

(2) the manure management plan is requested by the commissioner or county feedlot pollution control officer.

C. The manure management plan must be reviewed by the owner each year and adjusted for any changes in the amount of manure production, manure nutrient test results, fields available for receiving manure, crop rotations, or other practices which affect the available nutrient amounts or crop nutrient needs on fields receiving manure.

D. Except as provided in item E, the manure management plan must contain:

(1) a description of the manure storage/handling system and the expected annual amount of manure and nutrients which will need to be land applied;

(2) application methods, equipment, and calibration procedures;

(3) acreage available for manure and process wastewater application including maps or aerial photos showing field locations and areas within the fields that are suitable for manure or process wastewater application;

(4) a description of nutrient testing methods and frequency and the expected nutrient content of the manure to be applied;

(5) planned manure application rates and assumptions used to determine these rates, including assumptions of crop nitrogen and phosphorus needs and nitrogen and phosphorus supplied from all manure and nonmanure sources;

(6) total nitrogen and phosphorus amounts from manure and nonmanure sources to be applied per acre on each field and for each crop in the rotation when applied in accordance with the planned manure or process wastewater application rates established under subitem (5);

(7) expected first and second year plant available nutrients from the manure and process wastewater;

(8) expected months of application;

(9) a description of protective measures to minimize the risk of surface water and groundwater contamination when applying manure or process wastewater in a floodplain, special protection area, soils with less than three feet above limestone bedrock, drinking water supply management areas where the aquifer is designated vulnerable under chapter 4720, and land within 300 feet of all surface tile intakes, sinkholes without constructed diversions, and uncultivated wetlands. Protective measures include, but are not limited to, soil and water conservation measures, timing of application, methods of application, manure application rates, and frequency of application;

(10) for application onto frozen or snow-covered soil, the following information about the fields that may receive the manure or process wastewater:

(a) field location;

(b) land slopes;

(c) proximity of fields to surface waters;

(d) expected months of application for each field; and

(e) tillage and other conservation measures used to minimize risk of manure-contaminated runoff;

(11) a description of how phosphorus from manure is to be managed to minimize phosphorus transport to surface waters resulting from soil phosphorus build-up to levels described in subpart 3, item C;

(12) plans for soil nitrate testing in accordance with University of Minnesota Extension Service recommendations; and

(13) type of cover crop to be planted when manure is to be applied in June, July, or August to fields that have been harvested and would otherwise not have active growing crops for the remainder of the growing season.

E. When ownership of manure from an animal feedlot capable of holding 300 or more animal units or a manure storage area capable or holding the manure produced by 300 or more animal units is to be transferred for application to fields not owned or leased by the owner of the animal feedlot or manure storage area, the owner of the animal feedlot where the manure was produced need not include the requirements in item D, subitems (3), (5) to (7), and (10) in the owner's manure management plan. Any person receiving the manure shall comply with subpart 1, item C.

Subp. 5. **Record keeping.** Item A establishes the length of time that records must be kept. Items B and C indicate the information needed in records depending on the size and location of the facility.

A. Any person applying or receiving manure or process wastewater from a facility capable of holding 100 or more animal units shall maintain records of the amount of manure or process wastewater application on file:

(1) for the most recent six years for manure or process wastewater application within special protection areas; and

(2) for the most recent three years on land not covered under subitem (1).

B. For an animal feedlot capable of holding 300 or more animal units or a manure storage area capable of holding the manure produced by 300 or more animal units, or where manure or process wastewater is applied from an animal feedlot capable of holding 100 or

more animal units or a manure storage area capable of holding the manure produced by 100 or more animal units in a drinking water supply management area where the aquifer is designated vulnerable under chapter 4720, records kept in accordance with item A must contain the following information:

(1) field locations and cropland acreage where manure is applied;

(2) volume or tonnage of manure applied on each field;

(3) manure test nitrogen and phosphorus content, as required by subpart 2;

(4) dates of application;

(5) dates of manure incorporation when incorporating within ten days;

(6) expected plant-available amounts of nitrogen and phosphorus released from manure and commercial fertilizers on each field where manure is applied;

(7) a description of changes to the manure management plan, including documentation of the justification for any remedial nitrogen applications that exceed the nitrogen rate standard in subpart 3; and

(8) soil nutrient test results.

C. For an animal feedlot or a manure storage area with a capacity of 100 or more animal units and fewer than 300 animal units, where manure or process wastewater will not be applied in a drinking water supply management area in which the aquifer is designated vulnerable under chapter 4720, records kept in accordance with item A must contain the following:

(1) information necessary to credit the nitrogen available for crop growth that is supplied by manure and process wastewater applications; and

(2) manure and process wastewater test results for nitrogen and phosphorus content, if required in subpart 2.

D. Where manure or process wastewater from animal feedlots or manure storage areas with a capacity of 300 or more animal units is transferred for application to fields not owned or leased by the owner of the animal feedlot which produced the manure, the owner of the animal feedlot or the manure storage area from which the manure is produced must meet the following requirements:

(1) the manure and process wastewater records for the most recent three years must be kept on file and must contain the following information:

(a) the volume or tonnage of manure or process wastewater delivered;

(b) the nutrient content of the manure or process wastewater delivered;

(c) the name and address of any commercial hauler or applicator who received the manure or process wastewater; and

(d) the location where the manure or process wastewater was applied and rate of application; and

(2) commercial applicators spreading manure or process wastewater onto land not owned or leased by the owner of the animal feedlot or the manure storage area from which the manure or process wastewater is produced shall keep records, in accordance with subitem (1). A copy of these records must be submitted to the owner of the animal feedlot or the manure storage area from which the manure or process wastewater is produced no later than 60 days following land application.

Subp. 6. **Manure and process wastewater application requirements in special protection areas.**

A. Manure or process wastewater must not be applied to frozen or snow-covered soils in special protection areas.

B. Manure or process wastewater applied to unfrozen soils in special protection areas must comply with subitem (1), (2), or (3).

(1) A vegetative buffer must be maintained that:

(a) consists of perennial grasses or forages;

(b) is a minimum of 100 feet wide along lakes and perennial streams and 50 feet wide in other special protection areas; and

(c) does not receive manure applications from any animal feedlot or manure storage area.

(2) The following practices must be complied with:

(a) no application within 25 feet of the protected water, protected wetland, intermittent stream, or drainage ditch in the special protection area;

(b) inject or incorporate within 24 hours and prior to rainfall; and

(c) apply at a rate and/or frequency which will not allow soil phosphorus levels to increase over any six-year period with the following exception: soil phosphorus may be increased to 21 ppm (Bray P1) or 16 ppm (Olsen) when soil testing indicates soil phosphorus test concentrations are less than these values.

(3) Other agency-approved practices must be implemented that have been demonstrated through research by a land grant college to provide an equal degree of water quality protection as the measures in subitems (1) and (2).

C. Manure and process wastewater application by a traveling gun, center pivot, or other irrigation equipment that allows liquid application of manure to travel more than 50 feet in the air is prohibited in special protection areas.

Subp. 7. **Manure and process wastewater application for land within 300 feet of open tile intakes.** Manure and process wastewater applied within 300 feet of open tile intakes, and where manure-contaminated runoff may flow into the open tile intake, must be injected or incorporated within 24 hours of application according to the schedule in items A and B unless other agency-approved water quality protection management practices are implemented in accordance with item C.

A. All liquid manure and process wastewater applied within 300 feet of open tile intakes must be injected or incorporated within 24 hours of application beginning October 23, 2000.

B. All manure and process wastewater applied within 300 feet of open tile intakes must be injected or incorporated within 24 hours of application when applied after October 1, 2005.

C. Other agency-approved practices must be implemented that have been demonstrated through research by a land grant college to provide an equal degree of water quality protection as injection or incorporation within 24 hours.

Subp. 8. **Manure and process wastewater application near sinkholes, mines, quarries, and wells.**

A. Manure and process wastewater must not be applied to land within 50 feet of an active or inactive water supply well, sinkhole, mine, or quarry.

B. Manure and process wastewater must be incorporated within 24 hours of surface application when applied to land that slopes toward a sinkhole and is less than 300 feet from the sinkhole except that no setback incorporation is necessary where diversions prevent manure-contaminated runoff from entering the sinkhole.

Statutory Authority: *MS s 115.03; 116.07; 122.23*

History: *25 SR 834*