

## SECOND NOTICE OF COMMENT PERIOD

LSA Document #13-245

## SATELLITE MANURE STORAGE STRUCTURES

## PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for a new rule [327 IAC 20](#) concerning the construction, operation, and maintenance of satellite manure storage structures (SMSS). By this notice, IDEM is soliciting public comment on the draft rule language. IDEM seeks comment on the affected citations listed and any other provisions of Title 327 that may be affected by this rulemaking.

## HISTORY

First Notice of Comment Period: June 26, 2013, Indiana Register (DIN: [20130626-IR-327130245FNA](#)).

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

AUTHORITY: [IC 13-14-8](#); [IC 13-18-10.5](#).

## SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING

## Basic Purpose and 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 SMSS. [IC 13-18-10.5](#) also establishes that the Environmental Rules Board may adopt rules regarding construction, operation, and maintenance of these structures. There are no relevant federal laws on this subject matter. Prior to July 1, 2011, SMSSs were unregulated in Indiana.

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 via impaired water quality.

In this rulemaking, IDEM is proposing rules for SMSSs to provide construction, operation, and maintenance requirements for implementing [IC 13-18-10.5](#). IDEM seeks comment on the affected citations listed and any other provisions of Title 327 that may be affected by this rulemaking.

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

This rulemaking establishes a new Article 20 with rules for the design, construction, operation, and maintenance of a SMSS to implement [IC 13-18-10.5](#). There are currently no federal laws which cover this same subject matter. Since this is a state only requirement, every restriction or requirement on persons to whom the draft rule applies is "not imposed under federal law" (NIFL element or elements).

The proposed SMSS permitting program at [327 IAC 20](#) has a general purpose of providing construction, operation, and maintenance requirements for a SMSS to implement [IC 13-18-10.5](#) and protect human health and the environment from threats to water quality after the effective date of the rule.

The following elements of the draft rule impose either a restriction or a requirement on persons to whom the draft rule applies that is "not imposed under federal law" (NIFL element or elements):

- (1) An SMSS is designed in whole or in part to store large amounts of solid or liquid manure until the owner determines that the manure is needed for another purpose. In order to protect the surrounding aquifers, wells, and other surface and ground water from leaks, seepage, storm water runoff and other similar threats not specifically contemplated under federal law, the Indiana legislature has authorized IDEM to promulgate rules concerning the design, construction operation, and maintenance of a SMSS.
- (2) Although IDEM has drafted rule language to implement standards for a SMSS, a majority of these requirements derive from basic engineering standards that the owner or operator is likely to follow even without a permit requiring them to do so. At this time, IDEM estimates the cost of complying with the rules as drafted to be minimal per SMSS project. By requiring standards, IDEM expects to protect human health and the environment from threats to water quality.
- (3) IDEM relied upon the experience of internal employees and confined feeding operation (CFO) consultants when developing the estimated economic impact. IDEM administers an approval program for manure storage structures for CFOs through [327 IAC 19](#). By using data gathered during the continued administration of this program and consulting with CFO consultants, IDEM was able to draft rule language and estimate the fiscal impact of the proposed rules. The same branch of employees who administer the CFO manure storage

structure program will administer the SMSS permitting program, and intend to use similar methods to effectively implement the proposed rule. The following resources were found to be applicable and were relied on during the development of the draft rule:

Indiana NRCS Conservation Practice Standard Code 313: Waste Storage Structure, September 2005 available online at: [http://efotg.sc.egov.usda.gov/references/public/IN/waste\\_storage\\_facility.pdf](http://efotg.sc.egov.usda.gov/references/public/IN/waste_storage_facility.pdf)

Indiana NRCS Construction Specification, Concrete Construction, October 2005 available online at: [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs144p2\\_030562.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_030562.pdf)

MWPS-36: Rectangular Concrete Manure Storages, Second Edition, 2005

TR-9: Circular Concrete Manure Tanks, March 1998

Indiana NRCS Conservation Practice Standard Code 359: Waste Treatment Lagoon, September 2005 available online at: [http://efotg.sc.egov.usda.gov/references/public/IN/waste\\_treatment\\_lagoon.pdf](http://efotg.sc.egov.usda.gov/references/public/IN/waste_treatment_lagoon.pdf)

ASTM D2488-09a Standard Practice for Description and Identification of Soils (Visual-Manual Procedure) available online at: <http://enterprise2.astm.org/DOWNLOAD/D2488.000473097-1.pdf>

Indiana NRCS Conservation Practice Standard Code 634: Waste Transfer, October 2010 available online at: [http://efotg.sc.egov.usda.gov/references/public/IN/Waste\\_Transfer.pdf](http://efotg.sc.egov.usda.gov/references/public/IN/Waste_Transfer.pdf)

Indiana NRCS Conservation Practice Standard Code 521A: Pond Sealing or Lining, Flexible Membrane, October 2013 available online at:

[http://efotg.sc.egov.usda.gov/references/public/IN/521A\\_Pond\\_Sealing\\_or\\_Lining\\_Flexible\\_Membrane.pdf](http://efotg.sc.egov.usda.gov/references/public/IN/521A_Pond_Sealing_or_Lining_Flexible_Membrane.pdf)

Indiana NRCS Conservation Practice Standard Code 521B: Pond Sealing or Lining, Soil Dispersant, October 2011 available online at:

[http://efotg.sc.egov.usda.gov/references/public/IN/521B\\_Pond\\_Sealing\\_or\\_Lining\\_Soil\\_Dispersant\\_Treatment.pdf](http://efotg.sc.egov.usda.gov/references/public/IN/521B_Pond_Sealing_or_Lining_Soil_Dispersant_Treatment.pdf)

Indiana NRCS Conservation Practice Standard Code 521C: Pond Sealing or Lining, Bentonite Sealant, October 2011 available online at:

[http://efotg.sc.egov.usda.gov/references/public/IN/521C\\_Pond\\_Sealing\\_or\\_Lining\\_Bentonite\\_Treatment.pdf](http://efotg.sc.egov.usda.gov/references/public/IN/521C_Pond_Sealing_or_Lining_Bentonite_Treatment.pdf)

Indiana NRCS Conservation Practice Standard Code 360, Closure of Waste Impoundments, November 2012 available online at: [http://efotg.sc.egov.usda.gov/references/public/IN/360\\_Waste\\_Facility\\_Closure.pdf](http://efotg.sc.egov.usda.gov/references/public/IN/360_Waste_Facility_Closure.pdf)

These resources may also be obtained 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.

#### **Potential Fiscal Impact**

Currently there are three known SMSSs in the state of Indiana. The draft rule will have a potential fiscal impact for owners and operators who are designing, constructing, operating, and maintaining an SMSS after the effective date of this rule. Based upon available information, IDEM estimates the costs of complying with the rules as drafted to be minimal per SMSS. This encompasses the costs of obtaining a permit from IDEM, as well as associated cost of designing, constructing, operating, and maintaining a SMSS to the standards in the draft rules. However, these costs are relative and dependent upon the comparable standard the owner or operator would have used if designing, constructing, operating, and maintaining an unregulated manure storage structure. IDEM is soliciting comments on the estimated cost of designing, constructing, operating, and maintaining a SMSS to the standards as they appear below in the draft rule.

#### **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 Lauren Aguilar, Rules Development Branch, Office of Legal Counsel at (317) 234-8559 or (800) 451-6027 (in Indiana).

#### **SUMMARY/RESPONSE TO COMMENTS FROM THE FIRST COMMENT PERIOD**

IDEM requested public comment from June 26, 2013, through July 26, 2013, on alternative ways to achieve the purpose of the rule and suggestions for the development of draft rule language. IDEM received comments from the following parties by the comment period deadline:

Justin T. Schneider, Indiana Farm Bureau, Inc., Josh Trenary, Indiana Pork Advocacy Coalition, and Andy Tauer, Indiana Soybean Alliance and Indiana Corn Growers (IFB).

Kim Ferraro, Hoosier Environmental Council, Bowden Quinn, Sierra Club-Hoosier Chapter, and Dave Menzer, Citizens Action Coalition (HEC).

Following is a summary of the comments received and IDEM's responses thereto:

*Comment:* The 2011 legislation did not require IDEM to develop rules but doing so creates transparency for the regulated community to assess economic benefits of constructing a SMSS. (IFB)

*Response:* IDEM continuously strives to be transparent for the regulated community and appreciates the support.

*Comment:* This rulemaking should focus solely on construction standards for SMSSs, furthermore such standards should mirror those of the construction standards of the Confined Feeding Operation rule and should be incorporated by reference where appropriate. (IFB)

*Response:* [IC 13-18-10.5](#) establishes that the Environmental Rules Board may adopt rules regarding

construction, operation, and maintenance of SMSSs. Although construction will be a large component, IDEM will also be proposing performance standards for operation and maintenance in order to ensure protection against releases of manure and other threats to water quality from improper maintenance and operation of the structure. Given the similarities, where applicable, the construction standards for a SMSS will mirror the standards of manure storage structures in the CFO rule.

*Comment:* This rulemaking should only apply in instances when a structure is not being built in conjunction with a regulated livestock farm, regulated by CFO rules, or in conjunction with a biomass digester or gasifier, which is regulated by Indiana State Chemist rules. (IFB)

*Response:* IDEM agrees that the SMSS rules will not apply to those structures regulated by the CFO rules or in cases where the Indiana state chemist rules apply.

*Comment:* This rulemaking should prohibit construction of SMSSs in flood plains and wetlands, near water bodies, on sandy soils, drainage wells, karst topography or other areas that provide direct access to groundwater or surface water resources. (HEC)

*Response:* IDEM has drafted rules that regulate where and how a SMSS can be located and constructed. Although IDEM does not strictly prohibit construction of a SMSS in those areas, the environmental sensitivity of these areas is recognized and standards have been articulated to protect water quality.

*Comment:* This rulemaking should include greater setbacks than what is required in the CFO rule, [327 IAC 19-12-3](#). Several days rain can compromise the manure storage system, because the steady rainfall weakens berms and prevents the excess wastewater from being sprayed on already saturated fields. Pathogens and odors from animal waste can travel distances of 2-3 miles posing serious health risks and reducing quality of life for local residences. For these reason it is recommended that IDEM impose setbacks consistent with St. Joseph County for protection of public health and the environment:

Public water supply well/surface intake structure	1,500 feet
Surface waters	1,000 feet
Drainage inlets (including sediment basins)	500 feet
Sinkholes	500 feet
Floodplains	500 feet
Water wells	500 feet
Residences and public buildings	3,480 feet
Residentially zoned districts	7,680 feet
Municipalities	10,560 feet.

(HEC)

*Response:* IDEM strives to develop rules that promote environmental quality throughout the entire state of Indiana and must take the needs of every county into consideration. The proposed setbacks are consistent with setbacks in the state CFO and confined animal feeding operations (CAFO) regulations because IDEM believes that these manure storage setback requirements are protective of Indiana's environment and public health. More stringent measures are only necessary in individual cases based on the siting of a SMSS or other circumstances related to the SMSS.

*Comment:* Do not allow earthen manure-storage structures to be constructed for use as SMSSs in Indiana. (HEC)

*Response:* Earthen storage structures are allowed under the draft rules as long as they are constructed and maintained in accordance with the proposed rules. By following the standards of the draft rule an earthen manure storage structure should not cause environmental harm.

*Comment:* Require installation of groundwater monitors beneath and around the SMSS when constructed, odor control measure and BMPs such as impermeable covers, biofilter controls of covered structures, and pH monitors. (HEC)

*Response:* IDEM historically has not regulated odors. IDEM has the authority to require additional environmental protections in cases where they are warranted. These include groundwater monitoring, odor control measures, biofilter controls, and pH monitors. The Commissioner may require additional protections if needed.

*Comment:* Additional freeboard should be required to accommodate additional storm requirements and infrequency of monitoring a remote structure. (HEC)

*Response:* The proposed freeboard requirements are consistent with the manure storage standard in the state CFO and CAFO rules. IDEM believes these requirements should be sufficient to contain storm events.

*Comment:* Performance standards of [327 IAC 19-3-1](#) should be applied to SMSSs, assurance of compliance with water quality standards in [327 IAC 1](#), and requiring users of a SMSS to take reasonable steps to prevent manure releases, spills, or the discharge of manure, including seepage and leakage should be included in the rulemaking. (HEC)

*Response:* IDEM agrees that performance standards should be imposed upon the design, construction,

operation, and maintenance of a SMSS. Performance standards will be limited to prevention of runoff, spills, and manure releases; minimalization of leaks and seepage; and management of stormwater discharges of contaminated SMSS contents. IDEM has set standards and requires the owner or operator of an SMSS put procedures into place that protect against releases, spills or discharges, and respond in cases of emergency.

*Comment:* A professional engineer should certify all SMSSs comply with all applicable requirements and standards for containment design and groundwater protection. (HEC)

*Response:* IDEM has drafted language to have a registered professional engineer certify a liquid manure SMSS upon completion. All other structures require an affidavit upon completion affirming conformity with the permit and the requirements of proposed [327 IAC 20](#). Ground water protection may be imposed at the commissioner's discretion if necessary to protect health, safety, or the environment.

*Comment:* Impose permitting requirements for each structure, individually, to account for variable conditions, unique soils, nearby water features, and environmental compliance history of the SMSS owner or operator. (HEC)

*Response:* To comply with [IC 13-18-10.5](#) each SMSS will be permitted separately as an individual structure.

*Comment:* Each SMSS permit applicant should be subject to mandatory public notice and commenting requirements that allow for meaningful participation by impacted communities. Public notice procedures should be required as an element of permit approval as follows:

- Applicants must place a sign visible to the public from a public road at or near the entrance to property where a SMSS will be located that notifies the public that a complete application has been submitted to IDEM;
- Applicants will be required to place a complete copy of the draft permit application either in the nearest public library or nearest township or municipal government office at the time of the public notice;
- Applicants must show they have transmitted a copy of the official public notice with the pending public comment period deadline indicated not later than two (2) days after publication of the state public notice to:
  - Property owners adjacent to and within one (1) mile of the SMSS's property boundaries and that of associated land application areas;
  - The county executive of the county in which the SMSS is to be located;
  - The principle responsible officer of any municipal and/or private drinking water system with surface water intakes within thirty (30) miles downstream in the respective watershed where the SMSS and associated land application areas are located;
  - All persons on a list of interested parties provided and maintained by IDEM.
- IDEM should accept, consider and respond to public comments received during a minimum thirty (30) day comment period which is triggered with publication and mailing of public notice;
- Public hearings, not meetings, should be held when permit applications draw significant public opposition or concern. (HEC)

*Response:* IDEM follows the public participation requirements of [IC 13-15](#) for permitting actions. These requirements will also apply to SMSS applicants.

*Comment:* The rule should address the likelihood that there will be multiple users of a particular SMSS who could escape accountability for spills and discharges in their use of the SMSS if not subject to the SMSS's permit requirements. IDEM should require SMSS permit applicants to provide, among other things, information about:

- the owner or operator and each user of the SMSS including phone number and mailing address;
- the past environmental compliance history of the applicant, owner or operator, if different from the applicant, and each user;
- the physical location and GIS coordinates of the proposed SMSS;
- the amount and type of manure, i.e. swine, cattle, poultry, to be contained and identity of the generating sources;
- the capacity of the land application areas, if any, that will accommodate the structure's manure;
- all features of the SMSS for animal waste transfer and associated land application;
- all adjacent landowners and those within one (1) mile of the boundaries of the property on which the SMSS will be located;
- a site plan which includes, at a minimum, locations of ditches and conveyances, surface waters, well heads, hydrologically sensitive and critical areas, a topographic map of the site including any steep slopes or highly erodible land, and all features for the management and containment of waste including buffers, filter strips, discharge locations, as well as a soils map for the SMSS and all associated land application areas;
- a waste storage and management plan (WSMP) that contains: structural engineering requirements including requirements for operation and maintenance, work practices, inspections, record-keeping and reporting, and exertion of due diligence that exceed the requirements of [327 IAC 19-7-5](#); and work practice and bright line compliance requirements for making land application decisions related to nutrient budgets, manure and soil testing, weather conditions, and runoff avoidance consistent with [327 IAC 19-3-1\(f\)](#) and [327 IAC 19-14](#);
- a mandatory groundwater monitoring plan consistent with the requirements of [327 IAC 19-10-1](#);
- a site-specific storm water management plan exceeding the requirements of [327 IAC 19-11-12](#);

- an emergency response plan consistent with [327 IAC 19-13-4](#);
- a closure plan consistent with [327 IAC 19-15-2](#).

The waste storage and management plans should be incorporated as part of the SMSS permit and enforceable by IDEM and private citizens for protection of public health and the environment. All required compliance records that SMSSs' operators or users should be submitted to IDEM instead of being maintained by the owner or operator, user or "on-site" as allowed under the CFO rule. (HEC)

*Response:* The proposed requirements are consistent with the requirements for a permit under [IC 13-15](#). The information IDEM requires SMSS permit applicants to submit closely matches of what is required under the CFO and CAFO regulations. IDEM believes these requirements are comprehensive to adequately protect the environment and provides enough information for accountability. IDEM has incorporated an emergency response plan and a closure plan consistent with [327 IAC 19-13-4](#) and [327 IAC 19-15-2](#). Although mandatory groundwater monitoring plans and site-specific storm water management plans consistent with [327 IAC 19-10-1](#) and [327 IAC 19-11-12](#) are not required, IDEM has the authority to impose such requirements if after evaluating an individual SMSS application it is determined it is necessary. The SMSS is a storage structure, and as such, is not regulated under land application requirements. However, the land application of any fertilizer, including animal manure, is subject to regulation by the State Chemist.

*Comment:* Establish a work group. (HEC)

*Response:* IDEM values all public input. Numerous methods of providing comments concerning this rulemaking are available and are being utilized. IDEM will evaluate whether a workgroup would be beneficial in completing this rulemaking.

*Comment:* Rulemaking should go beyond what is required from on-site manure storage structures at CFOs. (HEC)

*Response:* IDEM believes that the manure storage requirements in the existing CFO and CAFO rules are protective of Indiana's environment and does not think that more stringent measures are necessary except in individual cases based on the siting of a SMSS or other circumstances related to the individual SMSS.

## 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 #13-245 Satellite Manure Storage Structures  
Lauren Aguilar  
Rules Development Branch  
Office of Legal Counsel  
Indiana Department of Environmental Management  
Indiana Government Center North  
100 North Senate Avenue  
Mail Code 65-46  
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) 233-8903.

(3) By electronic mail to [laguilar@idem.in.gov](mailto:laguilar@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 May 9, 2014. 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 Lauren Aguilar, Rules Development Branch, Office of Legal Counsel, (317) 234-8559 or (800) 451-6027 (in Indiana).

## DRAFT RULE

SECTION 1. [327 IAC 20](#) IS ADDED TO READ AS FOLLOWS:

**Rule 1. General Provisions**

**[327 IAC 20-1-1](#) Purpose**

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. 1. The purpose of this article is to:

- (1) provide construction, operation, and maintenance requirements for a SMSS to implement [IC 13-18-10.5](#); and
- (2) protect human health and the environment from threats to water quality.

*(Water Pollution Control Division; [327 IAC 20-1-1](#))*

**[327 IAC 20-1-2](#) Applicability**

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) This article applies to construction, operation, and maintenance of a SMSS as defined in [327 IAC 20-2-3](#).

(b) A person may not start the following activities without obtaining the prior approval of the department:

- (1) Construction of a SMSS.
- (2) Expansion of a SMSS that increases manure containment capacity.

(c) A manure storage structure is not a SMSS if the:

- (1) owner or operator of a regulated CAFO or CFO:
  - (A) controls the manure storage structure; and
  - (B) deposits any manure in the storage structure from a regulated CAFO or CFO also under the control of the owner or operator; or
- (2) structure and any associated structures are designed to store a combined total of:
  - (A) less than one million (1,000,000) gallons of liquid manure not including:
    - (i) secondary containment;
    - (ii) up to two (2) feet of freeboard in:
      - (AA) buildings;
      - (BB) lagoons;
      - (CC) pits; and
      - (DD) ponds;
    - (iii) the headspace for a tank as specified by:
      - (AA) the manufacturer; or
      - (BB) determined through standard engineering calculations; or
    - (iv) other freeboard or headspace necessary to reliably contain the manure or maintain the integrity of the structure; or
  - (B) less than five thousand (5,000) cubic yards of solid manure.

*(Water Pollution Control Division; [327 IAC 20-1-2](#))*

**[327 IAC 20-1-3](#) Appeal of decisions**

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 13-15-6](#); [IC 13-15-7](#); [IC 13-18](#); [IC 13-30](#)

Sec. 3. A decision by the commissioner to approve, deny, revoke, amend, require an approval, or impose additional requirements under this article is appealable under [IC 13-15-6](#) and [IC 13-15-7](#).

Information on appeal rights shall be provided with the documentation of the commissioner's decision.

(Water Pollution Control Division; [327 IAC 20-1-3](#)).

## Rule 2. Definitions

### [327 IAC 20-2-1](#) Definitions

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. 1. The definitions in [327 IAC 19-2](#) in addition to the definitions in this rule apply throughout this article.

(Water Pollution Control Division; [327 IAC 20-2-1](#))

### [327 IAC 20-2-2](#) "One hundred (100) year flood event" defined

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. "One hundred (100) year flood event" means a flood of a magnitude equaled or exceeded, on the average, once in one hundred (100) years.

(Water Pollution Control Division; [327 IAC 20-2-2](#))

### [327 IAC 20-2-3](#) "Satellite manure storage structure" or "SMSS" defined

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) "Satellite manure storage structure" or "SMSS" means any of the items listed in subsection (b) that are:

- (1) not located at a livestock or poultry production area; and
- (2) designed for use in whole or in part for the storage of at least:
  - (A) one million (1,000,000) gallons of manure; or
  - (B) five thousand (5,000) cubic yards of manure.

(b) The items referred to in subsection (a) are as follows:

- (1) A building.
- (2) A lagoon.
- (3) A pad.
- (4) A pit.
- (5) A pond.
- (6) A tank.

(Water Pollution Control Division; [327 IAC 20-2-3](#))

## Rule 3. Performance Standards and Permit Conditions

### [327 IAC 20-3-1](#) Performance standards

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. 1. A SMSS must be designed, constructed, maintained, and operated in a manner that:

- (1) prevents:
  - (A) runoff;

- (B) spills; or
- (C) manure releases;
- (2) minimizes:
  - (A) leaks; and
  - (B) seepage; and
- (3) manages stormwater to prevent discharge of stormwater contaminated by the contents of the SMSS to waters of the state.

(Water Pollution Control Division; [327 IAC 20-3-1](#))

### [327 IAC 20-3-2](#) Permit conditions

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 must:

- (1) have a valid permit to operate; or
- (2) close in accordance with [327 IAC 20-7](#).

(b) The following conditions apply to all SMSS permits:

- (1) The owner or operator must comply with all terms and conditions of the permit and this article.
- (2) The owner or operator shall take all reasonable steps to prevent, minimize, or correct any adverse impact on the environment resulting from noncompliance with the permit or this article.
- (3) The filing by the owner or operator of a request for a permit modification, revocation and reissuance, or revocation does not stay or suspend any permit term or condition.
- (4) The permit does not convey any property rights of any sort or any exclusive privilege.
- (5) The owner or operator shall allow the commissioner, or an authorized representative, including an authorized contractor acting as a representative of the commissioner, upon the presentation of credentials to:

- (A) enter upon the SMSS premises or where any records must be kept under the terms and conditions of the permit or this article;

- (B) have access to review any records that must be kept under the terms and conditions of the permit or this article;

- (C) inspect, at reasonable times:

- (i) any SMSS; or

- (ii) practices required or otherwise regulated under the permit or this article; and

- (D) sample or monitor, at reasonable times, for the purpose of evaluating compliance with the permit or state and federal laws and regulations.

- (6) The provisions of the permit are severable and, if any provision of the permit or the application of any provision of the permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of the permit shall not be affected.

(c) If determined to be necessary to protect human health or the environment, the commissioner may require additional protective measures such as:

- (1) alternate design standards;
- (2) alternate operational requirements; or
- (3) use of a registered professional engineer.

The commissioner shall provide written documentation describing the basis for the determination.

(d) The commissioner may incorporate conditions into the permit that require testing to verify that the SMSS is consistent with the design and performance standards established in this article.

(Water Pollution Control Division; [327 IAC 20-3-2](#))

## Rule 4. Permit Application Requirements and Approval Process

### [327 IAC 20-4-1](#) Initial application requirements

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

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**Sec. 1. (a) An application under this article is required for a SMSS permit.**

**(b) Three (3) copies of the application package, one (1) of which may be electronic, must be submitted to the commissioner in a format specified by the department and must include all of the following to be considered complete:**

**(1) Forms, as provided by the department, completed in accordance with the instructions provided on the forms.**

**(2) Plot maps of the location proposed for the SMSS, consisting of the following:**

**(A) A United States Department of Agriculture Natural Resources Conservation Service soil survey map\*.**

**(B) A United States Geological Survey topographical map\* that includes identification of any public water supply wells and public water supply surface intake structures within one thousand (1,000) feet of the SMSS.**

**(C) The maps must be legible and clearly show the:**

**(i) location of the SMSS; and**

**(ii) boundaries of the property on which the SMSS is to be located.**

**(3) A SMSS site plan that shows:**

**(A) Any of the following features present within five hundred (500) feet of the existing or proposed location of the SMSS:**

**(i) All existing and proposed structures.**

**(ii) Surface waters of the state.**

**(iii) Public and private roads.**

**(iv) Water well locations.**

**(v) Characteristics of karst terrain.**

**(vi) Property boundary line.**

**(vii) All outfalls of known subsurface drainage structures, including perimeter drain outfalls.**

**(viii) Drainage inlets, including water and sediment control basins.**

**(ix) Any residence.**

**(B) Any surface water control features, such as berms, used to divert storm water away from the SMSS.**

**(C) The SMSS site plan must:**

**(i) be legible and either:**

**(AA) drawn to approximate scale; or**

**(BB) show distances between:**

**(i) the SMSS; and**

**(ii) features in subsection (A) that are within five hundred (500) feet of the proposed SMSS;**

**(ii) contain reference to true north;**

**(iii) indicate any part of the SMSS in a one hundred (100) year flood plain; and**

**(iv) be submitted on paper not less than eight and one-half (8 1/2) inches by eleven (11) inches, but not greater than twenty-four (24) inches by thirty-six (36) inches.**

**(4) A SMSS drawing depicting the design, showing detailed views and necessary cross sections to define all dimensions and construction materials.**

**(5) Soil and water table information from test holes, as described in [327 IAC 20-5-2\(a\)\(3\)](#), for the proposed SMSS.**

**(6) A description of any proposed alternative to a specific requirement in this article to demonstrate equivalent environmental and human health protection.**

**(7) A list of potentially affected parties, which includes:**

**(A) the county executive of the county in which the SMSS is to be located or modified; and**

**(B) each owner and each occupant of land of which any part of the boundary is one-half (1/2) mile or less from the property on which the SMSS is to be located.**

**(8) Documentation showing all state and local zoning laws have been complied with.**

**(9) Other plans or supplemental information required by the commissioner to ensure compliance with this article. The commissioner shall provide written documentation of the basis for requiring any other plans or supplemental information.**

**(10) A statement affirming that the SMSS shall not be used to store manure from a CFO that is under ownership or control of the applicant.**

**(11) Copies of any written waivers related to reduction of setback distances.**

(c) Incomplete applications may be denied in accordance with [IC 13-15-4-9](#).

\*United States Department of Agriculture Natural Resources Conservation Service soil survey map may be obtained from Web Soil Survey at: <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>  
United States Geological Survey topographical map may be obtained from The National Map or US Topo at: <http://nationalmap.gov/> and <http://nationalmap.gov/ustopo/index.html>

(Water Pollution Control Division; [327 IAC 20-4-1](#))

#### [327 IAC 20-4-2](#) Duration of permits

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 13-15-7](#); [IC 13-18](#); [IC 13-30](#)

Sec. 2. (a) A permit shall be issued for a fixed term not to exceed ten (10) years.

(b) In accordance with [IC 13-15-7](#), a permit may be amended, revoked and reissued, or revoked prior to the expiration of the permit term.

(Water Pollution Control Division; [327 IAC 20-4-2](#))

#### [327 IAC 20-4-3](#) Permit renewals

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 13-15-4-9](#); [IC 13-18](#); [IC 13-30](#)

Sec. 3. (a) The owner or operator must submit an application for a renewal permit to continue to operate a regulated a SMSS. The application must:

- (1) be submitted on forms provided by the department;
- (2) contain a current SMSS site plan, as described in section 1(b)(3) of this rule; and
- (3) be submitted at least thirty (30) days prior to the expiration of the previous permit.

(b) The terms and conditions of an expired permit are automatically extended in full force and effect until the effective date of a renewal, if the:

- (1) owner or operator has submitted a complete application for a permit renewal under this article at least thirty (30) days prior to the expiration of the permit; and
- (2) commissioner, through no fault of the owner or operator, does not issue a permit renewal prior to the expiration date of the previous permit.

(c) Incomplete applications may be denied in accordance with [IC 13-15-4-9](#).

(Water Pollution Control Division; [327 IAC 20-4-3](#))

#### [327 IAC 20-4-4](#) Permit modifications

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. 4. (a) The commissioner may issue a SMSS permit modification at any time.

(b) Changes to a SMSS requiring a permit modification include the following:

- (1) Changes that increase storage capacity.
- (2) Changes to approved design drawings or construction specifications.
- (3) Any other changes the commissioner determines require a modification.

(c) If the change is not one listed in subsection (b), the owner or operator shall submit to the department:

- (1) a written description of the change; and
- (2) three (3) copies of any documents submitted under section 1 of this rule with revisions reflecting the change.

(d) Fifteen (15) days after submitting a change under subsection (c), an owner or operator may implement the change unless the department provides notification that:

- (1) additional information is necessary to review the change; or
- (2) the change requires a permit modification.

(e) When requesting a permit modification under subsection (b), the owner or operator shall submit three (3) copies of the request to the department including:

- (1) a description of the proposed modification; and
- (2) documents submitted under section 1 of this rule with revisions reflecting the change.

*(Water Pollution Control Division; [327 IAC 20-4-4](#))*

### **[327 IAC 20-4-5](#) Public comment periods and notifications**

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) An applicant who applies for a permit to construct or expand a SMSS, or renew a permit for a SMSS that has not begun construction, shall make a reasonable effort to provide notice, not more than ten (10) working days after submitting a complete application, to:

- (1) the county executive of the county in which the SMSS is to be located or modified; and
- (2) each owner and each occupant of land of which any part of the boundary is one-half (1/2) mile or less from the property on which the SMSS is to be located.

(b) The notice must be completed on forms provided or approved by the department and include:

- (1) the date on which the application was submitted to the department;
- (2) a brief description of the subject of the application; and
- (3) the dates comments are to be accepted by the department as described in subsection (e).

(c) The department shall accept written comments for a thirty-three (33) day period following the date of mailing of the notice required under subsection (a) or from the submittal of a complete permit application to the department, whichever is later.

(d) A public meeting on a permit application may be held at the commissioner's discretion where environmental concerns relevant to applicable rules or laws are raised.

*(Water Pollution Control Division; [327 IAC 20-4-5](#))*

### **[327 IAC 20-4-6](#) Transferability**

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. 6. (a) When ownership of a SMSS is transferred, the parties completing the transaction shall request transfer of the permit by submitting a written agreement, within ninety (90) days of closing, to the commissioner. The agreement must contain the following:

- (1) An anticipated date for transfer of permit responsibilities.
- (2) Identification of responsibility for any violations existing at the time of the transfer, if applicable.

(b) Failure to comply with subsection (a) shall result in the following:

- (1) Revocation of the existing SMSS permit and possible penalties for operating without a valid permit.
- (2) The new owner or operator shall submit an application for a new permit under this article.

(c) If the transfer is not complete within the time frame described in subsection (a), the new owner may

operate under the previous owner's permit until:

- (1) a transfer can be accomplished; or
- (2) the owner is otherwise notified by the commissioner.

(Water Pollution Control Division; [327 IAC 20-4-6](#))

## Rule 5. Design and Construction

### [327 IAC 20-5-1](#) Site restrictions and setbacks

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. 1. (a) A SMSS must not be located:

- (1) except as provided in subsection (b), in karst terrain based on information compiled by the department, and from karst and bedrock maps from the Indiana Geological Survey dated 1997;
- (2) in a floodway;
- (3) except as provided in subsection (c), in a one hundred (100) year flood plain;
- (4) over mines; and
- (5) in soil types that are expected to have a seasonable high water table, unless the water table is lowered to keep the water table below the bottom of the SMSS as described in section 2(c) of this rule.

(b) The commissioner may approve a SMSS to be located in karst terrain based upon submittal of the following site-specific information to the commissioner:

- (1) Characterization of the seasonal water table and soil.
- (2) Design and construction specifications that assure adequate structural integrity and environmental protection.
- (3) For an earthen SMSS, in addition to [327 IAC 20-4-1](#), information from at least one (1) of the soil borings or test holes, as described in section 2(a)(3) of this rule, to the shallower of either:
  - (A) bedrock; or
  - (B) ten (10) feet below the lowest point of the proposed SMSS.
- (4) Other information that the commissioner deems necessary to ensure protection of human health and the environment.

(c) The commissioner may approve a SMSS to be located in a one hundred (100) year flood plain based upon submittal of the following site-specific information to the commissioner:

- (1) Characterization of the soil and seasonal high water table.
- (2) Design and construction specifications that assure adequate structural integrity and environmental protection to withstand a one hundred (100) year flood event including the following:
  - (A) For a SMSS for solid manure, the base of the structure is at least two (2) feet above the one hundred (100) year flood elevation.
  - (B) For a SMSS for liquid manure:
    - (i) all access to manure storage is at least two (2) feet above the one hundred (100) year flood elevation; and
    - (ii) the design accounts for hydrostatic pressure on the structure from the seasonal high water table and from flood waters during a one hundred (100) year flood event.
- (3) Other information that the commissioner deems necessary to ensure protection of human health and the environment.

(d) A SMSS 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 to the department:

- (1) One thousand (1,000) feet from a public water supply well or public water supply surface intake structure.
- (2) Three hundred (300) feet from any:
  - (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; or
  - (D) off-site water wells.

- (3) One hundred (100) feet from any:
  - (A) on-site water wells;
  - (B) property lines; or
  - (C) public roads.
- (4) Four hundred (400) feet from existing off-site residential and public buildings.

(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 20-5-1](#))

### [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:

- (1) so the bottom of the SMSS is two (2) feet above bedrock;
- (2) above the seasonal high water table, that may be lowered in accordance with subsection (c); and
- (3) using test holes to obtain soil and water table information for the design 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) testing shall be conducted by:
      - (AA) a soil scientist registered under the Indiana board of registration for soil scientists;
      - (BB) a professional geologist certified in Indiana under [IC 25-17.6](#); or
      - (CC) 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 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;
- (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\* 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; and
- (2) be an underground steel storage tank.

\*These documents are incorporated by reference. Copies may be obtained from the Indiana NRCS State Office, 6013 Lakeside Boulevard, Indianapolis, IN 46278 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 document 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](#))

### [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 have a maximum specific discharge of one-sixteenth (1/16) in<sup>3</sup>/in<sup>2</sup>/day, 1.8x10<sup>-6</sup>cm<sup>3</sup>/cm<sup>2</sup>/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: Pond Sealing or Lining, Flexible Membrane, October 2013\*.
- (2) Indiana NRCS Conservation Practice Standard Code 521B: Pond Sealing or Lining, Soil Dispersant, October 2011\*.
- (3) Indiana NRCS Conservation Practice Standard Code 521C: Pond Sealing or Lining, Bentonite Sealant, October 2011\*.

(c) Clay liners shall be a minimum of one (1) foot thick and have a maximum specific discharge of one-sixteenth (1/16) in<sup>3</sup>/in<sup>2</sup>/day, 1.8x10<sup>-6</sup>cm<sup>3</sup>/cm<sup>2</sup>/sec.

\*These documents are incorporated by reference. Copies may be obtained from the Indiana NRCS State Office, 6013 Lakeside Boulevard, Indianapolis, IN 46278 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](#))

### [327 IAC 20-5-4](#) Solid 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. 4. In addition to section 2 of this rule, a SMSS that contains solid manure must be designed

according to the following:

(1) The SMSS must:

(A) be covered to prevent rainwater from contacting the manure; or

(B) have storm water run-on and run-off controls.

(2) The SMSS must 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),\* unless specially designed with an approved liner, in accordance with section 3 of this rule.

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

\*This document is incorporated by reference. Copies may be obtained from the ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 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 20-5-4](#))

### [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.\*

(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.

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

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

(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 IDEM prior to introducing manure.

\*This document is incorporated by reference. Copies may be obtained from the Indiana NRCS State Office, 6013 Lakeside Boulevard, Indianapolis, IN 46278 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](#))

### [327 IAC 20-5-6](#) Alternative to rule 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. 6. (a) An owner or operator may propose and request an alternative to a design, construction, or operational requirement specified in this article, provided the owner or operator can prove to the satisfaction of the commissioner that any alternative will provide equivalent or greater environmental protection than the requirements specified in this article.

(b) Any alternative must be submitted to the department and accompanied by documentation that demonstrates equivalent or greater environmental protection than the standard for which an alternative is being requested.

(c) No alternative may be used prior to approval by the commissioner.

(d) The commissioner shall provide written documentation describing the basis for any determination on an alternatives request.

(Water Pollution Control Division; [327 IAC 20-5-6](#))

### [327 IAC 20-5-7](#) Construction

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. 7. (a) The owner or operator shall notify the commissioner in writing at least two (2) days prior to scheduled construction of a SMSS. Multiple notices, with identification of the parts of the SMSS that are completed at the time of submittal, are required if an owner or operator performs partial construction of an approved structure and plans to utilize that portion prior to completing construction of the entire SMSS.

(b) Any field tiles or drainage outlets encountered during construction must be blocked or rerouted in accordance with any applicable local approval requirements, and be cut back at least fifty (50) feet from the edge of any:

- (1) berm;
- (2) concrete pit; or
- (3) earthen SMSS.

(c) The applicant shall execute and send to the commissioner a notarized affidavit, under penalty of perjury, that a SMSS was constructed, and shall be operated, in accordance with the requirements of the permit and this article, as follows:

- (1) The affidavit shall be submitted:
  - (A) on a form provided by the department;
  - (B) within thirty (30) days after the date construction is completed; and
  - (C) prior to the introduction of any manure.
- (2) The affidavit shall include identification of the parts of the SMSS that are completed at the time of submittal.
- (3) If an owner or operator performs partial construction of an approved SMSS and plans to utilize that portion prior to completing construction of the entire SMSS, multiple affidavits shall be submitted.

(d) The certification required by section 5(e) of this rule must be completed prior to the introduction of manure.

(Water Pollution Control Division; [327 IAC 20-5-7](#))

## Rule 6. Maintenance, Operation, and Monitoring

### [327 IAC 20-6-1](#) Maintenance 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. 1. (a) A SMSS must be maintained and operated to meet the requirements of this article and the permit conditions.

(b) The owner or operator shall inspect the SMSS for compliance with this article and the permit



conditions at least one (1) time each month. Any maintenance activities shall be documented in the operating record.

(c) An uncovered SMSS storing liquid manure must:

- (1) be maintained, with a minimum freeboard of two (2) feet, unless otherwise specified in the permit; and
- (2) have clearly identified markers to indicate manure levels relative to the approved freeboard elevation.

(d) An earthen berm for a SMSS must be:

- (1) stabilized with vegetation or alternative erosion control measures;
- (2) maintained to prevent growth of trees and shrubs; and
- (3) maintained to allow for visual inspection.

(Water Pollution Control Division; [327 IAC 20-6-1](#))

### [327 IAC 20-6-2](#) Operating record

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. The owner or operator of a SMSS must keep an operating record that includes the following:

- (1) The complete application.
- (2) The SMSS site plan.
- (3) Notification of construction required by [327 IAC 20-5-7\(a\)](#).
- (4) Notarized affidavit required by [327 IAC 20-5-7\(c\)](#).
- (5) Certification by a registered professional engineer, required by [327 IAC 20-5-5\(e\)](#).
- (6) The current emergency response plan, described in section 3(a) of this rule.
- (7) Documentation of any spill response, described in section 3(b) of this rule, implemented within the permit term.
- (8) Documentation of maintenance activities on the SMSS.
- (9) Copies of any written waivers related to reduction of the setback distances.
- (10) All permits, modifications, renewals, and notifications applicable to the SMSS.

(Water Pollution Control Division; [327 IAC 20-6-2](#))

### [327 IAC 20-6-3](#) Emergency response plan

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 owner or operator of a SMSS shall develop an emergency response plan to be kept in the operating record. The plan shall contain the following:

- (1) Procedures for:
  - (A) containing a manure release to prevent it from reaching waters of the state;
  - (B) locating the source of a manure release and stopping the flow of manure;
  - (C) returning released manure to the SMSS or an approved waste management system; and
  - (D) contacting the following:
    - (i) The owner or operator.
    - (ii) Any applicable local emergency or health authorities.
- (2) The names and telephone numbers of persons who are identified by the owner or operator as responsible for implementing the emergency response plan.
- (3) Identification of areas where potential manure releases could occur and their accompanying drainage points.
- (4) Identification of equipment and cleanup materials to be used in the event of a manure release.

(b) The owner or operator must implement the emergency response plan anytime a manure release occurs. If manure from the SMSS reaches waters of the state, the owner or operator must do the following:

(1) Provide notification in accordance with the following:

(A) As soon as possible, but within two (2) hours of discovery, communicate a spill report to the Department of Environmental Management, Office of Land Quality, Emergency Response Section: (888) 233-7745 for in-state calls (toll free) or (317) 233-7745 for out-of-state calls.

(B) If new or updated spill report information becomes known that indicates a significant increase in the likelihood of damage to the waters of the state, the responsible party shall notify the department as soon as possible, but within two (2) hours of the time the new or updated information becomes known.

(2) Submit a written copy of the spill report to the Indiana Department of Environmental Management, Office of Land Quality, Emergency Response Section (MC 66-30), Indiana Government Center North, Eleventh Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204, if requested in writing by the department.

(3) Except from modes of transportation other than pipelines, exercise due diligence and document attempts to notify the following:

(A) For manure releases or spills to surface water that cause damage, the nearest affected downstream water user located within ten (10) miles of the spill and in the state of Indiana.

(B) For manure releases or spills to soil outside the SMSS property boundary, the affected property owner or owners, operator or operators, or occupant or occupants.

*(Water Pollution Control Division; [327 IAC 20-6-3](#))*

## Rule 7. Exiting the Satellite Manure Storage Structure Program

### [327 IAC 20-7-1](#) Exiting the program but continuing to operate

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. 1. (a) A SMSS may be removed from the SMSS permitting program, but continue to operate if the department has received and approved a request from the owner or operator to be removed from the program. The request must include confirmation that the SMSS:

- (1) no longer meets the definition of an SMSS under this article; or
- (2) shall be operated under another regulatory program, if applicable.

(b) The commissioner shall send the owner or operator a letter of confirmation when the department has verified that the requirements of subsection (a) have been met.

(c) For a SMSS that has been removed from the SMSS permitting program under subsection (a), the owner or operator must submit a new application under this article prior to operating a new SMSS.

*(Water Pollution Control Division; [327 IAC 20-7-1](#))*

### [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, 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 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](#))

### [327 IAC 20-7-3](#) Closing a SMSS and exiting the program

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) A SMSS may be removed from the SMSS permit program and completely closed if the owner or operator has notified the department that the SMSS has been decommissioned in accordance with this rule, including the removal of all manure and completion of all additional decommissioning activities required under section 2 of this rule.

(b) A SMSS shall not be considered removed from the SMSS program until all manure in the SMSS has been managed:

- (1) as fertilizer in accordance with [355 IAC 8](#); or
- (2) in accordance with other applicable state and federal laws.

(c) The commissioner shall send the owner or operator a letter of confirmation when the department has verified that the requirements of subsections (a) and (b) have been met.

(Water Pollution Control Division; [327 IAC 20-7-3](#))

### [Notice of Public Hearing](#)

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