CHAPTER 459A
OPEN FEEDLOT OPERATIONS AND ANIMAL TRUCK WASH FACILITIES

Referred to in §455A.4, 455B.103, 455B.103A, 455B.105, 455B.111, 455B.112, 455B.113, 455B.115, 455B.174, 455B.175, 455B.179, 455B.182, 455B.185, 455B.197

SUBCHAPTER I
GENERAL PROVISIONS

459A.101 Title.  This chapter shall be known and may be cited as the “Animal Agriculture Compliance Act for Open Feedlot Operations and Animal Truck Wash Facilities”.
2005 Acts, ch 136, §1; 2015 Acts, ch 92, §1

459A.102 Definitions.  As used in this chapter, unless the context otherwise requires:
1. “Alternative technology system” or “alternative system” means a system for open feedlot effluent control as provided in section 459A.303.
2. “Animal” means the same as defined in section 459A.102.
3. “Animal feeding operation” means the same as defined in section 459A.102.
4. “Animal truck wash effluent” means a combination of manure, washwater-induced runoff, or other runoff derived from an animal truck wash facility, which may include solids.
5. “Animal truck wash effluent structure” means an impoundment which is part of an animal truck wash facility, if the primary function of the impoundment is to collect and store animal truck wash effluent.
6. “Animal truck wash facility” means an operation engaged in washing single-unit trucks, truck-tractors, semitrailers, or trailers used to transport animals.
7. “Animal unit” means the same as defined in section 459.102.
8. “Animal unit capacity” means a measurement used to determine the maximum number of animal units that may be maintained as part of an open feedlot operation.
9. “ASTM international” means the American society for testing and materials international.
10. “Commission” means the environmental protection commission created pursuant to section 455A.6.
11. “Concentrated animal feeding operation” means the same as defined in 40 C.F.R. §122.23.
12. “Confinement feeding operation” means the same as defined in section 459.102.
13. “Department” means the department of natural resources.
14. “Designated area” means a known sinkhole, a cistern, an abandoned well, an unplugged agricultural drainage well, an agricultural drainage well surface inlet, a drinking water well, a designated wetland, or a water source. However, “designated area” does not include a terrace tile inlet or surface inlet other than an agricultural drainage well surface tile inlet.
15. “Designated wetland” means the same as defined in section 459.102.
16. “Document” means any form required to be processed by the department under this chapter, including but not limited to applications for permits or related materials as provided in section 459A.205, soils and hydrogeologic reports as provided in section 459A.206, construction certifications as provided in section 459A.207, nutrient management plans as provided in section 459A.208, and notices required under this chapter.
17. “Effluent” means open feedlot effluent or animal truck wash effluent.
19. “Formed animal truck wash effluent structure” means a covered or uncovered impoundment used to store effluent from an animal truck wash facility, which has walls and a floor constructed of concrete, concrete block, wood, steel, or similar materials.
20. “Grassed waterway” means a natural or constructed channel that is shaped or graded and established with suitable vegetation for the stable conveyance of surface water runoff.
21. “High-quality water resource” means the same as defined in section 459.102.
22. “Karst terrain” means the same as defined in section 459.102.
23. “Manure storage structure” means the same as defined in section 459.102.
24. “NPDES permit” means a permit issued by the department under the national pollutant discharge elimination system pursuant to the federal Water Pollution Control Act of 1972, 33 U.S.C. ch. 26, as amended, and 40 C.F.R. pts. 122 and 412.
25. “Nutrient management plan” or “plan” means a plan which provides for the management of open feedlot effluent, or animal truck wash effluent, including the application of effluent as provided in section 459A.208.
26. “Open feedlot” means a lot, yard, corral, building, or other area used to house animals in conjunction with an open feedlot operation.
27. “Open feedlot effluent” means a combination of manure, precipitation-induced runoff, or other runoff from an open feedlot before its settleable solids have been removed.
28. “Open feedlot operation” or “operation” means an unroofed or partially roofed animal feeding operation if crop, vegetation, or forage growth or residue cover is not maintained as part of the animal feeding operation during the period that animals are confined in the animal feeding operation.
29. “Open feedlot operation structure” means an open feedlot, settled open feedlot effluent basin, a solids settling facility, or an alternative technology system. “Open feedlot operation structure” does not include a manure storage structure as defined in section 459.102.
30. “Owner” means a person who holds legal or equitable title to any of the following:
   a. The property where an open feedlot operation or animal truck wash facility is located.
   b. An open feedlot operation structure which is part of an open feedlot operation or an animal truck wash effluent structure which is part of an animal truck wash facility.
31. “Professional engineer” means the same as defined in section 459.102.
32. “Research college” means an accredited public or private college or university, including but not limited to a university under the control of the state board of regents as provided in chapter 262, or a community college under the jurisdiction of a board of directors for a merged area as provided in chapter 260C, if the college or university performs research or experimental activities regarding animal agriculture or agronomy.
33. “Settled open feedlot effluent” or “settled effluent” means a combination of manure, precipitation-induced runoff, or other runoff originating from an open feedlot after its settleable solids have been removed.
34. “Settled open feedlot effluent basin” or “basin” means an impoundment which is part of an open feedlot operation, if the primary function of the impoundment is to collect and store settled open feedlot effluent.
35. “Small animal feeding operation” means the same as defined in section 459.102.
36. “Small animal truck wash facility” means an animal truck wash facility, if all of the following apply:
   a. The animal truck wash facility and all single-unit trucks, truck-tractors, semitrailers, or trailers that are washed at the facility are owned by the same person.
   b. The average total per day volume of washwater used by the animal truck wash facility does not exceed two thousand gallons as calculated on a monthly basis.
37. a. “Solids” means that portion of effluent that meets all of the following requirements:
      (1) Does not flow perceptibly under pressure.
      (2) Is not capable of being transported through a mechanical pumping device designed to move a liquid.
      (3) The constituent molecules do not flow freely among themselves but do show the tendency to separate under stress.
   b. “Solids” includes settleable solids and scraped solids.
38. “Solids settling facility” means a basin, terrace, diversion, or other structure or solids removal method which is part of an open feedlot operation and which is designed and operated to remove settleable solids from open feedlot effluent. A “solids settling facility” does not include a basin, terrace, diversion, or other structure or solids removal method which retains the liquid portion of open feedlot effluent for more than seven consecutive days following a precipitation event.
39. “Stockpile” means to store solids from any of the following:
   a. An open feedlot operation outside of an open feedlot operation structure, or outside of an area that drains to an open feedlot operation structure.
   b. An animal truck wash facility, outside an animal truck wash facility, or outside an area that drains to an animal truck wash facility.
40. “Structure” means any of the following:
   a. An open feedlot operation structure.
   b. An animal truck wash effluent structure.
41. “Unformed animal truck wash effluent structure” means a covered or uncovered impoundment used to store animal truck wash effluent, other than a formed animal truck wash effluent structure.
42. “Water of the state” means the same as defined in section 455B.171.
43. “Water source” means the same as defined in section 459.102.
44. “Waters of the United States” means the same as defined in 40 C.F.R. §122.2, as that section exists on July 1, 2005.

**459A.103 Special terms.**
For purposes of this chapter, all of the following shall apply:
1. a. Two or more open feedlot operations under common ownership or common management are deemed to be a single open feedlot operation if they are adjacent or utilize a common area or system for open feedlot effluent disposal.
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b. For purposes of determining whether two or more open feedlot operations are adjacent, all of the following shall apply:
   (1) At least one open feedlot operation structure must be constructed on or after July 17, 2002.
   (2) An open feedlot operation structure which is part of one open feedlot operation is separated by less than one thousand two hundred fifty feet from an open feedlot operation structure which is part of the other open feedlot operation.
   c. (1) For purposes of determining whether two or more open feedlot operations are under common ownership, a person must hold an interest in each of the open feedlot operations as any of the following:
      (a) A sole proprietor.
      (b) A joint tenant or tenant in common.
      (c) A holder of a majority equity interest in a business association as defined in section 202B.102, including but not limited to as a shareholder, partner, member, or beneficiary.
   (2) An interest in the open feedlot operation under subparagraph (1), subparagraph division (b) or (c), which is held directly or indirectly by the person's spouse or dependent child shall be attributed to the person.
   d. For purposes of determining whether two or more open feedlot operations are under common management, a person must have significant control of the management of the day-to-day operations of each of the open feedlot operations. Common management does not include control over a contract livestock facility by a contractor, as defined in section 202.1.
   2. An open feedlot operation structure is “constructed” when any of the following occurs:
      a. Excavation commences for a proposed open feedlot operation structure or proposed expansion of an existing open feedlot operation structure.
      b. Forms for concrete are installed for a proposed open feedlot operation structure or the proposed expansion of an existing open feedlot operation structure.
      c. Piping for the movement of open feedlot effluent is installed within or between open feedlot operation structures as proposed or proposed to be expanded.
   3. a. In calculating the animal unit capacity of an open feedlot operation, the animal unit capacity shall not include the animal unit capacity of any confinement feeding operation building as defined in section 459.102, which is part of the open feedlot operation.
      b. Notwithstanding paragraph “a”, only for purposes of determining whether an open feedlot operation must obtain an NPDES permit, the animal unit capacity of the animal feeding operation includes the animal unit capacities of both the open feedlot operation and the confinement feeding operation if the animals in the open feedlot operation and the confinement feeding operation are all in the same category or type of animals as used in the definitions of large and medium concentrated animal feeding operations in 40 C.F.R. pt. 122. In all other respects, the confinement feeding operation shall be governed by chapter 459 and the open feedlot operation shall be governed by this chapter.
   4. An animal truck wash facility is considered to be part of an animal feeding operation if the animal truck wash facility and animal feeding operation are under common ownership or management and the animal truck wash facility is located within one thousand two hundred fifty feet of the animal feeding operation.
   5. a. If an open feedlot operation structure or animal truck wash effluent structure contains effluent from both an open feedlot operation and an animal truck wash facility, the animal truck wash effluent shall be deemed to be open feedlot effluent.
      b. If a manure storage structure or animal truck wash effluent structure contains both manure from a confinement feeding operation and animal truck wash effluent from an animal truck wash facility, the effluent shall be deemed to be manure.
   6. An open feedlot operation structure is abandoned if the open feedlot operation structure has been razed, removed from the site of an open feedlot operation, filled in with earth, or converted to uses other than an open feedlot operation structure so that it cannot be used as an open feedlot operation structure without significant reconstruction.
   7. All distances between locations or objects provided in this chapter shall be measured in feet from their closest points.
8. The regulation of effluent under this chapter shall be construed as also regulating effluent and solids.

9. “Seasonal high-water table” means the seasonal high-water table as determined by a professional engineer pursuant to the following requirements:
   a. The seasonal high-water table shall be determined by evaluating soil profile characteristics such as color and mottling from soil corings, soil test pits, or other soil profile evaluation methods, water level data from soil corings or other sources, and other pertinent information.
   b. If a drainage tile line to artificially lower the seasonal high-water table is installed as provided in section 459A.302, the level to which the seasonal high-water table will be lowered will be the seasonal high-water table.

10. An animal truck wash facility may be part of either a confinement feeding operation or an open feedlot operation. An animal truck wash effluent structure may also be the same as any of the following:
   a. A manure storage structure that is part of the confinement feeding operation, so long as the primary function of such impoundment is to collect and store effluent from both the animal truck wash facility and manure from the confinement feeding operation.
   b. A settled open feedlot effluent basin that is part of the open feedlot operation, so long as the primary function of such impoundment is to collect and store effluent from both the animal truck wash facility and open feedlot operation.


459A.104 General authority — commission and department — purpose — compliance.
1. The commission shall establish by rule adopted pursuant to chapter 17A, requirements relating to the construction, including expansion, or operation of all of the following:
   a. Open feedlot operations, including any related open feedlot operation structures.
   b. Animal truck wash facilities, including any related animal truck wash effluent structures.

2. Any provision referring generally to compliance with the requirements of this chapter as applied to open feedlot operations or animal truck wash facilities also includes compliance with requirements in rules adopted by the commission pursuant to this section, orders issued by the department as authorized under this chapter, and the terms and conditions applicable to licenses, certifications, permits, or nutrient management plans required under this chapter.

3. a. The purpose of this chapter is to provide requirements relating to the construction, including the expansion, and operation of all of the following:
   (1) Open feedlot operations, and the control of open feedlot effluent.
   (2) Animal truck wash facilities, and the control of animal truck wash effluent.

   b. The provisions of this chapter shall be construed to supplement applicable provisions of chapter 459. If there is a conflict between the provisions of this chapter and chapter 459, the provisions of this chapter shall prevail.

Referred to in §459A.105, 459A.404

459A.105 Exceptions to regulation.
1. a. Except as provided in paragraph “b”, the requirements of this chapter which regulate open feedlot operations, including rules adopted by the commission pursuant to section 459A.104, shall not apply to research activities and experiments performed under the authority and regulations of a research college, if the research activities and experiments relate to an open feedlot operation structure or the disposal or treatment of effluent originating from an open feedlot operation.
   b. The requirements of section 459A.410, including rules adopted by the commission under that section, apply to research activities and experiments performed under the authority and regulations of a research college.

2. a. Except as provided in paragraph “b”, the requirements of this chapter, including
rules adopted by the commission pursuant to section 459A.104, shall not apply to a small animal truck wash facility.

b. (1) The requirements of section 459A.205, including rules adopted by the commission pursuant to that section, shall apply to a small animal truck wash facility only to the extent required by section 459A.205, subsection 5.

(2) The requirements of section 459A.404, including rules adopted by the commission pursuant to that section, shall apply to a small animal truck wash facility. However, section 459A.404, subsection 1, shall only apply to a small animal truck wash facility as provided in that subsection.

(3) The requirements of section 459A.410, including rules adopted by the commission under that section, shall apply to a small animal truck wash facility.

Referred to in §459A.205

SUBCHAPTER II
DOCUMENTATION

459A.201 Document processing requirements.
1. The department shall adopt and promulgate forms required to be completed in order to comply with this chapter, including forms for documents that the department shall make available on the internet in the same manner as provided in section 459A.302.

2. a. The department shall provide for procedures for the receipt, filing, processing, and return of documents in an electronic format in the same manner as provided in section 459A.302. The department shall provide for authentication of the documents that may include electronic signatures as provided in chapter 554D.

b. The department shall to every extent feasible provide for the processing of documents required under this subchapter using electronic systems in the same manner as required in section 459A.302.

3. a. The department shall approve or disapprove an application for a construction permit as provided in section 459A.205 within sixty days after receiving the permit application. However, the applicant may deliver a notice requesting a continuance. Upon receipt of a notice, the time required for the department to act upon the application shall be suspended for the period provided in the notice, but for not more than thirty days after the department’s receipt of the notice. The applicant may submit more than one notice. However, the department may provide that an application is terminated if no action is required by the department for one year following delivery of the application to the department. The department may also provide for a continuance when it considers the application. The department shall provide notice to the applicant of the continuance. The time required for the department to act upon the application shall be suspended for the period provided in the notice, but for not more than thirty days. However, the department shall not provide for more than one continuance.

b. (1) A nutrient management plan as provided in section 459A.208 shall be approved or disapproved as part of a construction permit application pursuant to section 459A.205.

(2) For an open feedlot operation, if the nutrient management plan is not part of an application for a construction permit, the nutrient management plan shall be approved or disapproved within sixty days from the date that the department receives the nutrient management plan.

Referred to in §459A.208


459A.203 and 459A.204 Reserved.
459A.205 Permit requirements — settled open feedlot effluent basins and alternative technology systems, and animal truck wash effluent structures.

1. a. The department shall approve or disapprove applications for permits for the construction, including the expansion, of the following structures:
   (1) Settled open feedlot effluent basins and alternative technology systems, which are part of open feedlot operations as provided in this chapter.
   (2) Animal truck wash effluent structures which are part of animal truck wash facilities as provided in this chapter.

b. The department’s decision to approve or disapprove a permit for the construction of a structure described in paragraph “a” shall be based on whether the application is submitted according to procedures and standards required by this chapter. A person shall not begin construction of such a structure under this section, unless the department first approves the person's application and issues to the person a construction permit.

2. The department shall issue a construction permit upon approval of an application. The department shall approve the application regardless of whether the applicant is required to be issued a construction permit.

3. An application for a construction permit shall include all of the following:
   a. A nutrient management plan as provided in section 459A.208.
   b. An engineering report, construction plans, and specifications prepared by a professional engineer or the natural resources conservation service of the United States department of agriculture.

   (1) For an open feedlot operation, the professional engineer must certify that the construction of the settled open feedlot effluent basin or alternative technology system complies with the construction design standards required in this chapter.

   (2) For an animal truck wash facility, the professional engineer must certify that the construction of the animal truck wash effluent structure complies with the construction design standards required in this chapter. However, an animal truck wash facility electing to use a formed animal truck wash effluent structure, in lieu of an engineering report, may submit a construction design statement that meets the requirements of sections 459.306 and 459.307.

4. For an open feedlot operation, a construction permit must be issued prior to any of the following:
   a. The construction, including expansion, of a settled open feedlot effluent basin or alternative technology system if the open feedlot operation is required to be issued an NPDES permit.
   b. When the department has previously issued the open feedlot operation a construction permit and any of the following applies:
      (1) The animal unit capacity of the open feedlot operation will be increased to more than the animal unit capacity approved by the department in the previous construction permit.
      (2) The volume of open feedlot effluent stored at the open feedlot operation would be more than the volume approved by the department in the previous construction permit.
      (3) The open feedlot operation was discontinued for twenty-four months or more and the animal unit capacity would be one thousand animal units or more.

5. For an animal truck wash facility, a construction permit must be issued prior to any of the following:
   a. The construction, including expansion, of an animal truck wash effluent structure.
   b. When the department has previously issued the animal truck wash facility a construction permit and the volume of the animal truck wash effluent would be more than the volume approved by the department in the previous construction permit.
   c. When the animal truck wash facility is part of a confinement feeding operation, and all of the following apply:
      (1) The department has issued a construction permit under section 459.303 or a letter approving a construction design statement in lieu of a construction permit as provided by rules adopted by the commission under section 459.103.
      (2) The animal truck wash effluent will be added to an existing manure storage structure.
resulting in a total stored volume greater than that approved in the construction permit or the construction design statement approval letter.

d. When the animal truck wash facility is part of an open feedlot operation, and all of the following apply:
   (1) The department has issued a construction permit under this section or an NPDES permit under section 459A.401.
   (2) The animal truck wash effluent will be added to an existing settled open feedlot effluent basin resulting in a total stored volume greater than that approved in the construction permit or NPDES permit.
  e. When the animal truck wash facility is constructed or expanded as part of a small animal feeding operation that includes a manure storage structure, and the animal truck wash effluent will be added to the manure storage structure. However, a construction permit is not required under this section for a small animal truck wash facility or for a small animal truck wash facility that is part of a small animal feeding operation.
  f. Prior to submitting an application for a construction permit the applicant may submit a conceptual design and site investigation report to the department for review and comment.
  g. For an open feedlot operation, the application for a construction permit shall include all of the following:
     a. The name of the owner of the open feedlot operation and the name of the open feedlot operation, including a mailing address and telephone number for the owner and the operation.
     b. The name of the contact person for the open feedlot operation, including the person’s mailing address and telephone number.
     c. The location of the open feedlot operation.
     d. A statement providing that the application is for any of the following:
        (1) The construction or expansion of a settled open feedlot effluent basin or alternative technology system for an existing open feedlot operation which is not expanding.
        (2) The construction or expansion of a settled open feedlot effluent basin or alternative technology system for an existing open feedlot operation which is expanding.
        (3) The construction of a settled open feedlot effluent basin or alternative technology system for a proposed new open feedlot operation.
     e. The animal unit capacity for each animal species in the open feedlot operation before and after the proposed construction.
     f. An engineering report, construction plans, and specifications prepared by a professional engineer or by the United States natural resources conservation service, for the settled open feedlot operation effluent basin or alternative technology system.
     g. A soils and hydrogeologic report of the site, as required in section 459A.206.
     h. Information, including but not limited to maps, drawings, and aerial photos that clearly show the location of all of the following:
        (1) The open feedlot operation and all existing and proposed settled open feedlot effluent basins or alternative technology systems, clean water diversions, and other pertinent features or structures.
        (2) Any other open feedlot operation under common ownership or common management and located within one thousand two hundred fifty feet of the open feedlot operation.
        (3) A public water supply system as defined in section 455B.171 or a drinking water well which is located within a distance from the open feedlot operation as prescribed by rules adopted by the commission.
     i. For an open feedlot operation implementing an alternative technology system as provided in section 459A.303, the applicant shall submit all of the following:
        (1) Information showing that the proposed open feedlot operation meets criteria for siting as established by rules adopted by the commission. However, if the site does not meet the criteria, the information shall show substantially equivalent alternatives to meeting such criteria.
        (2) The results of predictive computer modeling for the proposed alternative technology system to determine suitability of the proposed site for the system and to predict performance
of the alternative technology system as compared to the use of a settled open feedlot effluent basin.

(3) A conceptual design of the proposed alternative technology system, as developed by a professional engineer.

8. For an animal truck wash facility, the application for the construction permit shall include all of the following:
   a. The name of the owner of the animal truck wash facility and the name of the animal truck wash facility, including a mailing address and telephone number for the owner and the animal truck wash facility.
   b. The name of the contact person for the animal truck wash facility, including the person’s mailing address and telephone number.
   c. The location of the animal truck wash facility.
   d. A statement providing that the application is for any of the following:
      (1) The construction or expansion of an animal truck wash effluent structure for an existing animal truck wash facility which is not expanding.
      (2) The construction or expansion of an animal truck wash effluent structure for an existing animal truck wash facility which is expanding.
      (3) The construction of an animal truck wash effluent structure for a proposed new animal truck wash facility.
   e. An engineering report, construction plans, and specifications prepared by a professional engineer or by the United States natural resources conservation service, for the animal truck effluent structure.
      (1) The engineering report must demonstrate that the storage capacity of its animal truck wash effluent structure is equal to or greater than the amount of effluent to be stored for any six-month period, in addition to two feet of freeboard.
      (2) If an animal truck wash effluent structure is to be constructed on karst terrain, the engineering report must establish that the construction complies with the requirements of section 459A.404.
   f. A soils and hydrogeologic report of the site, as required in section 459A.206.
   g. Information, including but not limited to maps, drawings, and aerial photos that clearly show the location of the animal truck wash facility and all animal truck wash effluent structures.

9. a. Except as provided in paragraph “b”, a construction permit for an open feedlot operation or animal truck wash facility expires as follows:
   (1) If construction does not begin within one year after the date the construction permit is issued.
   (2) If construction is not completed within three years after the date the construction permit is issued.
   b. If requested, the department may grant an extension of time to begin or complete construction upon a showing of just cause by the construction permit applicant.

10. The department may suspend or revoke a construction permit, modify the terms or conditions of a construction permit, or disapprove a request to extend the time to begin or complete construction as provided in this section, if it determines that the operation of the open feedlot operation or animal truck wash facility constitutes a clear, present, and impending danger to public health or the environment.

11. This section does not require a person to be issued a permit to construct a settled open feedlot effluent basin or alternative technology system if the basin or system is part of an open feedlot operation which is owned by a research college conducting research activities as provided in section 459A.105.


459A.206 Settled open feedlot effluent basins and unformed animal truck wash effluent structures — soils and hydrogeologic report.
1. A settled open feedlot effluent basin or an unformed animal truck wash effluent
structure required to be constructed pursuant to a construction permit issued pursuant to section 459A.205 shall meet design standards as required by a soils and hydrogeologic report.

2. The report shall be submitted with the construction permit application as provided in section 459A.205. The report shall include all of the following:

a. A description of the steps to determine the soils and hydrogeologic conditions at the proposed construction site, a description of the geologic units encountered, and a description of the effects of the soil and groundwater elevation and direction of flow on the construction and operation of the basin.

b. The subsurface soil classification of the site. A subsurface soil classification shall be based on ASTM international designation D-2487-92 or D-2488-90.

c. The results of at least three soil corings reflecting the continuous soil profile taken for each settled open feed lot effluent basin or unformed animal truck wash effluent structure. The soil corings shall be taken and used in determining subsurface soil characteristics and groundwater elevation and direction of flow of the proposed site for construction. The soil corings shall be taken as follows:

1. By a qualified person ordinarily engaged in the practice of taking soil cores and in performing soil testing.

2. At locations that reflect the continuous soil profile conditions existing within the area of the proposed basin or unformed structure, including conditions found near the corners and the deepest point of the proposed basin or unformed structure. The soil corings shall be taken to a minimum depth of ten feet below the bottom elevation of the basin or unformed structure.

3. By a method such as hollow stem auger or other method that identifies the continuous soil profile and does not result in the mixing of soil layers.

459A.207 Construction certification.

1. The owner of an open feedlot operation who is issued a construction permit for a settled open feedlot effluent basin or the owner of an animal truck wash facility who is issued a construction permit for an animal truck wash effluent structure as provided in section 459A.205 shall submit to the department a construction certification from a professional engineer certifying all of the following:

a. The basin or structure was constructed in accordance with the design plans submitted to the department as part of an application for a construction permit pursuant to section 459A.205. If the actual construction deviates from the approved design plans, the construction certification shall identify all changes and certify that the changes were consistent with all applicable standards of this section.

b. The basin or structure was inspected by the professional engineer after completion of construction and before commencement of operation.

2. A written record of an investigation for drainage tile lines, including the findings of the investigation and actions taken to comply with subchapter III, shall be submitted as part of the construction certification.

459A.208 Nutrient management plan — requirements.

1. The following persons shall develop and implement a nutrient management plan meeting the requirements of this section:

a. The owner of an open feedlot operation which has an animal unit capacity of one thousand animal units or more or which is required to be issued an NPDES permit.

b. The owner of an animal truck wash facility, other than a small animal truck wash facility, which has an animal truck wash effluent structure. However, for an animal truck wash facility which is part of a confinement feeding operation, in lieu of submitting a nutrient management plan, the owner of the animal truck wash facility may submit an original manure
management plan and an updated manure management plan to the department as required by section 459.312, including rules adopted by the commission pursuant to that section.

2. Not more than one open feedlot operation shall be covered by a single nutrient management plan.

3. a. A person shall not remove open feedlot effluent from an open feedlot operation structure or animal truck wash effluent from an animal truck wash effluent structure for which a nutrient management plan is required under this section, unless the department approves a nutrient management plan as required in this section.

b. Notwithstanding paragraph “a”, the commission may adopt rules allowing a person to remove effluent from an open feedlot operation structure or animal truck wash effluent structure until the nutrient management plan is approved or disapproved by the department according to terms and conditions required by rules adopted by the commission.

4. The department shall not approve an application for a permit to construct a settled open feedlot effluent basin or animal truck wash effluent structure, unless the owner of the open feedlot or animal truck wash facility, applying for approval submits a nutrient management plan together with the application for the construction permit as provided in section 459A.205. The owner of the open feedlot operation shall also submit proof that the owner has published a notice for public comment as provided in this section. The department shall approve or disapprove the nutrient management plan as provided in section 459A.201.

5. For an animal feeding operation, prior to approving or disapproving a nutrient management plan as required in this section, the department may receive comments exclusively to determine whether the nutrient management plan is submitted according to procedures required by the department and that the nutrient management plan complies with the provisions of this chapter.

a. The owner of the open feedlot operation shall publish a notice for public comment in a newspaper having a general circulation in the county where the open feedlot operation is or is proposed to be located and in the county where open feedlot effluent, which originates from the open feedlot operation, may be applied under the terms and conditions of the nutrient management plan.

b. The notice for public comment shall include all of the following:

(1) The name of the owner of the open feedlot operation submitting the nutrient management plan.

(2) The name of the township where the open feedlot operation is or is proposed to be located and the name of the township where open feedlot effluent originating from the open feedlot operation may be applied.

(3) The animal unit capacity of the open feedlot operation.

(4) The time when and the place where the nutrient management plan may be examined as provided in section 22.2.

(5) Procedures for providing public comment to the department. The notice shall also include procedures for requesting a public hearing conducted by the department. The department is not required to conduct a public hearing if it does not receive a request for the public hearing within ten days after the first publication of the notice for public comment as provided in this subsection. If such a request is received, the public hearing must be conducted within thirty days after the first date that the notice for public comment was published.

(6) A statement that a person may acquire information relevant to making comments under this subsection by accessing the department’s internet site. The notice for public comment shall include the address of the department’s internet site as required by the department.

c. The department shall maintain an internet site where persons may access information relevant to making comments under this subsection. The department may include an electronic version of the nutrient management plan as provided in section 459A.201. The department shall include information regarding the time when, the place where, and the manner in which persons may participate in a public hearing as provided in this subsection.

6. A nutrient management plan must be authenticated by the owner of the open feedlot.
operation or the owner of the animal truck wash facility as required by the department in accordance with section 459A.201.

7. A nutrient management plan shall include all of the following:
   a. Restrictions on the application of open feedlot effluent or animal truck wash effluent based on all of the following:
      (1) Calculations necessary to determine the land area required for the application of the effluent based on nitrogen use levels in order to obtain optimum crop yields according to a crop schedule specified in the nutrient management plan, and according to requirements adopted by the department.
      (2) A phosphorus index established pursuant to section 459.312.
   b. Information relating to the application of the effluent, including all of the following:
      (1) Nutrient concentrations of the effluent.
      (2) Application methods, the timing of the application, and the location of the land where the application occurs.
   c. If the application is on land other than land owned or rented for crop production by the owner, the plan shall include a copy of each written agreement executed by the owner and the landowner or the person renting the land for crop production where the effluent may be applied.
   d. An estimate of the effluent volume or weight produced by the open feedlot operation or animal truck wash facility.
   e. Information which shows all of the following:
      (1) There is adequate storage for open feedlot effluent or animal truck wash effluent, including procedures to ensure proper operation and maintenance of an open feedlot operation structure or animal truck wash effluent structure.
      (2) For an animal feeding operation, all of the following:
         (a) The proper management of animal mortalities to ensure that animals are not disposed of in an open feedlot operation structure or a treatment system that is not specifically designed to treat animal mortalities.
         (b) Animals kept in the open feedlot operation do not have direct contact with any waters of the United States.
      (3) (a) Surface drainage prior to contact with an open feedlot structure is diverted, as appropriate, from the open feedlot operation.
         (b) Surface drainage prior to contact with an animal truck wash facility is diverted, as appropriate, from the animal truck wash facility.
      (4) Chemicals or other contaminants handled on-site are not disposed of in an open feedlot operation structure, an animal truck wash facility, or a treatment system that is not specifically designed to treat such chemicals or contaminants.

8. If an open feedlot operation uses an alternative technology system as provided in section 459A.303, the nutrient management plan is not required to provide for settled effluent that enters the alternative technology system.

9. The owner of an open feedlot operation or animal truck wash facility who is required to develop and implement a nutrient management plan shall maintain a current nutrient management plan and maintain records sufficient to demonstrate compliance with the nutrient management plan.

Referred to in §459A.102, 459A.201, 459A.205
SUBCHAPTER III
DESIGN STANDARDS AND CONSTRUCTION REQUIREMENTS
Referred to in §459A.207

459A.301 Settled open feedlot effluent basins and animal truck wash effluent structures — construction design standards — rules.

If the department requires that a settled open feedlot effluent basin or animal truck wash effluent structure be constructed according to construction design standards, regardless of whether the department requires the owner to be issued a construction permit under section 459A.205, any construction design standards for the basin or structure shall be established by rules as provided in chapter 17A that exclusively account for special design characteristics of open feedlot operations and related basins or animal truck wash facilities and related structures, including but not limited to the dilute composition of settled effluent as collected and stored in the basins or structures.


459A.302 Settled open feedlot effluent basins or unformed animal truck wash effluent structures — construction requirements.

A settled open feedlot effluent basin or an unformed animal truck wash effluent structure required to be constructed pursuant to a construction permit issued pursuant to section 459A.205 shall meet all of the following requirements:

1. a. Prior to constructing a settled open feedlot effluent basin or an unformed animal truck wash effluent structure, the site for the basin or structure shall be investigated for a drainage tile line by the owner of the open feedlot operation or animal truck wash facility. The investigation shall be made by digging a core trench to a depth of at least six feet deep from ground level at the projected center of the berm of the basin or unformed structure. If a drainage tile line is discovered, one of the following solutions shall be implemented:

   (1) The drainage tile line shall be rerouted around the perimeter of the basin or unformed animal truck wash effluent structure at a distance of at least twenty-five feet horizontally separated from the outside edge of the berm of the basin or unformed structure. For an area of the basin or unformed structure where there is not a berm, the drainage tile line shall be rerouted at least fifty feet horizontally separated from the edge of the basin or unformed structure.

   (2) The drainage tile line shall be replaced with a nonperforated tile line under the floor of the basin or unformed animal truck wash effluent structure. The nonperforated tile line shall be continuous and without connecting joints. There must be a minimum of three feet between the nonperforated tile line and the floor of the basin or unformed structure.

   b. A written record of the investigation shall be submitted as part of the construction certification required under section 459A.207.

2. a. The settled open feedlot effluent basin or unformed animal truck wash effluent structure shall be constructed with a minimum separation of two feet between the top of the liner of the basin or unformed structure and the seasonal high-water table.

   b. If a drainage tile line around the perimeter of the settled open feedlot effluent basin or unformed animal truck wash effluent structure is installed a minimum of two feet below the top of the basin’s or unformed structure’s liner to artificially lower the seasonal high-water table, the top of the liner may be a maximum of four feet below the seasonal high-water table. The seasonal high-water table may be artificially lowered by gravity flow tile lines or other similar system. However, the following shall apply:

   (1) Except as provided in subparagraph (2), an open feedlot operation or animal truck wash facility shall not use a nongravity mechanical system that uses pumping equipment.

   (2) If the open feedlot operation was constructed before July 1, 2005, the operation may continue to use its existing nongravity mechanical system that uses pumping equipment or it may construct a new nongravity mechanical system that uses pumping equipment. However,
an open feedlot operation that expands the area of its open feedlot on or after April 1, 2011, shall not use a nongravity mechanical system that uses pumping equipment.

3. Drainage tile lines may be installed to artificially lower the seasonal high-water table at a settled open feedlot effluent basin or an unformed animal truck wash effluent structure, if all of the following conditions are satisfied:
   a. A device to allow monitoring of the water in the drainage tile lines and a device to allow shutoff of the flow in the drainage tile lines are installed, if the drainage tile lines do not have a surface outlet accessible on the property where the basin or unformed structure is located.
   b. Drainage tile lines are installed horizontally at least twenty-five feet away from the basin or unformed structure. Drainage tile lines shall be placed in a vertical trench and encased in granular material which extends upward to the level of the seasonal high-water table.

4. A settled open feedlot effluent basin or an unformed animal truck wash effluent structure shall be constructed with at least four feet between the bottom of the basin or unformed structure and a bedrock formation.

5. A settled open feedlot effluent basin or an unformed animal truck wash effluent structure constructed on a floodplain or within a floodway of a river or stream shall comply with rules adopted by the commission.

6. The liner of a settled open feedlot effluent basin or unformed animal truck wash effluent structure shall comply with all of the following:
   a. The liner shall comply with any of the following permeability standards:
      (1) The liner shall be constructed to have a percolation rate that shall not exceed one-sixteenth inch per day at the design depth of the basin as determined by percolation tests conducted by the professional engineer. If a clay soil liner is used, the liner shall be constructed with a minimum thickness of twelve inches or the minimum thickness necessary to comply with the percolation rate in this section, whichever is greater.
      (2) The liner shall be constructed at optimum moisture content not less than ninety-five percent of the maximum density as determined by a standard five-point proctor test performed at the site of the open feedlot operation by a professional engineer. If a clay soil liner is used, the liner shall be constructed with a minimum thickness of twelve inches.
   b. If a synthetic liner is used, the liner shall be installed to comply with the percolation rate required in this section.

7. The owner of an open feedlot operation using a settled open feedlot effluent basin or animal truck wash facility using an unformed animal truck wash effluent structure shall inspect the berms of the basin or unformed structure at least semiannually for evidence of erosion. If the inspection reveals erosion which may impact the basin's or unformed structure's structural stability or the integrity of the basin's or unformed structure's liner, the owner shall repair the berms.


Referred to in §459A.103, 459A.303

459A.303 Alternative technology systems.

In lieu of using a settled open feedlot effluent basin as provided in section 459A.302 to meet the open feedlot effluent control requirements of section 459A.401, an open feedlot operation may use an alternative technology system for open feedlot effluent control.

1. The alternative technology system must provide an equivalent level of open feedlot effluent control as would be achieved by using a settled open feedlot effluent basin.

2. The commission shall adopt rules establishing requirements for the construction and operation of alternative technology systems.


Referred to in §459A.102, 459A.205, 459A.208
SUBCHAPTER IV
EFFLUENT CONTROL

459A.401 Open feedlot effluent control methods.
An open feedlot operation shall provide for the management of open feedlot effluent by using an open feedlot effluent control method as follows:
1. All settleable solids from open feedlot effluent shall be removed prior to discharge into a water of the state.
   a. The settleable solids shall be removed by use of a solids settling facility. The construction of a solids settling facility is not required where existing site conditions provide for removal of settleable solids prior to discharge into a water of the state.
   b. The removal of settleable solids shall be deemed to have occurred when the velocity of flow of the open feedlot effluent has been reduced to less than point five feet per second for a minimum of five minutes. A solids settling facility shall have sufficient capacity to store settled solids between periods of land application and to provide required flow-velocity reduction for open feedlot effluent flow volumes resulting from a precipitation event of less intensity than a ten-year, one-hour frequency event. A solids settling facility which receives open feedlot effluent shall provide a minimum of one square foot of surface area for each eight cubic feet of open feedlot effluent per hour resulting from a ten-year, one-hour frequency precipitation event.
2. Notwithstanding subsection 1, an open feedlot operation that is a concentrated animal feeding operation shall comply with applicable NPDES permit requirements as provided in the federal Water Pollution Control Act, pursuant to rules that shall be adopted by the commission. Any rules adopted pursuant to this subsection shall be no more stringent than requirements under the federal Act.
3. If the open feedlot operation is designed, constructed, and operated in accordance with the requirements of an open feedlot effluent control system as provided in rules adopted by the commission, the operation shall be deemed to be in compliance with this section, unless a discharge from the operation causes a violation of state water quality standards as provided in chapter 455B, division III.
4. The following shall apply to an open feedlot operation which has an animal unit capacity of one thousand animal units or more:
   a. (1) The open feedlot operation shall not discharge open feedlot effluent from an open feedlot operation structure into any waters of the United States, unless the discharge is pursuant to an NPDES permit.
   (2) The open feedlot operation shall not be required to be issued an NPDES permit if the operation does not discharge open feedlot effluent into any waters of the United States.
   b. The control of open feedlot effluent originating from the open feedlot operation may be accomplished by the use of a solids settling facility, settled open feedlot effluent basin, alternative technology system, or any other open feedlot effluent control structure or practice approved by the department. The department may require the diversion of surface drainage prior to contact with an open feedlot operation structure. Solids shall be settled from open feedlot effluent before the effluent enters a settled open feedlot effluent basin or alternative technology system.

Referred to in §459A.205, 459A.303, 459A.402

459A.402 Open feedlot effluent control — alternative control practices.
If because of topography or other factors related to the site of an open feedlot operation it is economically or physically impractical to comply with open feedlot effluent control requirements using an open feedlot control method in section 459A.401, the department shall allow the use of other open feedlot effluent control practices if those practices will
provide an equivalent level of open feedlot effluent control that would be achieved by using an open feedlot effluent control method pursuant to section 459A.401.

2005 Acts, ch 136, §15

459A.403 Solids stockpiling.
A person may stockpile solids, subject to all of the following:
1. a. The person shall not stockpile the solids within the following distances:
   (1) Four hundred feet from a designated area other than a high-quality water resource.
   (2) Eight hundred feet from a high-quality water resource.
   b. The person shall not stockpile solids within two hundred feet from a terrace tile inlet or surface tile inlet unless the solids are maintained in a manner that will not allow precipitation-induced runoff to drain from the solids to the terrace tile inlet or surface tile inlet.
   c. The person shall not stockpile solids in a grassed waterway or where water pools on the soil surface.
   d. The person shall not stockpile solids on land having a slope of more than three percent unless methods, structures, or practices are implemented to contain the stockpiled solids, including but not limited to using hay bales, silt fences, temporary earthen berms, or other effective measures, and to prevent or diminish precipitation-induced runoff from the stockpiled solids.
2. The person must remove the stockpiled solids and apply them in accordance with the provisions of this chapter, including but not limited to section 459A.410, within six months after the solids are stockpiled.

2006 Acts, ch 1088, §5, 6

459A.404 Animal truck wash facility — construction regulations.
1. a. An animal truck wash effluent structure shall not be constructed or expanded within one thousand two hundred fifty feet from a residence not owned by the titleholder of the animal truck wash facility, a commercial enterprise, a bona fide religious institution, an educational institution, or a public use area, as those terms are defined in section 459.102, and as provided in rules adopted by the commission pursuant to sections 459.103 and 459A.104.
   b. An animal truck wash effluent structure shall not be constructed or expanded within one hundred feet from a public thoroughfare as defined in section 459.102.
   c. Paragraph “a” does not apply if a residence, educational institution, commercial enterprise, or bona fide religious institution was constructed or expanded, or if the boundaries of the public use area were expanded, after the date that the animal truck wash facility was established. The date the animal truck wash facility was established is the date on which the animal truck wash facility commenced operating. A change in ownership or expansion of the animal truck wash facility shall not change the established date of operation.
   d. Paragraph “a” or “b” does not apply if the titleholder of the land benefiting from the separation distance requirement, including a person so authorized by the titleholder, executes a written waiver with the titleholder of the land where the animal truck wash effluent structure is located. The structure shall be constructed or expanded under such terms and conditions that the parties negotiate. The state or a political subdivision constructing or maintaining the public thoroughfare benefiting from the separation distance requirement may execute a written waiver with the titleholder of the land where the structure is located. The animal truck wash effluent structure shall be constructed or expanded under such terms and conditions that the parties negotiate.
   e. Paragraph “a” or “b” does not apply to a small animal truck wash facility.
   f. An unformed animal truck wash effluent structure shall not be constructed or expanded within the following minimum separation distances from any of the following:
      (1) One thousand feet from a public shallow well.
      (2) Four hundred feet from a public deep well.
      (3) Four hundred feet from a private well.
2. a. Any separation distance required for a confinement feeding operation structure and
a location or object specified in section 459.310, subsection 1, shall also apply to an animal truck wash effluent structure and that same location or object.

b. Any requirement, qualification, or exception that applies to a separation distance required for a confinement feeding operation structure and a location or object specified in section 459.310, subsections 1 and 3, shall also apply to the separation distance required for an animal truck wash effluent structure and that same location or object. A separation distance requirement shall not apply to any of the following:

(1) An animal truck wash effluent structure and a farm pond or privately owned lake, as defined in section 462A.2.
(2) An animal truck wash effluent structure constructed with a secondary containment barrier in accordance with rules adopted by the commission. The rules shall correspond to rules adopted pursuant to section 459.310, subsection 3.

3. a. An animal truck wash effluent structure shall not be constructed or expanded on land that is part of a one hundred year floodplain as designated by rules adopted by the commission pursuant to section 459A.104. The rules shall correspond to rules adopted pursuant to section 459.310, subsections 2 and 4.

b. For purposes of section 459.310, subsection 4, the provisions relating to an unformed manure storage structure shall apply to an unformed animal truck wash effluent structure and the provisions relating to a formed manure storage structure shall apply to a formed animal truck wash effluent structure. However, the requirement in section 459.310, subsection 4, paragraph “a”, relating to animal weight capacity or animal unit capacity shall not apply to the replacement of an unformed animal truck wash effluent structure with a formed animal truck wash effluent structure. In addition, the capacity of a replacement animal truck wash effluent structure shall not exceed the amount required to store animal truck wash effluent for any eighteen-month period.

4. A person shall not construct or expand an unformed animal truck wash effluent structure within an agricultural drainage well area as provided in section 460.205.

5. A person shall not construct an unformed animal truck wash effluent structure on karst terrain or on an area that drains into a known sinkhole. However, a person may construct an animal truck wash effluent structure if there is a twenty-five foot vertical separation distance between the bottom of the structure and underlying limestone, dolomite, or other soluble rock as documented in the engineering report submitted to the department pursuant to section 459A.205.

Referred to in §459A.105, 459A.205

459A.405 through 459A.409 Reserved.

459A.410 Effluent application requirements.

1. Open feedlot effluent or animal truck wash effluent shall be applied in a manner which does not cause surface water or groundwater pollution. Application in accordance with the provisions of state law, including this chapter, rules adopted pursuant to the provisions of state law, including this chapter, and guidelines adopted pursuant to this chapter, shall be deemed as compliance with this section.

2. A separation distance in section 459.314 that applies to the land application of liquid manure from a confinement feeding operation shall also apply to animal truck wash effluent from an animal truck wash effluent structure in accordance with rules adopted by the commission.

3. A person shall not apply animal truck wash effluent on land located within seven hundred fifty feet from a residence not owned by the titleholder of the land in accordance with rules adopted by the commission. This separation distance does not apply to the following:

a. The animal truck wash effluent is injected into the soil or incorporated within the soil not later than twenty-four hours from the original application, as provided by rules adopted by the commission.

b. The titleholder of the land benefiting from the separation distance requirement
executes a written waiver with the titleholder of the land where the animal truck wash effluent is applied.

  c. The animal truck wash effluent is from a small animal truck wash facility or an animal truck wash facility that is part of a small animal feeding operation.

  Referred to in §459A.105, 459A.403

459A.411 Discontinuance of operations.
The owner of an open feedlot operation or animal truck wash facility who discontinues its operation shall remove all effluent from related open feedlot operation structures or animal truck wash effluent structures used to store effluent, as soon as practical but not later than six months following the date the operations of the open feedlot operation or animal truck wash facility are discontinued.


SUBCHAPTER V
ENFORCEMENT

459A.501 General.
The department and the attorney general shall enforce the provisions of this chapter in the same manner as provided in chapter 455B, division I and section 455B.175, unless otherwise provided in this chapter.


459A.502 Violations — civil penalty.
A person who violates this chapter shall be subject to a civil penalty which shall be established, assessed, and collected in the same manner as provided in section 455B.191. Any collected civil penalty and interest on a civil penalty shall be credited to the Iowa nutrient research fund created in section 466B.46. A person shall not be subject to a penalty under this section and a penalty under section 459.603 for the same violation.

  Referred to in §455B.109, 466B.46