

# ARTICLE 20. SATELLITE MANURE STORAGE STRUCTURE PERMITTING PROGRAM

<a href="#">Rule 1.</a>	General Provisions
<a href="#">Rule 2.</a>	Definitions
<a href="#">Rule 3.</a>	Performance Standards and Permit Conditions
<a href="#">Rule 4.</a>	Permit Application Requirements and Approval Process
<a href="#">Rule 5.</a>	Design and Construction
<a href="#">Rule 6.</a>	Maintenance, Operation, and Monitoring
<a href="#">Rule 7.</a>	Exiting the Satellite Manure Storage Structure Program

## Rule 1. General Provisions

<a href="#">327 IAC 20-1-1</a>	General provisions
<a href="#">327 IAC 20-1-2</a>	Appeal of decisions

### 327 IAC 20-1-1 General provisions

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10.5](#)  
Affected: [IC 13-11-2-196.2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10.5](#); [IC 13-30](#)

Sec. 1. (a) Under [IC 13-18-10.5](#), a person may not start the following activities regarding a SMSS, as defined in [IC 13-11-2-196.2](#), without obtaining the prior approval of the department:

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

(b) The storage or manure containment capacity shall be determined by the greatest amount of manure the SMSS is able to hold after meeting the minimum standards of this article for:

- (1) secondary containment;
- (2) freeboard; and
- (3) headspace.

(c) If the owner or operator of a regulated CAFO or CFO deposits any manure from the owner or operator's CAFO or CFO into a storage structure also under the control of the owner or operator, the structure shall not be considered a SMSS. This action shall constitute an expansion of the owner or operator's CAFO or CFO operation.

(d) Storage, for purposes of this article, shall not include staging as defined in 327 IAC 19-2-43. (*Water Pollution Control Division; 327 IAC 20-1-1; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

### 327 IAC 20-1-2 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. 2. 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 20-1-2; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*).

## Rule 2. Definitions

<a href="#">327 IAC 20-2-1</a>	Definitions
<a href="#">327 IAC 20-2-2</a>	"One hundred (100) year flood event" defined
<a href="#">327 IAC 20-2-3</a>	"Satellite manure storage structure" or "SMSS" defined

### 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 and the definitions in this rule apply throughout this article. (*Water Pollution Control Division; 327 IAC 20-2-1; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**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 13-11-2-196.2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 3. "Satellite manure storage structure" or "SMSS" has the meaning set forth in [IC 13-11-2-196.2](#). (*Water Pollution Control Division; 327 IAC 20-2-3; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**Rule 3. Performance Standards and Permit Conditions**

[327 IAC 20-3-1](#) Performance standards  
[327 IAC 20-3-2](#) 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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**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 with reissuance, or revocation without reissuance 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 the 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 in compliance with the design and performance standards established in this article. (*Water Pollution Control Division; 327 IAC 20-3-2; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

#### Rule 4. Permit Application Requirements and Approval Process

<a href="#">327 IAC 20-4-1</a>	Initial application requirements
<a href="#">327 IAC 20-4-2</a>	Duration of permits
<a href="#">327 IAC 20-4-3</a>	Permit renewals
<a href="#">327 IAC 20-4-4</a>	Permit modifications
<a href="#">327 IAC 20-4-5</a>	Public comment periods and notifications
<a href="#">327 IAC 20-4-6</a>	Transferability

#### 327 IAC 20-4-1 Initial application 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 13-15-4-9](#); [IC 13-18](#); [IC 13-30](#)

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:

SATELLITE MANURE STORAGE STRUCTURE PERMITTING PROGRAM

---

- (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 the following:
- (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.
    - (x) One hundred (100) year flood plains.
  - (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:
        - (aa) the SMSS; and
        - (bb) features in clause (A) that are within five hundred (500) feet of the proposed SMSS;
    - (ii) contain reference to true north; and
    - (iii) 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 compliance with all state and local zoning laws.
- (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; filed Sep 28, 2015, 11:13 a.m.: 20151028-IR-327130245FRA; readopted filed May 18, 2021, 1:04 p.m.: 20210609-IR-327210118BFA*)

**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](#)

---

SATELLITE MANURE STORAGE STRUCTURE PERMITTING PROGRAM

---

Sec. 2. (a) An initial permit may be issued for a fixed term not to exceed five (5) years. A renewal permit may 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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**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 (c).
- (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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

(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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**Rule 5. Design and Construction**

- |                                |   |
|--------------------------------|---|
| <a href="#">327 IAC 20-5-1</a> | Site restrictions and setbacks              |
| <a href="#">327 IAC 20-5-2</a> | Design requirements                         |
| <a href="#">327 IAC 20-5-3</a> | Design requirements for liners              |
| <a href="#">327 IAC 20-5-4</a> | Solid manure structure design requirements  |
| <a href="#">327 IAC 20-5-5</a> | Liquid manure structure design requirements |
| <a href="#">327 IAC 20-5-6</a> | Alternative to rule requirements            |
| <a href="#">327 IAC 20-5-7</a> | 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) in a one hundred (100) year flood plain;
- (4) over mines; or
- (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 ensure 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) 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 outer limit of the depression in the ground surface formed by the sinkhole where surface water drains to the sinkhole; 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.
- (d) 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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#))*

**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 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.

SATELLITE MANURE STORAGE STRUCTURE PERMITTING PROGRAM

---

(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 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, 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.

\*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 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](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#); filed May 23, 2022, 9:29 a.m.: [20220622-IR-327210028FRA](#); errata filed Jun 2, 2022, 12:20 p.m.: [20220622-IR-327210028ACA](#)*)

**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 must 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 520: Pond Sealing or Lining, Compacted Soil Treatment, October 2016\*.

(2) Indiana NRCS Conservation Practice Standard Code 522: Pond Sealing or Lining – Concrete, October 2016\*.

(c) Clay liners must 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, online at <http://nrcs.usda.gov/>, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. (*Water Pollution Control Division; 327 IAC 20-5-3; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#); filed May 23, 2022, 9:29 a.m.: [20220622-IR-327210028FRA](#)*)

### **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 one-half (1/2) 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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

### **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, 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 2015\*.

---

SATELLITE MANURE STORAGE STRUCTURE PERMITTING PROGRAM

---

(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 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](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#); filed May 23, 2022, 9:29 a.m.: [20220622-IR-327210028FRA](#)*)

**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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**Rule 6. Maintenance, Operation, and Monitoring**

<a href="#">327 IAC 20-6-1</a>	Maintenance requirements
<a href="#">327 IAC 20-6-2</a>	Operating record
<a href="#">327 IAC 20-6-3</a>	Emergency response plan

**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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#))*

**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. (a) 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.  
(b) The operating record described in subsection (a) shall be kept on site for the duration of the permit term, except items described in subsection (a)(1), (a)(2), (a)(4), (a)(5), and (a)(9) shall be kept on site for the life of the facility. If the operator is unable to keep the operating record on site, it must be kept at the operator's address listed in the permit.  
(c) If the record in subsection (a) is unable to be kept on site to be made available for inspection in accordance with 327 IAC 20-3-2(b)(5), upon request by the commissioner or an authorized representative, the operator must submit a copy of the record to the department within a reasonable period of time. *(Water Pollution Control Division; 327 IAC 20-6-2; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#))*

**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 the following:
  - (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.
  - (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 Indiana Department of Environmental Management, Office of Land Quality, Emergency Response Section: (888) 233-7745 or (317) 233-7745.
  - (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, Indiana Government Center North, Eleventh Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204, if requested 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, 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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#))*

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

<a href="#">327 IAC 20-7-1</a>	Exiting the program but continuing to operate
<a href="#">327 IAC 20-7-2</a>	Decommissioning a satellite manure storage structure
<a href="#">327 IAC 20-7-3</a>	Closing a SMSS and exiting the 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 a 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

---

SATELLITE MANURE STORAGE STRUCTURE PERMITTING PROGRAM

---

submit a new application under this article prior to operating a new SMSS. (*Water Pollution Control Division; 327 IAC 20-7-1; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

**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, 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 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](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#); filed May 23, 2022, 9:29 a.m.: [20220622-IR-327210028FRA](#)*)

**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; filed Sep 28, 2015, 11:13 a.m.: [20151028-IR-327130245FRA](#); readopted filed May 18, 2021, 1:04 p.m.: [20210609-IR-327210118BFA](#)*)

\*