
TITLE 327 WATER POLLUTION CONTROL DIVISION

**FINDINGS AND DETERMINATION OF THE COMMISSIONER
PURSUANT TO [IC 13-14-9-7](#) AND SECOND NOTICE OF COMMENT PERIOD**
LSA Document #21-28

SATELLITE MANURE STORAGE STRUCTURE REFERENCE UPDATES

PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for amendments to update the references in [327 IAC 20](#) to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Conservation Practice Standards for consistency with the requirements found in [327 IAC 19](#). The purpose of this notice is to seek public comment on the draft rule, including suggestions for specific language to be included in the rule. IDEM seeks comment on the affected citations listed and any other provisions of Title 327 that may be affected by this rulemaking.

CITATIONS AFFECTED: [327 IAC 20](#).

AUTHORITY: [IC 13-14-9-7](#); [IC 13-18-10.5](#).

STATUTORY REQUIREMENTS

[IC 13-14-9-7](#) recognizes that under certain circumstances it may be appropriate to reduce the number of public comment periods routinely provided. In cases where the commissioner determines that the rulemaking policy alternatives available to IDEM are so limited that the first notice of public comment period would provide no substantial benefit to the environment or persons to be regulated or otherwise affected by the proposed rule, IDEM may forgo this comment period and proceed directly to the notice of second public comment period.

If the commissioner makes the determination of limited rulemaking policy alternatives required by [IC 13-14-9-7](#), the commissioner shall prepare written findings and include them in the second notice of public comment period published in the Indiana Register. This document constitutes the commissioner's written findings pursuant to [IC 13-14-9-7](#).

The statute provides for this shortened rulemaking process if the commissioner determines that "the rulemaking policy alternatives available to the department are so limited that the public notice and comment period under [\[IC 13-14-9-3\]](#) . . . would provide no substantial benefit to:

- (1) the environment; or
- (2) persons to be regulated or otherwise affected by the proposed rule."

BACKGROUND

The 2011 Indiana General Assembly passed legislation, codified at [IC 13-18-10.5](#), requiring that a person receive approval from IDEM prior to constructing or expanding the capacity of a satellite manure storage structure (SMSS). A SMSS is a building, lagoon, pad, pit, pond, or tank that is not located at a livestock or poultry production area and is designed to store at least 1,000,000 gallons of manure or 5,000 cubic yards of manure ([IC 13-11-2-196.2](#)).

A SMSS must be structurally sound and watertight to contain the large volume of manure to be stored, to minimize leaks and seepage, and to prevent releases or spills of manure. Improperly designed, constructed, or maintained structures can pose a threat to water quality and human health through spills or excessive seepage of manure that can enter underlying aquifers or surface water and contaminate drinking water supplies or destroy aquatic life. Assuring that a SMSS is designed, constructed, and maintained to prevent any harm to the quality of surface or groundwater will reduce the potential of any harm to human health through impaired water quality.

This rulemaking updates references in [327 IAC 20](#) for the design and construction standards to be consistent with the standards in [327 IAC 19](#) for confined feeding operations. The alignment of the references in these two rules will eliminate confusion for interested parties and provide consistency in the design and construction of manure storage structures.

IDEM has reviewed the rule to ensure typographical errors, inconsistencies, and organizational issues are clarified. The rule also was reviewed to ensure compliance with rule drafting guidelines, and for opportunities to streamline, simplify, and clarify the language. IDEM seeks comment on the affected citations listed, including suggestions for specific language, any other provisions of Title 327 that may be affected by this rulemaking, and alternative ways to achieve the purpose of the rulemaking.

[IC 13-14-9-4](#) Identification of Restrictions and Requirements Not Imposed under Federal Law

The Satellite Manure Storage Structure rule at [327 IAC 20](#) is a state program authorized under [IC 13-18-10.5](#) that is not imposed under federal law.

Potential Fiscal Impact

Updating the references to the NRCS Conservation Practice Standards throughout [327 IAC 20](#) will have a minor cost increase to future applicants due to NRCS Conservation Practice Standard Code 313. The updated NRCS Conservation Practice Standard Code 313 includes new soil strength standards and soil suitability standards for backfill. IDEM expects the added cost to be negligible. All other updated NRCS Standards do not impose any additional requirements.

Public Participation and Work Group Information

No work group is planned for the rulemaking. If you feel that a work group or other informal discussion on the rule is appropriate, please contact Krystal Hackney, Rules Development Branch, Office of Legal Counsel at (317) 232-3158 or (800) 451-6027 (in Indiana).

Small Business Assistance Information

IDEM established a compliance and technical assistance program (CTAP) under [IC 13-28-3](#). The program provides assistance to small businesses and information regarding compliance with environmental regulations. In accordance with [IC 13-28-3](#) and [IC 13-28-5](#), there is a small business assistance program ombudsman to provide a point of contact for small businesses affected by environmental regulations. Information on CTAP and other resources available can be found at:

www.in.gov/idem/ctap

For purposes of [IC 4-22-2-28.1](#), small businesses affected by this rulemaking may contact the Small Business Regulatory Coordinator:

Angela Taylor
IDEM Small Business Regulatory Coordinator/CTAP Small Business Liaison
IGCN 1316
100 North Senate Avenue
Indianapolis, IN 46204-2251
(317) 233-0572 or (800) 988-7901
ctap@idem.in.gov

For purposes of [IC 4-22-2-28.1](#), the Small Business Ombudsman designated by [IC 5-28-17-6](#) is:

Joseph Fagan
Small Business Ombudsman
Indiana Economic Development Corporation
One North Capitol, Suite 700
Indianapolis, IN 46204
(317) 586-3807
jfagan@iedc.in.gov

Resources available to regulated entities through the small business ombudsman include the ombudsman's duties stated in [IC 5-28-17-6](#), specifically [IC 5-28-17-6\(9\)](#), investigating and attempting to resolve any matter regarding compliance by a small business with a law, rule, or policy administered by a state agency, either as a party to a proceeding or as a mediator.

The Small Business Assistance Program Ombudsman is:

Erin Moorhous
IDEM Small Business Assistance Program Ombudsman/Business, Agricultural, and Legislative Liaison
IGCN 1301
100 North Senate Avenue
Indianapolis, IN 46204-2251
(317) 232-8921 or (800) 451-6027
emoorhou@idem.in.gov

FINDINGS

The commissioner of IDEM has prepared written findings regarding rulemaking on amending [327 IAC 20](#) to update references to design and construction standards. These findings are prepared under [IC 13-14-9-7](#) and are as follows:

- (1) This rule updates the references in [327 IAC 20](#) for the USDA NRCS Conservation Practice Standards for consistency with the requirements in [327 IAC 19](#) for the confined feeding operations. The updated references provide more consistency in the design and construction of manure storage structures.
- (2) The environment and persons regulated or otherwise affected by the proposed rule will benefit from prompt adoption of this rule, because it will clear up any confusion for regulated persons between the NRCS Conservation Practice Standards in [327 IAC 19](#) and [327 IAC 20](#).
- (3) I have determined that under the specific circumstances pertaining to this rule, the rulemaking policy alternatives are so limited that the public notice and comment period provided in the notice of first public comment period would provide no substantial benefit to the environment or to persons to be regulated or otherwise affected by the rule.
- (4) The draft rule is hereby incorporated into these findings.

Bruno L. Pigott
Commissioner
Indiana Department of Environmental Management

REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the draft rule. Comments may be submitted in one of the following ways:

- (1) By mail or common carrier to the following address:
LSA Document #21-28 SMSS Reference Updates
Krystal Hackney
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
Indiana Government Center North
100 North Senate Avenue
Indianapolis, IN 46204-2251
- (2) By facsimile to (317) 233-5970. Please confirm the timely receipt of your faxed comments by calling the Rules Development Branch at (317) 232-8922.
- (3) By electronic mail to khackney1@idem.in.gov. To confirm timely delivery of submitted comments, please request a document receipt when sending the electronic mail. **PLEASE NOTE: Electronic mail comments will NOT be considered part of the official written comment period unless they are sent to the address indicated in this notice.**
- (4) Hand delivered to the receptionist on duty at the thirteenth floor reception desk, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana.

Regardless of the delivery method used, to properly identify each comment with the rulemaking action it is intended to address, each comment document must clearly specify the LSA document number of the rulemaking.

COMMENT PERIOD DEADLINE

All comments must be postmarked, faxed, or time stamped not later than March 12, 2021. Hand-delivered comments must be delivered to the appropriate office by 4:45 p.m. on the above-listed deadline date.

Additional information regarding this action may be obtained from Krystal Hackney, Rules Development Branch, Office of Legal Counsel, (317) 232-3158 or (800) 451-6027 (in Indiana).

DRAFT RULE

SECTION 1. [327 IAC 20-5-2](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 20-5-2](#) Design requirements

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10.5](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#); [IC 25-17.6](#)

Sec. 2. (a) A SMSS must be designed as follows:

- (1) The bottom of the SMSS is **must be** at least two (2) feet above bedrock.
- (2) The bottom of the SMSS must be above the seasonal high water table, unless lowered in accordance with subsection (c).
- (3) Test holes to obtain soil and water table information for the design must be obtained as follows:
 - (A) The number of test holes must be sufficient to adequately characterize the seasonal water table and soil underneath the SMSS.
 - (B) Test holes must be:
 - (i) evenly distributed throughout the SMSS;
 - (ii) at least two (2) feet below the base of the SMSS for concrete structures in karst and non-karst areas;
 - (iii) at least five (5) feet below the base of the SMSS for earthen structures in non-karst areas; and
 - (iv) placed in accordance with section 1(b)(3) of this rule in areas of karst terrain.
 - (C) Testing shall **must** be conducted by:
 - (i) a soil scientist registered under the Indiana board of registration for soil scientists;
 - (ii) a professional geologist certified in Indiana under [IC 25-17.6](#); or
 - (iii) a professional engineer registered in Indiana.

(b) Plastic, fiberglass, and aboveground steel tanks must:

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

(c) Any drainage system to lower the seasonal water table around the base of a SMSS 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 SMSS;
- (3) if applicable, be provided with:
 - (A) sumps;
 - (B) pumps, including a backup pump; and
 - (C) electricity supply;
- (4) if applicable, have a surface outlet that is at least fifty (50) feet away from the SMSS, 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;
- (5) have a shut-off valve or equivalent; and
- (6) have an access point for sampling within fifty (50) feet of the SMSS.

(d) A concrete SMSS must be constructed according to the Indiana NRCS Construction Specification, Concrete Construction, ~~October 2005*~~ **May 2015*** and designed to either of the following design standards:

- (1) MWPS-36: Rectangular Concrete Manure Storages, Second Edition, 2005**.
- (2) TR-9: Circular Concrete Manure Tanks, March 1998**.

(e) A SMSS must not:

- (1) have a discharge pipe or conveyance that would allow for a release or discharge of manure or water contaminated by manure; or
- (2) be an underground steel storage tank.

~~*This document is~~ ***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://nrqs.usda.gov/>**, or are available for review ~~and copying~~ at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

~~**These documents are 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 and copying at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.~~

(Water Pollution Control Division; [327 IAC 20-5-2](#); filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#))

SECTION 2. [327 IAC 20-5-3](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 20-5-3](#) Design requirements for liners

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10.5](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 3. (a) The soil or foundation of an earthen SMSS ~~shall~~ **must** have a maximum specific discharge of one-sixteenth (1/16) in³/in²/day, 1.8x10⁻⁶cm³/cm²/sec. This requirement may be satisfied by soil testing that shows a minimum of three (3) feet of in situ soils that:

- (1) meet the maximum specific discharge criteria;

- (2) are over-excavated a minimum of six (6) inches; and
- (3) are recompacted 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 a SMSS must meet the following design standards as applicable:

(1) Indiana NRCS Conservation Practice Standard Code 521A: ~~520: Pond Sealing or Lining, Flexible Membrane, October 2013*~~ **Compacted Soil Treatment, October 2016***.

(2) Indiana NRCS Conservation Practice Standard Code 521B: ~~Pond Sealing or Lining, Soil Dispersant, October 2014*~~.

(3)(2) Indiana NRCS Conservation Practice Standard Code 521C: ~~522: Pond Sealing or Lining, Bentonite Sealant, October 2014*~~ **Concrete, October 2016***.

(c) Clay liners ~~shall~~ **must** be a minimum of one (1) foot thick and have a maximum specific discharge of one-sixteenth (1/16) in³/in²/day, 1.8x10⁻⁶cm³/cm²/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://nrcs.usda.gov/>**, or are available for review ~~and copying~~ at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Water Pollution Control Division; [327 IAC 20-5-3](#); filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#))

SECTION 3. [327 IAC 20-5-5](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 20-5-5](#) Liquid manure structure design requirements

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10.5](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 5. (a) In addition to section 2 of this rule, a SMSS that contains liquid manure must be designed according to the Indiana NRCS Conservation Practice Standard Code 313: Waste Storage Structure, ~~September 2005*~~ **October 2016***.

(b) An uncovered SMSS containing liquid manure must be designed with a minimum freeboard of two (2) feet unless an alternate design is approved by the commissioner **under section 6 of this rule**.

(c) Test holes for an earthen SMSS storing liquid manure must be placed at a rate of two (2) holes for the first one-half (1/2) acre of storage and one (1) additional hole for each additional one-half (1/2) acre of storage.

(d) Pipelines must be constructed according to the Indiana NRCS Conservation Practice Standard Code 634: Waste Transfer, ~~October 2010*~~ **October 2016***.

(e) The SMSS 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 to the department prior to introducing manure **into the SMSS**.

*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://nrcs.usda.gov/>**, or are available for review ~~and copying~~ at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Water Pollution Control Division; [327 IAC 20-5-5](#); filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#))

SECTION 4. [327 IAC 20-7-2](#) IS AMENDED TO READ AS FOLLOWS:

[327 IAC 20-7-2](#) Decommissioning a satellite manure storage structure

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10.5](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 2. (a) The owner or operator of a SMSS that plans to decommission a SMSS shall do the following:

(1) Continue to maintain the SMSS in accordance with the requirements of this article until the manure is removed.

(2) Follow the requirements in the Indiana NRCS Conservation Practice Standard Code 360, ~~Closure of Waste Impoundments~~ **Waste Facility Closure**, November 2012*, if applicable.

(3) Have all associated appurtenances and conveyance structures removed from uncovered manure storage facilities.

(4) Notify the department:

(A) before demolishing or converting the use of any SMSS; and

(B) of the intended future use of the SMSS, if the SMSS is to be converted to another use.

(b) The owner or operator shall submit a certification to the commissioner within thirty (30) days after completing the requirements in this section that certifies 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:

(A) leakage;

(B) seepage;

(C) manure releases; or

(D) spills; or

(3) other criteria related to protection of human health or the environment.

(d) 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.nrcs.usda.gov/>**, or are available for review and copying at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(*Water Pollution Control Division; [327 IAC 20-7-2](#); filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#)*)

[Notice of Public Hearing](#)

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