Bold = new language
~~Strikeout~~ = existing language deleted in this rulemaking

TITLE 327 WATER POLLUTION CONTROL DIVISION

DRAFT RULE
LSA Document #21-28

DIGEST

Amends 327 IAC 20 concerning updates to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Conservation Practice Standards for consistency with the requirements found in 327 IAC 19. 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: February 10, 2021, Indiana Register (DIN: 20210210-IR-327210028FDA).

Notice of Public Hearing: February 10, 2021, Indiana Register (DIN: 20210210-IR-327210028PHA).

Date of First Hearing: May 12, 2021.

327 IAC 20

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://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.

**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) $in^3/in^2/day$, $1.8x10^{-6}cm^3/cm^2/sec$. 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, **Compacted Soil Treatment, October 2016*.** ~~Flexible Membrane, October 2013*.~~
~~(2) Indiana NRCS Conservation Practice Standard Code 521B: Pond Sealing or Lining, Soil Dispersant, October 2011*.~~
~~(3)~~**(2)** Indiana NRCS Conservation Practice Standard Code ~~521C:~~ **522:** Pond Sealing or Lining~~,~~ ~~Bentonite Sealant, October 2011*~~ **-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) $in^3/in^2/day$, $1.8x10^{-6}cm^3/cm^2/sec$.

*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)*