
TITLE 327 WATER POLLUTION CONTROL DIVISION**Final Rule**
LSA Document #16-3(F)**DIGEST**

Amends [327 IAC 15-16-1](#), [327 IAC 15-16-2](#), [327 IAC 15-16-4](#), [327 IAC 15-16-5](#), [327 IAC 15-16-6](#), [327 IAC 15-16-7](#), [327 IAC 15-16-9](#), [327 IAC 15-16-10](#), [327 IAC 19-6-1](#), [327 IAC 19-8-4](#), [327 IAC 19-11-1](#), [327 IAC 19-12-1](#), [327 IAC 19-12-3](#), [327 IAC 19-12-4](#), [327 IAC 19-12-5](#), [327 IAC 19-14-3](#), [327 IAC 19-14-4](#), [327 IAC 19-14-6](#), and [327 IAC 19-15-2](#) and adds [327 IAC 19-1-4](#), concerning concentrated animal feeding operations (CAFO) and confined feeding operations (CFO), to update references to the Indiana Natural Resources Conservation Service (NRCS) Nutrient Management Conservation Practice Standards Codes 313, 360, 520, 521A, 521B, 521C, 522, 590, 633, and 656, and the construction specification for concrete construction; update the Code of Federal Regulations (CFR) incorporated into the rules to the 2016 edition; and correct formatting, typographical errors, and references to websites. Effective 30 days after filing with the Publisher.

HISTORY

Findings and Determination of the Commissioner Pursuant to [IC 13-14-9-7](#) and Second Notice of Comment Period: January 20, 2016, Indiana Register (DIN: [20160120-IR-327160003FDA](#)).

Notice of First Hearing: January 20, 2016, Indiana Register (DIN: [20160120-IR-327160003PHA](#)).

Date of First Hearing: May 11, 2016.

Proposed Rule and Third Comment Period: June 29, 2016, Indiana Register (DIN: [20160629-IR-327160003PRA](#)).

Notice of Second Hearing: June 29, 2016, Indiana Register (DIN: [20160629-IR-327160003PHA](#)).

Change in Notice of Hearing: March 8, 2017, Indiana Register (DIN: [20170308-IR-327160003CHA](#)).

Date of Second Hearing: April 12, 2017.

[327 IAC 15-16-1](#); [327 IAC 15-16-2](#); [327 IAC 15-16-4](#); [327 IAC 15-16-5](#); [327 IAC 15-16-6](#); [327 IAC 15-16-7](#); [327 IAC 15-16-9](#); [327 IAC 15-16-10](#); [327 IAC 19-1-4](#); [327 IAC 19-6-1](#); [327 IAC 19-8-4](#); [327 IAC 19-11-1](#); [327 IAC 19-12-1](#); [327 IAC 19-12-3](#); [327 IAC 19-12-4](#); [327 IAC 19-12-5](#); [327 IAC 19-14-3](#); [327 IAC 19-14-4](#); [327 IAC 19-14-6](#); [327 IAC 19-15-2](#)

SECTION 1. [327 IAC 15-16-1](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 15-16-1](#) Purpose and applicability

Authority: [IC 13-14-8](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14-12](#); [IC 13-18-10](#); [IC 13-30](#)

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) AFOs **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 or operator~~ **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](#))

SECTION 2. [327 IAC 15-16-2](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 15-16-2](#) References to the Code of Federal Regulations

Authority: [IC 4-22-2-21](#); [IC 13-14-8](#); [IC 13-18-10-4](#)

Affected: [IC 4-22-9-5](#); [IC 13-11-2](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 2. (a) ~~The following are incorporated by reference, revised as of~~ **Unless otherwise indicated, any reference to the Code of Federal Regulations (CFR) in this article means the July 1, 2009, 2016, edition,** except as provided in subsection (e): **(b).**

- ~~(1) 40 CFR 122.21.~~
- ~~(2) 40 CFR 122.23.~~
- ~~(3) 40 CFR 122.42(e).~~
- ~~(4) 40 CFR 122.63(h).~~
- ~~(5) 40 CFR 412.~~

~~(b) Federal regulations that have been incorporated by reference do not include any later amendments than those specified in the incorporation citation in subsection (a). Sales of the Code of Federal Regulations are handled by the Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000, or online at <http://bookstore.gpo.gov/>. The incorporated materials are available for public review at the offices of the department of environmental management.~~

~~(e) (b) The following are exceptions to the incorporations by reference in subsection (a):~~

- ~~(1) Delete the following phrases "or proposes to discharge" wherever they occur: **it occurs.**~~
 - ~~(A) "proposes to discharge".~~
 - ~~(B) "or proposes to discharge".~~
 - ~~(C) "propose to discharge".~~
 - ~~(D) "or propose to discharge".~~
- ~~(2) In 40 CFR 122.23(d)(1), delete "A CAFO proposes to discharge if it is designed, constructed, operated, or maintained such that a discharge will occur."~~
- ~~(3) (2) Delete 40 CFR 122.23(e)(2).~~
- ~~(4) (3) Delete 40 CFR 122.23(f) and substitute the following: Any CAFO that discharges must obtain permit coverage under paragraph (d)(1) of this section.~~
- ~~(5) Delete 40 CFR 122.23(i).~~
- ~~(6) Delete 40 CFR 122.23(j).~~

***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 15-16-2](#); 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](#))

SECTION 3. [327 IAC 15-16-4](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 15-16-4](#) Definitions

Authority: [IC 13-14-8](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 4. **In addition to** the definitions in [IC 13-11-2](#), [327 IAC 5-1.5](#), [327 IAC 19-2](#), and 40 CFR 122.23, and the following definitions apply throughout this rule:

(1) "Agricultural storm water discharge" means a precipitation related discharge from a land application area where the manure, litter, or process wastewater has been applied in accordance with this rule and site-specific nutrient management practices to ensure the agronomic utilization of the nutrients in the manure, litter, or process wastewater as provided in 33 U.S.C. 1362(14) and 40 CFR 122.23(e).

(2) ~~"CAFO~~ **"Confined feeding operation approval"** means a valid approval issued by the commissioner under [327 IAC 19](#).

(3) "Manure storage area" means any area where manure is kept. The term includes ~~but is not limited to~~, the following areas:

- (A) Lagoons.
- (B) Runoff ponds.
- (C) Storage sheds.
- (D) Stockpiles.
- (E) Under house or pit storage.
- (F) Liquid impoundments.
- (G) Static piles.
- (H) Composting piles.

~~(4) "NRCS 590 standard" means the Indiana Natural Resources Conservation Service (NRCS) Nutrient Management Conservation Practice Standard, Code 590, July 2001, available from the Natural Resources Conservation Service, Indiana Field Office, 6013 Lakeside Boulevard, Indianapolis, Indiana 46278-2933 or online at <http://www.in.nrcs.usda.gov/>. The standard may be viewed and copied at IDEM Office of Land Quality, 100 North Senate Avenue, Eleventh Floor, Indianapolis, Indiana.~~

~~(5)~~ **(4)** "One hundred (100) year, twenty-four (24) hour rainfall event" means a twenty-four (24) hour precipitation event with a probable recurrence interval of once in one hundred (100) years, as determined using **National Oceanic and Atmospheric Administration (NOAA) Atlas 14**, "Precipitation-Frequency Atlas of the United States, Volume 2 Version 3.0", revised 2006*.

~~(6)~~ **(5)** "Overflow" means the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or storm water can be contained by the structure.

~~(7)~~ **(6)** "Setback" means a specified distance from surface waters or potential conduits to surface waters where manure, litter, and process wastewater may not be land applied. Examples of conduits or potential conduits include ~~but are not limited to~~, the following:

- (A) Open tile line intake structures.
- (B) Sinkholes.
- (C) Agricultural well heads.

~~(8)~~ **(7)** "Twenty-five (25) year, twenty-four (24) hour rainfall event" means a twenty-four (24) hour precipitation event with a probable recurrence interval of once in twenty-five (25) years, as determined using NOAA Atlas 14, "Precipitation-Frequency Atlas of the United States, Volume 2 Version 3.0", revised 2006*.

*Copies are available from the National Weather Service, Office of Hydrologic Development, 1325 East West Highway, Silver Spring, MD 20910 or online at <http://www.nws.noaa.gov/oh/hdsc/currentpf.htm>.

(Water Pollution Control Division; [327 IAC 15-16-4](#); 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](#))

SECTION 4. [327 IAC 15-16-5](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 15-16-5](#) Application requirements

Authority: [IC 13-14-8](#); [IC 13-18-10-4](#)

Affected: [IC 13-18-10-2](#); [IC 13-18-20-11.5](#); [IC 13-18-20-12](#); [IC 13-30](#)

Sec. 5. (a) The ~~owner or operator~~ **owner/operator** of a CAFO must submit all of the following to the department:

- (1) The application for an individual NPDES permit required by 40 CFR 122.21* and [327 IAC 5-2-3](#) on forms provided by the department.
- (2) The NPDES permit application fee of fifty dollars (\$50) required by [IC 13-18-20-12](#). If this fee is not submitted, the permit application must be denied as provided in [IC 13-18-20-12\(b\)](#).
- (3) The individual NPDES CAFO permit application fee of two hundred fifty dollars (\$250) required by [IC 13-](#)

[18-20-11.5.](#)

(4) A list of potentially affected persons, which includes those described in [IC 13-18-10-2](#) and landowners or occupants of land that adjoins the land that is the subject of the permit.

(b) In addition to the requirements in subsection (a), when expanding the CAFO to increase animal capacity or manure containment capacity, the ~~owner or operator~~ **owner/operator** must:

(1) obtain a separate construction approval under [327 IAC 19](#) by submitting:

(A) an application in accordance with [327 IAC 19-7-1](#); and

(B) the fee of one hundred dollars (\$100) required by [IC 13-18-10-2\(a\)\(5\)](#); and

(2) comply with the public notice and comment requirements of [327 IAC 19-8-7](#).

The department shall incorporate the construction approval into the NPDES CAFO permit.

(c) The department shall process the application in accordance with [327 IAC 5-3](#).

***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 15-16-5](#); 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](#))

SECTION 5. [327 IAC 15-16-6](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 15-16-6](#) Permit term and renewal

Authority: [IC 13-13-5-1](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#)

Affected: [IC 13-18-10](#)

Sec. 6. (a) A permit issued under this rule is effective for a period of five (5) years from the date the permit is issued by the department.

(b) To obtain renewal of coverage under this rule, the information required under 40 CFR 122.21* shall be submitted to the department no later than one hundred eighty (180) days before the expiration of coverage under the permit.

(c) The permittee must submit an application in accordance with section 5 of this rule to renew a permit.

***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 15-16-6](#); 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](#))

SECTION 6. [327 IAC 15-16-7](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 15-16-7](#) Performance standards and effluent limitations

Authority: [IC 13-14-8](#); [IC 13-18-10-4](#)

Affected: [IC 13-14-12](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 7. (a) All permitted CAFOs must comply with the requirements of [327 IAC 19-3-1](#).

(b) Animals in any confinement area must not have direct access to waters of the state.

(c) ~~There shall be no~~ A discharge of process wastewater pollutants to waters of the state **is prohibited**, except as described in subsection (d).

(d) Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated, and maintained to contain all process wastewater generated in addition to the runoff from a twenty-five (25) year, twenty-four (24) hour rainfall event for the location of the point source, process wastewater pollutants in the overflow may be discharged into waters, provided that the production area is operated in accordance with the ~~additional~~ requirements of 40 CFR 412.37(a)* and 40 CFR 412.37(b)*.

(e) Any discharges by operations permitted under this rule may not cause an ~~exceedence~~ **exceedance** of a water quality standard under [327 IAC 2](#).

(f) Permitted CAFOs must meet the following requirements and effluent limitations for the CAFO production areas as of the date of permit coverage:

(1) ~~There must be no~~ A discharge of manure, litter, or process wastewater pollutants to waters of the state **is prohibited**.

(2) Whenever rainfall events cause an overflow of process wastewater from a structure designed, constructed, operated, and maintained to contain all process wastewater including the direct precipitation and runoff from a twenty-five (25) year, twenty-four (24) hour rainfall event for the location of the point source, process wastewater pollutants in the overflow may be discharged into waters, provided that the production area is operated in accordance with the requirements of ~~subdivision~~ **subdivisions** (3) through (7).

(3) Conduct weekly visual inspections of all of the following:

(A) Storm water diversion devices.

(B) Runoff diversion devices.

(C) Devices channeling contaminated storm water to the process wastewater and manure storage structure.

(D) Manure, litter, and process wastewater impoundments, noting the level in open surface liquid impoundments as indicated by the depth marker.

(4) Conduct daily inspection of all water lines that may come in contact with or impact manure, litter, or process wastewater in and around the production area. ~~Such~~ **Water** lines include drinking water lines for livestock.

(5) Correct any deficiencies found in inspections as soon as possible.

(6) Do not dispose of mortalities in a liquid manure or process wastewater system. Mortalities must be handled ~~in such a way as~~ to prevent the discharge of pollutants to surface water.

(7) Maintain, within the operating record required under section 11 of this rule, for a period of five (5) years from the date of creation, a complete copy of the following records:

(A) Records documenting self-inspections.

(B) Weekly records of the depth of manure and process wastewater in the open surface liquid impoundment, as indicated by the depth marker.

(C) Records of actions taken to correct deficiencies. Deficiencies not corrected within thirty (30) days of discovery must be accompanied by an explanation of the factors preventing immediate correction.

(D) Records of mortality management and practices.

(E) Records documenting the current design of any manure, litter, or process wastewater storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity.

(F) Records of the date, time, and estimated amount of any overflow.

(g) For the land upon which the CAFO applies manure, the records described in [327 IAC 19-14-3\(f\)](#) must be maintained in the operating record for a period of five (5) years from the date of permit coverage.

***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 15-16-7](#); 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](#))

SECTION 7. [327 IAC 15-16-9](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 15-16-9](#) Nutrient management requirements

Authority: [IC 13-13-5-1](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#)

Affected: [IC 13-18-10](#)

Sec. 9. (a) ~~CAFOs~~ **The owner/operator of a CAFO** must conduct manure, litter, and process wastewater testing for nitrogen and phosphorus annually. Soil sampling and testing must be conducted at a minimum of once every three (3) years. ~~Owners or operators~~ **An owner/operator** may use the most recent data required under [327 IAC 19-7-5](#) to meet this requirement after the effective date of this rule.

(b) ~~Owners or operators~~ **An owner/operator** shall use the protocols listed in the **Indiana NRCS Nutrient Management Conservation Practice Standard, Code 590: standard Nutrient Management, October 2013*** for sampling and testing of soil, manure, litter, and process wastewater.

(c) When developing the nutrient management plan required by 40 CFR 122.42(e)**, the ~~owner or operator~~ **owner/operator** shall follow:

- (1) the Indiana Comprehensive Nutrient Management Plan ~~Statement of Work, April 9, 2004 available from the Natural Resources Conservation Service, Indiana Field Office, 6013 Lakeside Boulevard, Indianapolis, Indiana 46278-2933 or the department, or available online at <http://www.in.nrcs.usda.gov/>;~~ **Criteria Practice Activity Code 102, August 2015***;
- (2) the Purdue University Manure Management Planner***; available for use online at <http://www.agry.purdue.edu/mmp/>; or
- (3) an equivalent program that meets all requirements of 40 CFR 122.42(e)**.

(d) Manure application rates must be in accordance with [327 IAC 19-14-3](#).

(e) Except as otherwise provided under this section, application of manure, litter, and process wastewater must be in accordance with the setbacks in [327 IAC 19-14-6](#).

(f) Manure, litter, or process wastewater must be applied to the land in accordance with [327 IAC 19-14-4](#).

(g) Land application sites must be inspected to identify any field tile outlets under or immediately bordering the land application site in accordance with [327 IAC 19-14-6](#).

(h) Spray irrigation must be done in accordance with the requirements in [327 IAC 19-14-5](#).

(i) Marketing of manure must be done in accordance with the requirements of [327 IAC 19-14-7](#).

(j) In accordance with 40 CFR 122.42(e)**, the department shall **provide** public notice **of** substantial changes to the nutrient management plan for seven (7) days after receipt of the changes. The owner/operator may not implement the changes until after:

- (1) closure of the comment period; and
- (2) notification of approval by the department.

(k) ~~Submittal of a nutrient management plan under this section by a CAFO that meets the requirements of this section satisfies the requirements of [IC 13-18-10-2.3](#) regarding submission of a manure management plan.~~

***This document is incorporated by reference. Copies may be obtained from the Indiana NRCS State Office, 6013 Lakeside Boulevard, Indianapolis, IN 46278, online at <http://www.in.nrcs.usda.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.**

****This document is incorporated by reference. Copies may be obtained from 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.

*****This program is available for use online at: <http://www.purdue.edu/agsoftware/mmp/>.**

(Water Pollution Control Division; [327 IAC 15-16-9](#); 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](#))

SECTION 8. [327 IAC 15-16-10](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 15-16-10](#) Annual report and general conditions

Authority: [IC 13-13-5-1](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#)

Affected: [IC 13-18-10](#)

Sec. 10. (a) Any person with a facility subject to this rule shall submit an annual report to the commissioner by February 15 of each year for the previous calendar year with the following information:

(1) The requirements listed in 40 CFR 122.42(e)(4)*.

(2) Information specified under [327 IAC 15-4-2](#) and [327 IAC 15-4-3](#) for any instance of noncompliance. If a spill occurs, the spill must be reported to the department within two (2) hours of discovery, in accordance with [327 IAC 2-6.1-7](#).

(b) All reports and information required to be submitted under this rule shall be signed and certified in accordance with [327 IAC 15-4-3\(g\)](#).

(c) It shall not be a defense in an enforcement action that an ~~owner or operator~~ **owner/operator** would have had to halt or reduce the permitted activity in order to maintain compliance with the requirements of this rule.

(d) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(e) The ~~owner or operator~~ **owner/operator** shall comply with the requirements of [327 IAC 5-2-14](#).

(f) The ~~owner or operator~~ **owner/operator** shall give notice to the commissioner as soon as possible of any planned physical alterations or additions to the permitted facility when the alterations or additions would cause the facility to become a new source under 40 CFR 122.29(b)*.

(g) The ~~owner or operator~~ **owner/operator** shall give notice to the commissioner of any planned change in the permitted facility or activity that may result in noncompliance with the requirements of this rule.

***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.**

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SECTION 9. [327 IAC 19-1-4](#) IS ADDED TO READ AS FOLLOWS:

[327 IAC 19-1-4](#) References to the Code of Federal Regulations

Authority: [IC 4-22-2-21](#); [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 4-22-9-5](#); [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 4. Unless otherwise indicated, any reference to the Code of Federal Regulations (CFR) in this article means the July 1, 2016, edition.

(Water Pollution Control Division; [327 IAC 19-1-4](#); filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

SECTION 10. [327 IAC 19-6-1](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 19-6-1](#) Existing confined feeding operations

Authority: [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-15](#); [IC 13-18-10-1](#); [IC 13-30](#)

Sec. 1. (a) All CFOs must be maintained and operated in compliance with all applicable:

- (1) state laws; and
- (2) approval conditions.

(b) The owner/operator of a CFO with an existing approval before the effective date of this article shall comply with the following requirements by the effective date of this article:

- (1) Operational requirements in [327 IAC 19-13](#), except the owner/operator shall comply with [327 IAC 19-13-4](#) within ninety (90) days of the effective date of this article.
- (2) Manure application requirements in [327 IAC 19-14](#).
- (3) Manure management plan requirements in ~~[IC 13-18-10-2.3](#)~~, and as described in [327 IAC 19-7-5](#).
- (4) Closure requirements in [327 IAC 19-16](#).

(c) An approval amendment is required for an increase in the amount of manure generated that reduces the storage capacity to less than the required storage capacity at the time of the most recent approval.

(d) Any increase in animal capacity or manure containment capacity requires a new application under [IC 13-18-10-1](#) and the requirements therein.

(e) A facility that becomes a regulated CFO after the effective date of this article that contains existing waste management systems not previously regulated under this title may be required to modify them to meet the requirements of this article if necessary to protect human health and the environment. The commissioner shall provide written documentation describing the basis for any modifications.

(Water Pollution Control Division; [327 IAC 19-6-1](#); filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

SECTION 11. [327 IAC 19-8-4](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 19-8-4](#) Denials

Authority: [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-15](#); [IC 13-18-10-2.1](#); [IC 13-30](#)

Sec. 4. ~~(a)~~ The commissioner may deny an approval application or place conditions on an approval if:

- (1) the CFO is, at the time of the approval application or approval decision, not in compliance with:
 - (A) all current approval conditions or compliance requirements;
 - (B) [IC 13-18](#); or
 - (C) this article;
 - (2) the application is not on a form provided by the department or does not meet the requirements of this article; or
 - (3) a complete application has not been submitted after receipt of two (2) notices of the same deficiency on the new or renewal application;
- or as provided in [IC 13-18-10-2.1](#).

~~(b)~~ All CFOs are subject to [327 IAC 19-7-1](#) ~~(e)~~ as well as the conditions listed in this section.

(Water Pollution Control Division; [327 IAC 19-8-4](#); filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

SECTION 12. [327 IAC 19-11-1](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 19-11-1](#) Applicability

Authority: [IC 13-13-5-1](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#)

Affected: [IC 13-18-10](#)

Sec. 1. (a) All CFOs that are defined as concentrated animal feeding operations (CAFOs) in 40 CFR 122.23(b)(2)* and all CAFOs with a NPDES permit must meet the storm water requirements in 40 CFR 122.23(e)*, and 40 CFR 122.42(e)(1)*, through and 40 CFR 122.42(e)(2)*.

(b) All CFOs not defined as a CAFO in subsection (a) must comply with section 2 of this rule.

***These documents are incorporated by reference. Copies may be obtained from 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 19-11-1](#); filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

SECTION 13. [327 IAC 19-12-1](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 19-12-1](#) Applicability

Authority: [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 1. (a) This rule applies to waste management systems approved for construction after the effective date of this article.

~~(b) Indiana NRCS conservation practice standards and construction specifications are available from the Natural Resources Conservation Service, Indiana Field Office, 6013 Lakeside Boulevard, Indianapolis, Indiana 46278-2933 or online at <http://www.in.nrcs.usda.gov/>. The standards may be viewed and copied at IDEM Office of Land Quality, 100 North Senate Avenue, Eleventh Floor, Indianapolis, Indiana.~~

~~*(Water Pollution Control Division; [327 IAC 19-12-1](#); filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))*~~

SECTION 14. [327 IAC 19-12-3](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 19-12-3](#) Setbacks

Authority: [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 3. (a) Waste management systems must be located to maintain the minimum setback distances from the following features that are known and identifiable at the time an application is submitted for approval:

- (1) One thousand (1,000) feet from a public water supply well or public water supply surface intake structure.
- (2) Except for subsection (c), three hundred (300) feet from the following:
 - (A) Surface water.
 - (B) Drainage inlets, including water and sediment control basins.
 - (C) Sinkholes, as measured from the surficial opening or the lowest point of the feature.
 - (D) Off-site water wells.
- (3) One hundred (100) feet from the following:
 - (A) On-site water wells.
 - (B) Property lines.
 - (C) Public roads.
- (4) Four hundred (400) feet from existing off-site residential and public buildings.

(b) A manure storage facility that contains solid manure must be maintained to have a minimum setback of one hundred (100) feet from the features in ~~subdivision~~ **subsection (a)(2)**, but must comply with the setbacks in ~~subdivisions~~ **subsection (a)(1), and (a)(3), through and (a)(4)**.

(c) If one (1) of the features in subsection (b) is constructed within the specified setback distances to an existing waste management system, a new waste management system may be constructed to maintain the same setback between the existing waste management system and the feature, providing that the feature was:

- (1) not under the control of the owner/operator of the CFO; and
- (2) constructed after the application for original waste management system was submitted to the department.

(d) The owner/operator may obtain a reduced setback under [327 IAC 19-5](#) by demonstrating to the commissioner that a different compliance approach meets the performance standards in [327 IAC 19-3-1](#).

(e) The property line setback distances in this section may be waived in writing by the owner of the adjoining property.

(Water Pollution Control Division; [327 IAC 19-12-3](#); filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

SECTION 15. [327 IAC 19-12-4](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 19-12-4](#) Storage capacity and design requirements

Authority: [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-15](#); [IC 13-18-10-4](#); [IC 13-30](#)

Sec. 4. (a) An alternate design may be approved by the commissioner if it is shown to provide an equivalent amount of environmental protection.

(b) All waste management systems must be designed to not discharge to surface waters of the state. If a waste management system discharges or is designed to discharge, a NPDES CAFO permit under ~~40-CFR 422.23~~, [327 IAC 15-16](#) is required.

(c) All manure storage facilities for the CFO must be designed, constructed, and maintained with a combined storage capacity of at least one hundred eighty (180) days storage for the following:

- (1) All materials entering the manure storage facility.
- (2) If applicable, the expected precipitation and runoff from a twenty-five (25) year, twenty-four (24) hour precipitation event that falls on the drainage area around the manure storage facility that contains liquid. Calculations for manure excretion characteristics must be based on ASAE D384.2: Manure Production and Characteristics, March 2005*. available from the American Society of Agricultural and Biological Engineers, 2950 Niles Road, St. Joseph, Michigan 49085-9659, or online at http://evo31.ae.iastate.edu/ifafs/doc/pdf/ASAE_D384.2.pdf.

(d) All liquid manure storage facilities must be constructed according to the Indiana NRCS Conservation Practice Standard Code 313: Waste Storage Facility, ~~September 2005~~: **October 2016****. Construction of all liquid manure storage facilities approved after the effective date of this article must be certified upon completion by a registered professional engineer on a form provided by the department. The engineer's certification must be kept in the operating record and submitted with the affidavit required by subsection (s).

(e) In addition to subsection (d), all concrete manure storage facilities must be constructed according to: either of the following design standards:

(1) Indiana NRCS Construction Specification, Concrete Construction, May 2015*; and**

(2) either:

(+) (A) MWPS-36: Rectangular Concrete Manure Storages, Second Edition, 2005**; or**

(-) (B) TR-9: Circular Concrete Manure Tanks, March 1998**.**

~~All concrete structures must be constructed according to the Indiana NRCS Construction Specification, Concrete~~

~~*Available from Midwest Plan Service, 122 Davidson Hall, Iowa State University, Ames, Iowa 50011-3080.~~

(f) All earthen manure storage lagoons utilized for treatment must be constructed according to the Indiana NRCS Conservation Practice Standard Code 359: Waste Treatment Lagoon, September 2005^{***}.

(g) Manure storage facilities that contain solid manure may not be constructed in sand or gravel soils, Unified Soil Classification of Pt, GW, GP, GM, GC, SW, SP, SM, as described in ASTM D2488-09a Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)^{****}, ~~available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959,~~ unless specially designed with an approved liner, in accordance with section 5 of this rule.

(h) Waste management systems not specifically listed in this section must be designed and constructed in accordance with the requirements of [IC 13-18-10-4](#)(b). The design must be submitted to the department for approval under subsection (a) before construction can commence.

(i) Pipelines must be constructed according to the Indiana NRCS Conservation Practice Standard Code 634: Waste Transfer, October 2010^{**}.

(j) Installation of underground steel storage tanks for manure is prohibited.

(k) Plastic and fiberglass tanks and aboveground steel tanks must comply with the following:

- (1) Tanks must have sufficient strength to withstand design loads.
- (2) All tanks must be watertight.
- (3) Tanks used to store any objectionable or hazardous substances must be cleaned to remove any traces of the other substances prior to addition of manure to the tank.
- (4) Tanks must be designed and installed to ensure the seasonal high water table is maintained below the tank or the tank must be anchored to prevent flotation.
- (5) Aboveground tanks must have protected shutoff valves for all inlet and outlet pipes.

(l) Vegetative management systems must be constructed according to the Indiana NRCS Conservation Practice Standard Code 635: Vegetated Treatment Area; October 2008^{**}.

(m) Constructed wetlands must be constructed according to the Indiana NRCS Conservation Practice Standard Code 656: Constructed Wetland; ~~October 2006.~~ **November 2012^{**}.**

(n) Any drainage system to lower a seasonal water table around the base of a waste management system must be equipped with an access point for sampling within fifty (50) feet of the waste management system.

(o) Any drainage system to lower the seasonal water table around the base of a waste management system must be designed and installed to:

- (1) effectively collect and drain the ground water;
- (2) be of adequate size, proper slopes, and proper distance from the waste management system;
- (3) **if applicable**, be provided with sumps, pumps (including a backup pump), and electricity supply; **if applicable**;
- (4) if applicable, have a surface outlet that is at least fifty (50) feet away from the building, and at least:
 - (A) fifty (50) feet from the property line in soils with a permeability of one-half (1/2) inch per hour or less; or
 - (B) twenty (20) feet from the property line in soils with a permeability greater than one-half (1/2) inch per hour; and
- (5) have a shut-off valve or equivalent.

(p) Any field tiles or drainage outlets encountered during construction must be cut back at least fifty (50) feet from the edge of a berm or concrete pit or earthen structure and blocked or rerouted in accordance with any applicable local approval requirements.

(q) The commissioner may incorporate conditions into the approval that require testing to verify that the manure storage facility is consistent with the design and performance standards established in this article.

(r) The owner/operator shall notify the commissioner in writing two (2) days prior to scheduled construction of a waste management system. If an owner/operator completes construction of an approved waste management system and wishes to utilize that portion prior to finishing construction of the entire facility, multiple notices ~~shall~~ **must** be submitted.

(s) The applicant shall execute and send to the commissioner an affidavit, under penalty of perjury, that a waste management system was constructed and shall be operated in accordance with the requirements of the approval and this article **as follows:**

(1) The owner/operator ~~must~~ **shall** submit to IDEM, on a form provided by the department, the affidavit within thirty (30) days after the date construction of an approved waste management structure is completed, and prior to the introduction of any animals or manure.

(2) The affidavit must be completed, notarized, and returned to IDEM assuring that the waste management system was constructed and shall be operated in accordance with the requirements of the approval.

(3) The affidavit must ~~also~~ include identification of ~~what~~ **the** parts of the waste management system are ~~that~~ **were** completed at the time of submittal.

(4) If an owner/operator performs partial construction of an approved facility and wishes to utilize that portion prior to completing construction of the entire facility, multiple affidavits ~~shall~~ **must** be submitted.

(5) No portion of a waste management system, including animal feed and similar feedstock storage areas, shall be utilized unless that portion, or a combination of the waste management system for that portion, is completely constructed prior to the introduction of animals and provides a minimum of one hundred eighty (180) days storage for manure, wastewater, ~~and/or~~ **and** leachate.

***This document is incorporated by reference. Copies may be obtained from the American Society of Agricultural and Biological Engineers, 2950 Niles Road, St. Joseph, Michigan 49085-9659, online at <http://www.asabe.org/>, 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.**

****These documents are incorporated by reference. Copies may be obtained from the Indiana NRCS State Office, 6013 Lakeside Boulevard, Indianapolis, IN 46278, online at <http://www.nrcs.usda.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.**

*****This document is incorporated by reference. Copies may be obtained from the Indiana NRCS State Office, 6013 Lakeside Boulevard, Indianapolis, IN 46278, online at <http://www.nrcs.usda.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.**

******This document is incorporated by reference. Copies may be obtained from the MidWest Plan Service, 122 Davidson Hall, Iowa State University, Ames, Iowa 50011-3080 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.**

*******This document is incorporated by reference. Copies may be obtained from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 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 19-12-4](#); filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

SECTION 16. [327 IAC 19-12-5](#) IS AMENDED TO READ AS FOLLOWS:

327 IAC 19-12-5 Design requirements for liners

Authority: [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 5. (a) The soil or foundation of a manure storage pond or manure treatment lagoon shall **must** have a maximum specific discharge of $1/16 \text{ in}^3/\text{in}^2/\text{day}$ ($1.8 \times 10^{-6} \text{ cm}^3/\text{cm}^2/\text{sec}$). This requirement may be satisfied by soil testing that shows a minimum of three (3) feet of in situ soils that meet the maximum specific discharge criteria. The soil must be over-excavated a minimum of six (6) inches and recompact to break up the existing macropore structure.

(b) If there is not at least three (3) feet of in situ soils that meet the maximum specific discharge criteria in subsection (a), a liner must be used. Except for clay liners described in subsection (c), liners used in manure storage facilities must meet any of the following design standards:

(1) Indiana NRCS Conservation Practice Standard Code 520: Pond Sealing or Lining-Compacted Soil Treatment, October 2016*.

~~(1) Indiana NRCS Conservation Practice Standard Code 521A: Pond Sealing or Lining, Flexible Membrane, October 2006.~~ **2013*.**

~~(2) Indiana NRCS Conservation Practice Standard Code 521B: Pond Sealing or Lining, Soil Dispersant, October 2006.~~

~~(3) Indiana NRCS Conservation Practice Standard Code 521C: Pond Sealing or Lining, Bentonite Sealant, October 2006.~~ **2016.**

(c) Clay liners shall **must** be a minimum of one (1) foot thick and have a maximum specific discharge of $1/16 \text{ in}^3/\text{in}^2/\text{day}$ ($1.8 \times 10^{-6} \text{ cm}^3/\text{cm}^2/\text{sec}$).

***These documents are incorporated by reference. Copies may be obtained from the Indiana NRCS State Office, 6013 Lakeside Boulevard, Indianapolis, IN 46278, online at <http://www.nrcs.usda.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 19-12-5](#); filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

SECTION 17. [327 IAC 19-14-3](#) IS AMENDED TO READ AS FOLLOWS:

327 IAC 19-14-3 Manure application rates

Authority: [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

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 shall **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*. ~~available from the Cooperative Extension Service, Purdue University, West Lafayette, Indiana 47907; or~~

(2) Tri-State Fertilizer Recommendations for Corn, Soybeans, Wheat and Alfalfa, Extension Bulletin E-2567 (New), July 1995**. ~~available from the Cooperative Extension Service, Purdue University, West Lafayette, Indiana 47907;~~

~~for current or planned crops of the upcoming growing season as documented in the operating record.~~ 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 shall **must** be:

(1) based on either:

- (4) (A) manure test values as described in [327 IAC 19-7-5\(d\)](#); or
- (2) (B) values in the NRCS Agricultural Waste Management Field Handbook (AWMFH) Chapter 4, March 2008***; available from the Natural Resources Conservation Service, West National Technology Support Center, 1201 NE Lloyd Boulevard, Suite 1000, Portland, OR 97232 or online at <http://policy.nrcs.usda.gov/OpenNonWebContent.aspx?content=17768.wba> 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.**

****This document is 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/AY/AY-9-32.pdf>, 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.**

*****This document is incorporated by reference. Copies may be obtained from the Natural Resources Conservation Service, West National Technology Support Center, 1201 NE Lloyd Boulevard, Suite 1000, Portland, OR 97232, online at <http://www.nrcs.usda.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.**

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(Water Pollution Control Division; [327 IAC 19-14-3](#); filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; errata filed Nov 9, 2012, 11:09 a.m.: [20121128-IR-327120607ACA](#); filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

SECTION 18. [327 IAC 19-14-4](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 19-14-4](#) Manure application activities

Authority: [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 4. (a) Manure that is staged at the manure application site for more than seventy-two (72) hours must be:

- (1) covered or adequately bermed to prevent run-on or runoff;
- (2) applied to the site within ninety (90) days;
- (3) set back from property lines and public roads one hundred (100) feet; and
- (4) set back from residential buildings four hundred (400) feet.

(b) Staging of manure at the manure application site is prohibited:

- (1) within three hundred (300) feet of surface water, drainage inlets, including water and sediment control basins, or water wells unless there is a:
 - (A) barrier; or
 - (B) surface gradient that contains or directs any contaminated runoff away from the waters of the state, drainage inlets, including water and sediment control basins, or water wells;
- (2) on any area with a slope greater than six percent (6%), unless run-on and runoff is controlled;
- (3) on any standing water or waterway; or
- (4) in any flood plain for more than seventy-two (72) hours.

(c) Solid manure, litter, or contaminated bedding may not be placed outside of any approved manure storage facility at the CFO overnight for more than twenty-four (24) hours or during inclement weather.

(d) The application of manure is prohibited in the following conditions:

- (1) Saturated ground.
- (2) Manure applied from manure application equipment operating on a public road.

(e) For large CAFOs, as defined in 40 CFR 122.23(b)*, and CAFOs with a NPDES permit, surface application of manure, litter, or process wastewater to frozen or snow covered ground is prohibited, unless allowed under a NPDES permit obtained by the CAFO. Injection or incorporation of manure into the soil on the same day is ~~not prohibited.~~ **allowed.**

(f) CFOs not described in subsection (e) may surface apply manure on frozen or snow covered ground in accordance with subsections (g) through (i). Injection or incorporation of manure into the soil on the same day is ~~not prohibited.~~ **allowed.**

(g) For purposes of this section, an emergency application is only allowed when there is an immediate need to apply manure to comply with the manure storage requirement of [327 IAC 19-12-4](#) due to unforeseen circumstances affecting the storage of the liquid manure **as follows:**

(1) The unforeseen circumstances must be beyond the control of the owner of the CFO, including: ~~but not limited to;~~

- (A) natural disaster;
- (B) extreme weather conditions; or
- (C) equipment **failure**; or
- (D) structural failure.

(2) The need to apply manure to maintain required storage capacity due to improper design or management of the manure storage facility, including ~~but not limited to;~~ a failure to properly account for the volume of manure to be stored ~~shall~~ **is** not be considered an emergency.

(h) The following requirements apply to all emergency land application of manure on frozen or snow covered ground:

- (1) The person must notify the appropriate department field office by telephone prior to the application.
- (2) The following information must be provided or the notification ~~will~~ **is** not be considered complete:
 - (A) The CFO owner's name.
 - (B) The facility name.
 - (C) The facility ID number.
 - (D) The reason for emergency application.
 - (E) The date of land application.
 - (F) The estimated number of gallons of manure to be applied.
 - (G) The location of the application fields.

The owner must document the emergency as well as actions taken to abate it and keep that information in the CFO's operating record.

(3) The manure must be applied in accordance with all land application requirements of this rule and additionally, may only be applied on a field where the following conditions are met:

- (A) No application to land with a slope greater than two percent (2%), unless there is forty percent (40%) crop residue or vegetated crop cover on the land application site.
- (B) No application in a flood plain.
- (C) Application may not be closer than two hundred (200) feet from any surface water.
- (D) The application rate for all farms can be no more than a total of fifty percent (50%) of the agronomic rate, based on Table 1 of section 3 of this rule.

(4) Once the emergency is abated, land application of manure must cease to frozen or snow covered ground.

(i) For a CFO that is not a large CAFO with one hundred twenty (120) days or less of approved storage capacity, the commissioner may authorize application of manure to frozen or snow-covered ground on a case-by-case basis. The CFO must:

- (1) provide proof of available storage capacity to the commissioner; and
- (2) comply with ~~subdivision~~ **subsection** (h)(3).

This authorization terminates when a discharge to waters of the state or a water quality violation is documented.

- (j) Manure must not be applied to highly erodible land unless:
 - (1) the land has forty percent (40%) residue protection or crop cover; or
 - (2) it is applied in accordance with a conservation plan described in section 3(f)(13) of this rule.

- (k) Any manure application, except those described in subsection (l), that causes a water quality violation:
 - (1) is a violation of this article; and
 - (2) may result in enforcement action.

- (l) Subsection (k) does not apply to organic or inorganic matter that consists of fertilizer material that:
 - (1) is contained in:
 - (A) runoff from a storm event; or
 - (B) irrigation return flow; and
 - (2) enters waters of ~~Indiana~~ **the state** as a result of land application of the fertilizer material that is:
 - (A) for agricultural purposes;
 - (B) done at appropriate agronomic rates for proper nutrient uptake in the field;
 - (C) applied in accordance with this rule; and
 - (D) documented.

***This document is incorporated by reference. Copies may be obtained from 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 19-14-4](#); filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

SECTION 19. [327 IAC 19-14-6](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 19-14-6](#) Manure application setbacks

Authority: [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 6. (a) Except as otherwise provided under this section, application of manure and process wastewater must be in accordance with the setbacks in Table A- 1: Manure Application Setback Distances, from Indiana NRCS Conservation Practice Standard ~~633: Waste Utilization~~, **590: Nutrient Management**, October 2007, **2013***, as follows:

- (1) All setback distances must be measured from the edge of the area of actual placement of manure or process wastewater on the land.
- (2) The property line setback distances in this subsection may be waived in writing by the owner of the adjoining property.
- (3) The setback is the width of the filter strip if a properly designed and maintained filter strip of at least fifty feet in width is located between the application site and any of the following:
 - (A) Surface water.
 - (B) Any known private well.
 - (C) The surface opening or lowest point of any sinkhole.
 - (D) Any drainage inlet, including water and sediment control basins.
- (4) The setback is ten (10) feet if a gradient barrier is located between the application site and any of the following:
 - (A) Surface water.
 - (B) Any known well.
 - (C) The surface opening or lowest point of any sinkhole.
 - (D) Any drainage inlet, including water and sediment control basins.

(b) ~~When planning land application,~~ **To ensure that manure and process wastewater are not applied before, during, or immediately following a rain event that, when combined with soil conditions, would likely result in runoff**, the owner/operator must take into account the:

- (1) weather forecast and likelihood of precipitation events for the twenty-four (24) hour period before and after the application; and
- (2) site soil conditions.

~~to assure that manure and process wastewater are not applied before, during, or immediately following a rain event that, when combined with soil conditions, would likely result in runoff.~~

(c) Land application sites must be inspected to identify any field tile outlets, grassed waterways, and surface water conveyance channels under or immediately bordering the land application site **as follows:**

(1) Monitoring of identified field tile outlets, waterways, and surface water conveyance channels must occur during and immediately following land application of the manure or process wastewater based on:

- (1) **(A)** color;
- (2) **(B)** flow;
- (3) **(C)** volume and volume change; and
- (4) **(D)** odor and change in odor.

~~must occur during and immediately following land application of the manure or process wastewater.~~

(2) If there is evidence of manure or process wastewater discharging from the field tile outlet, the land application must cease immediately and the flow must be stopped or captured. Any flow that is captured shall must be either land applied or returned to an approved manure storage facility.

(d) The monitoring activities conducted in accordance with subsection (c) must be documented and placed in the operating record.

***This document is incorporated by reference. Copies may be obtained from the Indiana NRCS State Office, 6013 Lakeside Boulevard, Indianapolis, IN 46278, online at <http://www.in.nrcs.usda.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 19-14-6; filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

SECTION 20. [327 IAC 19-15-2](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 19-15-2](#) General requirements

Authority: [IC 13-14-8](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 2. (a) The owner/operator of a CFO that plans to decommission a manure storage facility shall do the following:

- (1) Decommission the manure storage facility in accordance with the requirements in this section prior to expiration of the approval.
- (2) Continue to maintain the manure storage facility in accordance with the requirements of this article until the manure is removed.
- (3) Have all the manure removed from the manure storage facility to the extent practical.
- (4) Have the manure:
 - (A) applied to the land in accordance with [327 IAC 19-14](#); or
 - (B) managed in accordance with this article and applicable state and federal laws.
- (5) Follow the requirements in the Indiana NRCS Conservation Practice Standard Code 360, Closure of Waste Impoundments, ~~October 2004~~, **November 2012***, if applicable.
- (6) Have all associated appurtenances and conveyance structures removed from uncovered manure storage facilities.
- (7) Recalculate the storage capacity for the CFO.
- (8) Notify the department:
 - (A) before demolishing or converting the use of any manure storage facility; and
 - (B) of the intended future use of the manure storage facility if the manure storage facility is to be converted to another use.

(b) The owner/operator shall submit a certification to the commissioner within thirty (30) days of completing the requirements in this section that states compliance with the requirements in this section.

(c) If deemed necessary to protect human health or the environment, the commissioner may require additional decommissioning activities based on:

- (1) surface or ground water contamination;
- (2) evidence of leakage, seepage, manure releases, or spills; or
- (3) other criteria related to protection of human health or the environment.

The commissioner shall provide written documentation describing the basis for any required additional activities.

***This document is incorporated by reference. Copies may be obtained from the Indiana NRCS State Office, 6013 Lakeside Boulevard, Indianapolis, IN 46278, online at <http://www.in.nrcs.usda.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 19-15-2](#); filed Feb 6, 2012, 2:58 p.m.: [20120307-IR-327090615FRA](#), eff Jul 1, 2012; filed Jul 12, 2017, 8:47 a.m.: [20170809-IR-327160003FRA](#))

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Documents Incorporated by Reference: 40 CFR 122.21, Application for a Permit, July 1, 2016 Edition; 40 CFR 122.23, Concentrated Animal Feeding Operations, July 1, 2016 Edition; 40 CFR 122.42, Additional Conditions Applicable to Specified Categories of NPDES Permits, July 1, 2016 Edition; 40 CFR 122.63, Minor Modifications of Permits, July 1, 2016 Edition; 40 CFR 412.37, Additional Measures, July 1, 2016 Edition; Indiana Comprehensive Nutrient Management Plan Criteria Practice Activity Code 102, August 2015; Indiana NRCS Nutrient Management Conservation Practice Standard, Code 590: Nutrient Management, October 2013; Indiana NRCS Conservation Practice Standard Code 313: Waste Storage Facility, October 2016; Indiana NRCS Conservation Practice Standard Code 360, Closure of Waste Impoundments, November 2012; Indiana NRCS Conservation Practice Standard Code 520, Pond Sealing or Lining Compacted Soil Treatment, November 2012; Indiana NRCS Conservation Practice Standard Code 521A: Pond Sealing or Lining, Flexible Membrane, October 2013; Indiana NRCS Conservation Practice Standard Code 522: Pond Sealing or Lining, Concrete, October 2016; Indiana NRCS Conservation Practice Standard Code 656: Constructed Wetland, November 2012; Indiana NRCS Construction Specification, Concrete Construction, May 2015.

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