567—65.104(455B,459A) NPDES permits.

65.104(1) *Existing animal feeding operations holding an NPDES permit.* Animal feeding operations which hold a valid NPDES permit issued prior to September 14, 2005, are not required to reapply for an NPDES permit. However, the operations are required to apply for permit renewal in accordance with subrule 65.104(10).

65.104(2) *Existing animal feeding operations not holding an NPDES permit.* Animal feeding operations in existence prior to April 14, 2003, which were defined as CAFOs under rules that were in effect prior to April 14, 2003, but which have not obtained a permit, should have applied for an NPDES permit by April 14, 2003. Animal feeding operations in existence on April 14, 2003, which were not defined as CAFOs under rules that were in effect prior to April 14, 2003, shall apply for an NPDES permit no later than July 31, 2007.

65.104(3) *Expansion of existing animal feeding operations*. A person intending to expand an existing animal feeding operation which, upon completion of the expansion, will be defined as a CAFO shall apply for an NPDES permit at least 90 days prior to the scheduled expansion. Operation of the expanded portion of the facility shall not begin until an NPDES permit has been obtained.

65.104(4) *New animal feeding operations.* A person intending to begin a new animal feeding operation which, upon completion, will be defined as a CAFO shall apply for an NPDES permit at least 180 days prior to the date operation of the new animal feeding facility is scheduled. Operation of the new facility shall not begin until an NPDES permit has been obtained.

65.104(5) *Permits required as a result of departmental designation.* An animal feeding operation which is required to apply for an NPDES permit as a result of departmental designation (in accordance with the provisions of 65.103(455B,459A)) shall apply for an NPDES permit within 90 days of receiving written notification of the need to obtain a permit. Once application has been made, the animal feeding operation is authorized to continue to operate without a permit until the application has either been approved or disapproved by the department, provided that the owner or operator has submitted all requested information and promptly taken all steps necessary to obtain coverage.

65.104(6) *Voluntary permit applications.* Applications for NPDES permits received from animal feeding operations which are not defined as CAFOs will be acknowledged and returned to the applicant. NPDES permits will not be issued for facilities which are not defined or designated as CAFOs.

65.104(7) *Application forms.* An application for an NPDES permit shall be made on a form provided by the department. The application shall be complete and shall contain information required by the department. Applications submitted after September 30, 2006, shall include a nutrient management plan as required in rule 65.112(459A). The application shall be signed by the person who is legally responsible for the animal feeding operation and its associated manure or process wastewater control system.

65.104(8) *Compliance schedule.* When necessary to comply with a standard which must be met at a future date, an NPDES permit shall include a schedule for modification of the permitted facility to meet the standard. The schedule shall not relieve the permittee of the duty to obtain a construction permit pursuant to rule 65.105(459A).

65.104(9) *Permit conditions.* NPDES permits shall contain conditions required by 40 CFR Section 122.41 and conditions considered necessary by the department to ensure compliance with all applicable rules of the department, to ensure that the production area and land application areas are operated and maintained as required by Iowa law, to protect the public health and beneficial uses of waters of the United States, and to prevent water pollution from manure storage or application operations. Any more stringent conditions of 2005 Iowa Code Supplement chapter 459A, 567—subrule 62.4(12), and this chapter that apply to animal feeding operations shall govern. For CAFOs that maintain cattle, swine, or poultry, the following conditions shall be included:

a. Nutrient management plan. Open feedlot CAFOs shall comply with the requirements of 65.112(459A) and any additional nutrient management plan requirements for CAFOs in these rules by December 31, 2006. CAFOs that seek to obtain coverage under an NPDES permit issued after December 31, 2006, shall have a nutrient management plan developed and implemented upon the date of permit coverage.

b. Inspections and record keeping.

(1) Visual inspections. Routine visual inspections of the CAFO production area must be conducted. At a minimum the following must be visually inspected:

1. Weekly inspections of all storm water diversion, runoff diversion structures, and devices channelling contaminated storm water to the open feedlot structure.

2. Daily inspection of water lines, including drinking water or cooling water lines.

(2) Corrective actions. Any deficiencies found as a result of the inspections required in 65.104(9) "b"(1) or as a result of the liquid level reporting required in 65.104(9) "e" must be corrected as soon as possible.

(3) The following records must be maintained on site for a period of five years from the date they are created and must be made available to the department upon request:

1. Records documenting the inspections required in 65.104(9) "b"(1).

2. Records of weekly liquid level observations as required in 65.104(9) "e."

3. Records documenting any actions taken to correct deficiencies as required in 65.104(9) "b"(2).

c. Large CAFOs—transfer of manure, process wastewater, settled open feedlot effluent, settleable solids, or open feedlot effluent. Prior to transferring manure, process wastewater, settled open feedlot effluent, settleable solids or open feedlot effluent to other persons, a large CAFO must provide the recipient of the manure, process wastewater, settled open feedlot effluent, settleable solids or open feedlot effluent analysis. A large CAFO must retain for five years records of the date, recipient name and address, nutrient analysis and approximate amount of manure, process wastewater, settleable solids or open feedlot effluent, settleable solids or open feedlot effluent analysis.

d. Minimum monitoring requirements for AT systems. During the first two years of operation of an AT system, the following minimum monitoring will be required:

(1) Discharge monitoring. An effluent collection point must be established at the outlet of the AT system, and the flow volume recorded and an effluent sample collected on each day a discharge from the AT system occurs. Discharge samples must be submitted to a certified laboratory and analyzed for: total Kjeldahl N, NH4 N, total P, COD, total suspended solids, and chloride.

(2) Discharge monitoring—tile lines. If the AT system includes a tile system installed to enhance infiltration within the VTA in accordance with 65.110(6) "*h*" or 65.110(7) "*h*," water samples shall be collected from a sampling point located downgradient of the VTA on each individual tile line or combination of tile lines on the following schedule:

1. Quarterly sampling. One sample shall be taken from each sampling point once each quarter (January - March, April - June, July - September, October - December), and the level of flow in the tile system recorded at the time of sampling. The sample shall be collected at least ten days after a rainfall event of one inch or greater; and samples must be taken at least two, but not more than four, months apart. If there is no discharge from the tile line at a time that meets these requirements, documentation on appropriate department forms can be substituted for the sample and analysis. Collected samples shall be submitted to a certified laboratory and analyzed for: total Kjeldahl N, NH4 N, total P, COD, total suspended solids, and chloride.

2. Event sampling. Each year, two rainfall event related tile flow samples shall be collected from each sampling point. For each sampling event, one sample shall be taken from each sampling point three to five days following a rainfall event of one inch or greater, and the level of flow in the tile system recorded at the time of sampling. Collected samples shall be submitted to a certified laboratory and analyzed for: total Kjeldahl N, NH4 N, total P, COD, total suspended solids, and chloride.

(3) Groundwater monitoring. A minimum of two groundwater monitoring wells or piezometers (one upgradient and one downgradient) must be established at each AT system. Additional wells or piezometers may be required if the department determines they are necessary to adequately assess the impacts the AT system is having on groundwater. Samples must be collected from these wells quarterly and analyzed for: NH4 N, NO3 N, and chloride.

(4) Soil sampling.

1. Initial and permit renewal sampling. Soil sampling shall be conducted prior to initial discharge of open feedlot effluent into the AT system and repeated prior to renewal of the NPDES permit, as outlined below:

• VTA. A minimum of two sampling sites shall be established within each VTA cell, one located where runoff enters the VTA and one where runoff is discharged from the VTA. Soil samples shall be taken from these sites to a depth of 4 feet, with separate samples taken to represent the 0 to 6-inch depth, the 6- to 12-inch depth, and in one-foot increments thereafter. All samples shall be analyzed for NO3 N, NH4 N, P by either the Olsen or Mehlich-3 method, and pH.

If the length of effluent flow through the VTA exceeds 400 feet, an additional soil sample representing the 0 to 6-inch depth should be taken for each additional 200 feet of VTA length. Samples shall be analyzed for NO3 N, NH4 N, P by either the Olsen or Mehlich-3 method, and pH.

• VIB. One sampling site shall be established where open feedlot effluent enters the VIB. Soil samples at this site shall be taken to a depth of 4 feet, with separate samples taken to represent the 0 to 6-inch depth, the 6- to 12-inch depth, and in one-foot increments thereafter. These samples shall be analyzed for NO3 N, NH4 N, P by either the Olsen or Mehlich-3 method, and pH.

An additional sampling site shall be established where open feedlot effluent is discharged from the VIB through the tile system. Soil samples shall be taken at this site to represent the 0 to 6-inch depth, and analyzed for NO3 N, NH4 N, P by either the Olsen or Mehlich-3 method, and pH.

2. Annual sampling. One sampling site shall be established in each cell of a VTA and VIB in an area which is expected to receive the greatest amount of open feedlot effluent. Soil samples shall be taken from each site prior to initiating discharge of open feedlot effluent into the VTA or VIB and shall be repeated annually. Each sample shall represent a composite of 10 to 12 individual samples taken to a 6-inch depth, and analyzed for P using either the Olsen or Mehlich-3 method and for pH.

Monitoring requirements for an AT system following the initial two-year operation period will be determined at the time the NPDES permit for the operation is due for renewal.

e. Quarterly reporting requirements for CAFOs with outside liquid impoundments. A permittee with outside liquid impoundments must submit quarterly reports by April 10, July 10, October 10, and January 10, following the respective calendar quarters, documenting daily precipitation, weekly impoundment liquid levels, volume of liquid removed from the impoundments, and the date, time, duration, and estimated volume of any overflow. Liquid levels must be obtained by observing a depth marker which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour precipitation event or the 100-year, 24-hour precipitation event as applicable pursuant to 65.101(2)"a."

f. Annual reporting requirements for all CAFOs with systems other than AT systems. All permittees must submit an annual report to the department by January 10 of the following year. The annual report must include:

(1) The number and type of animals in the open feedlot operation;

(2) Estimated amount of manure, process wastewater, settled open feedlot effluent, settleable solids, or open feedlot effluent generated by the CAFO in the previous 12 months (tons/gallons);

(3) Estimated amount of total manure transferred to other persons by the CAFO in the previous 12 months (tons/gallons);

(4) Total number of acres for land application covered by the nutrient management plan and the total number of acres under control of the CAFO that were used for land application of manure in the previous 12 months;

(5) Summary of all manure, process wastewater, settled open feedlot effluent, settleable solids, or open feedlot effluent discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume; and

(6) A statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner.

g. Quarterly reporting requirements for CAFOs with AT systems. A permittee with an AT system must submit quarterly reports by April 10, July 10, October 10, and January 10, following the respective calendar quarters. The quarterly reports shall provide all of the following information:

(1) Daily precipitation.

(2) Dates on which manure, process wastewater, settled open feedlot effluent, open feedlot effluent, or settleable solids were removed from the production area and estimated amounts of manure, process wastewater, settled open feedlot effluent, settleable solids, or open feedlot effluent removed (tons/gallons).

(3) Dates on which discharges from the production area or the AT system occurred and the estimated duration and volume of discharge on each discharge date.

(4) Results of laboratory analyses of discharge samples for each date a discharge from the production area or the AT system occurred. If the results of laboratory analyses are not available by the due date of the quarterly report, the results shall be provided with the following quarter's report.

(5) Results of laboratory analyses of samples taken from the groundwater monitoring wells or piezometers. If the results of laboratory analyses are not available by the due date of the quarterly report, the results shall be provided with the following quarter's report.

h. Annual reporting requirements for CAFOs with AT systems. A permittee shall submit an annual report by January 10 of the following year. The annual report must include all of the following:

(1) The number and type of animals in the open feedlot operation.

(2) Estimated amount of total manure, process wastewater, settled open feedlot effluent, settleable solids, or open feedlot effluent generated by the CAFO in the previous 12 months (tons/gallons).

(3) Estimated amount of total manure, process wastewater, settled open feedlot effluent, settleable solids, or open feedlot effluent transferred to other persons by the CAFO in the previous 12 months (tons/gallons).

(4) Total number of acres for land application covered by the nutrient management plan and the total number of acres under control of the CAFO that were used for land application of manure, process wastewater, settled open feedlot effluent, settleable solids, or open feedlot effluent in the previous 12 months.

(5) Summary of all manure, process wastewater, settled open feedlot effluent, settleable solids, or open feedlot effluent discharges from the production area or AT system that have occurred in the previous 12 months, including date, time, and approximate volume.

(6) Harvest dates and estimated amounts of forage removed from the AT system during the previous 12 months.

(7) Results of soil and groundwater sampling within the AT system during the previous 12 months.

(8) A statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner.

65.104(10) *Permit renewal.*

a. General requirements. An NPDES permit may be issued for any period of time not to exceed five years. An application for renewal of an NPDES permit must be submitted to the department at least 180 days prior to the date the permit expires. Each permit to be renewed shall be subject to the rules of the department in effect at the time of renewal. A permitted animal feeding operation which ceases to be a CAFO will be exempted from the need to retain an NPDES permit if the permittee can demonstrate to the satisfaction of the department that there is no remaining potential for a discharge of manure that was generated while the operation was a CAFO, other than agricultural storm water from land application areas.

b. Permits involving use of AT systems.

(1) During the first two years of operation of an AT system, a permittee will be issued a two-year NPDES permit. Renewal of this permit is contingent upon proper operation and maintenance of the AT system, submittal of all required records and reports, and demonstration that the AT system is providing an equivalent level of performance to that achieved by a containment system that is designed and operated as required by statute, 567—subrule 62.4(12) and Division II of this chapter.

(2) If departmental review of an AT system indicates the system is not meeting the equivalent performance standard, the permittee may either be required to make needed system modifications to enable compliance with this standard or be required to install a conventional runoff containment system.

Open feedlot operations found to be in compliance with the equivalent performance standard will be issued a five-year NPDES permit which allows continued use of the AT system.

65.104(11) *Permit modification, suspension or revocation.* The department may modify, suspend, refuse to renew or revoke in whole or part any NPDES permit for cause. Any more stringent requirement pursuant to 40 CFR Section 122.62, 122.63 or 122.64 shall control. Cause for modification, suspension or revocation of a permit may include the following:

a. Violation of any term or condition of the permit.

b. Obtaining a permit by misrepresentation of fact or failure to disclose fully all material facts.

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

d. Failure to retain, make available, or submit the records and information that the department requires in order to ensure compliance with the operation and discharge conditions of the permit.

e. A determination by the department that the continued operation of a CAFO constitutes a clear, present and impending danger to public health or the environment.