



University of Arkansas Division of Agriculture

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Nutrient Management Plans Statutes & Regulations

Indiana

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Nutrient Management Plans

STATE OF INDIANA

- 1) Ind. Code Ann. §§ 13-18-10-2, 4; 327 IAC 19-7-5
- 2) Ind. Code Ann. §§ 13-18-19-1, 13-18-20-11.5; 327 IAC 15-16-1, 19-14-3

The statutes and Constitution are current through the 2018 regular and special legislative sessions. The statutes are subject to changes by the Indiana Legislative Council.

1) Ind. Code Ann. §§ 13-18-10-2, 4; 327 IAC 19-7-5

§ 13-18-10-2. Application for approval of construction or expansion.

(a) An application for an approval under section 1 [IC 13-18-10-1] of this chapter must be submitted on a form provided by the department. An applicant must submit the completed application form to the department together with the following:

- (1) Plans and specifications for the design and operation of manure treatment and control facilities.
- (2) A manure management plan that outlines procedures for the following:
 - (A) Soil testing.
 - (B) Manure testing.
- (3) Maps of manure application areas.
- (4) Supplemental information that the department requires, including the following:
 - (A) General features of topography.
 - (B) Soil types.
 - (C) Drainage course.
 - (D) Identification of nearest streams, ditches, and lakes.
 - (E) Location of field tiles.

(F) Location of land application areas.

(G) Location of manure treatment facilities.

(H) Farmstead plan, including the location of water wells on the site.

(5) A fee of one hundred dollars (\$100). The department shall refund the fee if the department does not make a determination in accordance with the time period established under section 2.1 [IC 13-18-10-2.1] of this chapter.

(b) An applicant who applies for an approval under section 1 of this chapter shall, not more than ten (10) working days after submitting the application, make a reasonable effort to provide notice under this subsection:

(1) to the county executive of the county in which the confined feeding operation is to be located or expanded; and

(2) to each owner and each occupant of land of which any part of the boundary is one-half (½) mile or less from the following:

(A) Any part of the proposed footprint of either or both of the following to be located on the land on which the confined feeding operation is to be located:

(i) A livestock or poultry production structure.

(ii) A permanent manure storage facility.

(B) Any part of the proposed footprint of either or both of the following to be located on the land on which the confined feeding operation is to be expanded:

(i) A livestock or poultry production structure.

(ii) The expanded area of a livestock or poultry production structure.

The notice must be sent by mail, be in writing, include the date on which the application was submitted to the department, and include a brief description of the subject of the application. The applicant shall pay the cost of complying with this subsection. The applicant shall submit an affidavit to the department that certifies that the applicant has complied with this subsection.

(c) A person must submit an application for the renewal of an approval to:

(1) operate a confined feeding operation; or

(2) complete construction or expansion of a confined feeding operation; at least thirty (30) days prior to the expiration of the existing approval. The construction standards that apply to a renewal application under this subsection shall be the standards in place under rules adopted by the board at the time that the original approval for construction or expansion of a confined feeding operation was issued.

(d) A person who has received approval to construct or expand a confined feeding operation under section 1 of this chapter and has not begun construction or expansion within thirty (30) days of the expiration of the approval must:

(1) submit a renewal application for construction or expansion at least thirty (30) days prior to the expiration of the approval; and

(2) comply with the requirements of subsection (b).
The construction standards that apply to a renewal application under this subsection shall be the standards in place under rules adopted by the board at the time that the renewal application is submitted.

(e) The department shall approve the construction or expansion and the operation of the manure management system of the confined feeding operation if the commissioner determines that the applicant meets the requirements of:

(1) this chapter;

(2) rules adopted under this chapter;

(3) the water pollution control laws;

(4) rules adopted under the water pollution control laws; and

(5) policies and statements adopted under IC 13-14-1-11.5 relative to confined feeding operations.

§ 13-18-10-4. Adoption of rules, policies, or statements.

(a) The board may adopt rules under IC 4-22-2 and IC 13-14-9 and the department may adopt policies or statements under IC 13-14-1-11.5 that are necessary for the proper administration of this chapter. The rules, policies, or statements may concern construction, expansion, and operation of confined feeding operations and may include uniform standards for:

(1) construction, expansion, and manure containment that are appropriate for a specific site; and

(2) manure application and handling that are consistent with best management practices:

(A) designed to reduce the potential for manure to be conveyed off a site by runoff or soil erosion; and

(B) that are appropriate for a specific site.

(b) Standards adopted in a rule, policy, or statement under subsection (a) must:

(1) consider confined feeding standards that are consistent with standards found in publications from:

(A) the United States Department of Agriculture;

(B) the Natural Resources Conservation Service of the United States Department of Agriculture;

(C) the Midwest Plan Service; and

(D) postsecondary educational institution extension bulletins; and

(2) be developed through technical review by the department, postsecondary educational institution specialists, and other animal industry specialists.

327 IAC 19-7-5 Manure management plan

Sec. 5.

(a) A manure management plan must be developed and submitted to the commissioner that contains the following:

(1) Procedures for soil testing as described in subsection (c).

(2) Procedures for manure testing as described in subsection (d).

(3) Plot maps as described in section 2(a)(1) and 2(b) of this rule.

(4) If applicable, the land application acreage requirements waiver, as described in 327 IAC 19-14-2(d).

(b) If applicable, the manure management plan must also contain a description of any:

(1) alternate methods proposed by the applicant for managing of the manure; and

(2) other practices to be used that assure the CFO meets the performance standards in this article.

(c) A soil test must be obtained that provides sufficient information about soil fertility to allow for nutrient recommendations for existing or planned crops. Soil tests may not represent more than twenty (20) acres per sample. The frequency of this testing must be:

(1) specified in the manure management plan; and

(2) conducted a minimum of once every four (4) years unless a different frequency is approved by the department in writing and is included in the manure management plan.

(d) A manure test must be obtained that provides sufficient information about the manure content to allow for nutrient recommendations for existing or planned crops and to minimize nutrient leaching. The frequency of this testing must be:

(1) specified in the manure management plan; and

(2) conducted a minimum of once every year.

(e) Manure samples must be representative of the manure that is land applied. If manure is mixed from separate manure storage facilities prior to land application, a composite sample may be taken. If manure is land applied from separate and distinct storage facilities, a sample must be taken from each unique production system.

(f) A manure management plan must be submitted to the department at least one (1) time every five (5) years and with any approval application and renewal application to maintain a valid approval for the CFO. A copy of the current manure management plan must be maintained in the operating record. (Water Pollution Control Division; 327 IAC 19-7-5; filed Feb 6, 2012, 2:58 p.m.:20120307-IR-327090615FRA, eff Jul 1, 2012; readopted filed Jun 6, 2018, 1:59 p.m.: 20180704-IR-327180171BFA)

2) Ind. Code Ann. §§ 13-18-19-1, 13-18-20-11.5; 327 IAC 15-16-1, 19-14-3

§ 13-18-19-1. Duties of department.

When the department receives an application for an original National Pollutant Discharge Elimination System (NPDES) permit required for discharge into a stream, the department shall do the following:

(1) Send a list in writing, on a monthly basis, of original applications received during the month to the county surveyor of the affected county, not later than thirty (30) days after receipt of the application.

(2) Advise the applicant in writing that if the stream is a regulated drain under IC 36-9-27, the county drainage board must also review the application for approval under IC 36-9-27.

13-18-20-11.5. Additional permit fees.

(a) In addition to the fee under section 12 [IC 13-18-20-12] of this chapter, when a person files a notice of intent with the department concerning:

(1) an initial; or

(2) the renewal of a;

general NPDES permit for a CAFO, the person must remit a permit fee of one hundred dollars (\$100) to the department.

(b) In addition to the fee under section 12 of this chapter, when a person files an application with the department concerning:

(1) an initial; or

(2) the renewal of an;

individual NPDES permit for a CAFO, the person must remit a permit fee of two hundred fifty dollars (\$250) to the department.

(c) If a person is subject to a fee for a CAFO under this section, no other fee under this chapter applies to the CAFO other than the fee under section 12 of this chapter.

327 IAC 15-16-1 Purpose and applicability

Sec. 1.

(a) This rule:

(1) incorporates by reference federal National Pollutant Discharge Elimination System (NPDES) concentrated animal feeding operation (CAFO) regulations;

(2) requires construction, operational, and land application standards for CAFOs; and

(3) describes how to be removed from the CAFO permitting program.

(b) This rule applies to all of the following:

(1) All CAFOs defined as CAFOs under 40 CFR 122.23(c)* that discharge to waters of the state.

(2) Animal feeding operations designated as CAFOs under 40 CFR 122.23(c)* that discharge to waters of the state.

(3) AFOs electing to be subject to this rule.

(c) An owner/operator of a facility listed in subsection (b) must obtain permit coverage under this rule.

(d) The discharge of manure, litter, or process wastewater from a CAFO to waters of the state as a result of land application of manure, litter, or process wastewater by the CAFO to land application areas under the control of the CAFO owner/operator is a discharge subject to NPDES permit requirements under this rule, except where it is an agricultural storm water discharge.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, IN 46204. (Water Pollution Control Division; 327 IAC 15-16-1; filed Feb 6, 2012, 2:50 p.m.: 20120307-IR-327090213FRA, eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: 20170809-IR-327160003FRA)

327 IAC 19-14-3 Manure application rates

Sec. 3.

(a) The owner/operator of a CFO shall have the results of a soil test prior to any land application events, as well as a manure test. Soil and manure tests must be conducted in accordance with the manure management plan that is submitted to the commissioner to meet the requirement in 327 IAC 19-7-1(c)(5).

(b) The application rate of nitrogen (N) must not exceed the N requirements based on the recommendations in the following documents for current or planned crops of the upcoming growing season as documented in the operating record:

(1) Purdue University Cooperative Extension Service publication ID-101: Animal Manure as a Plant Nutrient Resource, February 2001*.

(2) Tri-State Fertilizer Recommendations for Corn, Soybeans, Wheat and Alfalfa, Extension Bulletin E-2567 (New), July 1995**. Minimum N loss estimates must be used unless otherwise justified. This justification must be kept in the operating record.

(c) For the first manure application only, nutrient content of manure from facilities constructed after the effective date of this article must be:

(1) based on either:

(A) manure test values as described in 327 IAC 19-7-5(d); or

(B) values in the NRCS Agricultural Waste Management Field Handbook (AWMFH) Chapter 4, March 2008***; and

(2) applied at fifty percent (50%) of the rate listed in subsection (b). For all subsequent manure application events, nutrient content values must be based on manure test values.

(d) As of the effective date of this article, the following must comply with the phosphorus application rates in Table 1:

(1) Large CAFOs, as defined in 40 CFR 122.23(b)****, that were approved for initial construction after February 13, 2003.

(2) CAFOs with a NPDES permit.

(3) CFOs approved for initial construction after the effective date of this article.

Table 1	
Phosphorus Application Rates for Large CAFOs Approved for Initial Construction After February 13, 2003, and CFOs Approved for Initial Construction After the Effective Date of this Article	
Soil test level (ppm)	Application rate
0-50	N based
51-100	1.5 x P crop removal
101-200	1.0 x P crop removal
201+	0

(e) Beginning with the effective date of this article, CFOs and CAFOs not listed in subsection (d) must comply with the phosphorus application rates in Table 2:

Table 2				
Phosphorus Application Rates for all Other CFOs and CAFOs				
Soil test level (ppm)	Year <1>			
	2012-2013	2014-2015	2016-2017	2018+
0-50	N based	N based	N based	N based
51-100	1.5 x P crop removal	1.5 x P crop removal	1.5 x P crop removal	1.5 x P crop removal
101-200	1.0 x P crop removal	1.0 x P crop removal	1.0 x P crop removal	1.0 x P crop removal
201-250	0.9 x P crop removal	0.75 x P crop removal	0.75 x P crop removal	0
251-275	0.9 x P crop removal	0.75 x P crop removal	0.5 x P crop removal	0
276-300	0.9 x P crop removal	0.75 x P crop removal	0.25 x P crop removal	0
301-350	0.7 x P crop removal	0.5 x P crop removal	0	0
351-400	0.7 x P crop removal	0.25 x P crop removal	0	0
401+	0	0	0	0

<1> Multiple years of phosphorus may be applied as long as the net average of phosphorus does not exceed the amounts indicated in Table 2.

(f) The following land application information must be added to the operating record as needed in accordance with required time frames established in this article and IC 13-18-10 and must be maintained and updated in the operating record:

- (1) Expected crop yields.
- (2) The date or dates manure, litter, or process wastewater is applied to each field.
- (3) Precipitation events at the time of application and for twenty-four (24) hours prior to and following application.
- (4) Test methods used to sample and analyze manure, litter, process wastewater, and soil.
- (5) Results from manure, litter, process wastewater, and soil sampling.
- (6) An explanation of the basis for determining manure, litter, and process wastewater application rates.
- (7) Calculations showing the manure nitrogen and phosphorus to be applied to each field.
- (8) Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied.

- (9) The method used to apply the manure, litter, or process wastewater.
- (10) The date or dates of manure, litter, and process wastewater application equipment inspection.
- (11) USDA soil survey maps of currently available land application sites.
- (12) The type of manure applied.
- (13) A written conservation plan with an explanation of conservation practices used must be completed and implemented prior to land application on highly erodible land, if required in section 4(j) of this rule. CAFOs with a NPDES permit must have a nutrient management plan prior to land application on highly erodible land.

*These documents are incorporated by reference. Copies may be obtained from the Cooperative Extension Service, Purdue University, West Lafayette, IN 47907, online at <https://www.extension.purdue.edu/extmedia/id/id-101.html>, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, IN 46204.

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