

TITLE 410 INDIANA DEPARTMENT OF HEALTH

Final Rule

LSA Document #22-395(F)

DIGEST

Amends 410 IAC 6-8.3 to update definitions and other provisions to reflect current terminology, standards, and best practices regarding the design, installation, construction, maintenance, and operation of residential on-site sewage systems. Effective 30 days after filing with the Publisher.

410 IAC 6-8.3-51; 410 IAC 6-8.3-52; 410 IAC 6-8.3-53; 410 IAC 6-8.3-57; 410 IAC 6-8.3-67; 410 IAC 6-8.3-69; 410 IAC 6-8.3-91

SECTION 1. 410 IAC 6-8.3-51 IS AMENDED TO READ AS FOLLOWS:

410 IAC 6-8.3-51 Administrative authority

Authority: IC 16-19-3-4

Affected: IC 16-19-3-4; IC 16-19-3-27.8; IC 16-41-25-10; IC 16-41-25-11

Sec. 51. (a) This rule shall be administered by the local boards of health through their health officer and ~~his or her~~ **the health officer's** authorized representatives.

~~(b) [Voided by P.L. 167 2022, SECTION 16, effective July 1, 2023.]~~

~~(b)~~ **(b)** Each local health department residential on-site sewage system permit program is subject to review by the department. ~~Such~~ A review may include, but not be limited to, a review of the permits issued, supporting documentation, and a review of on-site sewage system installations.

~~(c)~~ **(c)** **In accordance with IC 16-41-25-10 and IC 16-41-25-11**, the department ~~or~~ its agent, or the health officer or ~~his or her~~ **the health officer's agent**, shall be permitted to enter upon all properties at the proper time for the following purposes necessary to achieve compliance with this rule:

- (1) Inspection.
- (2) Observation.
- (3) Measurement.
- (4) Sampling.
- (5) Testing.

(d) A local ordinance is not considered more stringent than this rule if it is in accordance with IC 16-19-3-27.8.
(Indiana Department of Health; 410 IAC 6-8.3-51; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA)

SECTION 2. 410 IAC 6-8.3-52 IS AMENDED TO READ AS FOLLOWS:

410 IAC 6-8.3-52 General sewage disposal requirements

Authority: IC 16-19-3-4

Affected: IC 16-19-3-4; IC 16-41-25

Sec. 52. (a) No person shall throw, run, drain, seep, or otherwise dispose into any of the surface waters or groundwaters of this state, or cause, permit, or suffer to be thrown, run, drained, allowed to seep, or otherwise disposed into ~~such~~ **those** waters, ~~any~~ organic or inorganic matter from a dwelling or residential on-site sewage system that would cause or contribute to a health hazard or water pollution.

- (b) The:
- (1) design;

- (2) construction;
- (3) installation;
- (4) location;
- (5) maintenance; and
- (6) operation;

of residential on-site sewage systems shall comply with the provisions of this rule.

(c) All residential on-site sewage systems utilizing sanitary privies shall conform to department bulletin SE 11, "The Sanitary Vault Privy", ~~1986~~ **2021** Edition.

(d) ~~Any~~ **A** dwelling that is not connected, or cannot be connected, to a sanitary sewerage system shall be provided with a residential on-site sewage system that includes a septic tank and a soil absorption system that has not failed.

(e) A temporary sewage holding tank is an alternative method of sewage disposal subject to the written approval of the department, except as provided in subsection (f). A temporary sewage holding tank shall not be used as a primary means of residential sewage disposal except:

- (1) where necessary to prevent continued discharge of sewage from a failed existing residential on-site sewage system;
- (2) when soil conditions exist that preclude the prompt construction of a soil absorption system on a site that has already received a construction permit; or
- (3) where the holding tank is operated by a conservancy district, sewer district, private utility, or municipality as a part of its sewage disposal plan, or for not more than one (1) year while connection to a sanitary sewer is being secured. This one (1) year time frame may be extended upon documentation of satisfactory operation of the holding tank.

(f) A temporary sewage holding tank may be approved by the local health department:

- (1) as a temporary storage facility where occupancy of the home must continue while an existing residential on-site sewage system is being replaced or renovated; or
- (2) until soil conditions permit the installation of a soil absorption system for which a construction permit has been issued.

(g) If any conditions preclude the installation of a residential on-site sewage system as described in this rule, the local board of health may not approve the use of ~~any~~ other residential on-site sewage system technology unless written approval from the department is:

- (1) issued, under subsection (h), for local health departments to issue construction permits for the use of the technology; or
- (2) obtained for specific applications.

(h) In order to permit development of new or more efficient sewage treatment or disposal processes, the department may approve the installation of experimental and TNI equipment, facilities, or pollution control devices for which extensive experience or records of use have not been developed in Indiana. The applicant for ~~such~~ **the** approval must submit evidence of sufficient clarity and conclusiveness to convince the department that the proposal has a reasonable and substantial probability of satisfactory operation without failure.

(i) No portion of the residential on-site sewage system or its associated drainage system shall be constructed upon property other than that from which the sewage originates unless easements, which grant permission for ~~such~~ **the** construction and access for system maintenance, have been obtained for that property and have been legally approved and recorded by the proper authority or commission.

(j) Residential on-site sewage systems shall not be used for the disposal of water from:

- (1) roof drains;
- (2) foundation drains;
- (3) swimming pool main drains;
- (4) hot tub drains; or
- (5) area drains.

~~Neither~~ **These sewage systems** shall ~~they~~ **also not** be used for the disposal of chemical wastes in quantities that would pollute groundwater or inhibit solids settling or digestion in the septic tank.

(k) ~~Any~~ A jetted bathtub with a capacity of greater than one hundred twenty-five (125) gallons shall be treated as an extra bedroom for the on-site sewage system sizing requirements of this rule. (*Indiana Department of Health; 410 IAC 6-8.3-52; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; filed Apr 9, 2014, 9:51 a.m.: 20140507-IR-410130350FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA*)

SECTION 3. 410 IAC 6-8.3-53 IS AMENDED TO READ AS FOLLOWS:

410 IAC 6-8.3-53 Construction permits

Authority: IC 16-19-3-4; IC 16-41-25-1

Affected: IC 16-19-3-4; IC 16-41-25-1

Sec. 53. (a) For ~~any~~ a dwelling or place of residence that will not be connected to a sanitary sewerage system, the owner or agent of the owner shall obtain a written construction permit, signed by the health officer, for construction of a residential on-site sewage system prior to the:

- (1) start of construction of a residence;
- (2) placement of a manufactured home, modular home, or mobile home;
- (3) construction or placement of a residential outbuilding that will include plumbing, or the addition of plumbing to an existing residential outbuilding;
- (4) replacement of ~~any~~ a dwelling, place of residence, or residential outbuilding that includes plumbing;
- (5) reconstruction of ~~any~~ a dwelling, place of residence, or residential outbuilding that includes plumbing;
- (6) expansion or remodeling of a residence that may increase the number of bedrooms or the DDF;
- (7) addition to, alteration of, replacement of, or repair of an existing residential on-site sewage system; or
- (8) installation of an on-site sewage system for an existing residence that did not previously have a residential on-site sewage system as defined in section 32 of this rule.

(b) A local health department shall not issue a construction permit for a new on-site sewage system, ~~or for~~ the repair of an on-site sewage system, or **the** replacement of a soil absorption system using TNI without the written approval of the department, except for the provisions of section 52(g) of this rule.

(c) The approval of a site by the local plan commission or the county recorder does not constitute approval by the local health officer.

(d) The application for a construction permit shall be made on a form provided by the local health department. The application shall contain, or include as attachments, the following:

- (1) Information on the following:
 - (A) The name and address of the property owner.
 - (B) The location of the property.
 - (C) The number of bedrooms and bedroom equivalents.
- (2) The on-site soils evaluation, as outlined in section 56 of this rule, for the site where the residential soil absorption system is to be constructed.
- (3) Written plans of sufficient clarity that it can be verified that the design of the residential on-site sewage system shall comply with the provisions of this rule.
- (4) ~~Any~~ Other information deemed necessary by the health officer.

(e) When site limitations and soil information for the site have been determined, the owner is responsible for the residential on-site sewage system design that:

- (1) addresses the demands of the site in accordance with this rule; and
- (2) will meet local health department approval.

(f) The local health department may require scale drawings of the site and residential on-site sewage system as part of the application process.

(g) In accordance with IC 16-41-25-1(a), the local health department shall issue or deny, in writing to the owner, a residential on-site sewage system construction permit within ~~forty five (45)~~ **thirty (30)** days of receipt of an application and plan submittal.

(h) No construction on the residential on-site sewage system may take place if the residential on-site sewage system site is disturbed or altered after the on-site evaluation by the addition of fill material (other than construction necessary for the residential on-site sewage system) or by cutting, scraping, compaction, or the removal of soil, until a new on-site evaluation has been conducted and a modified construction permit has been issued.

(i) A soil absorption system replacement for a residential on-site sewage system shall meet or exceed the minimum provisions of this rule. When replacement is necessary due to on-site sewage system failure, and if the replacement soil absorption system cannot meet all of the provisions of this rule, deviations to this rule for a soil absorption system replacement may be made in accordance with the best judgment of the local department of health, based on the following:

- (1) Limitations of the site.
- (2) Written results of an evaluation of the operational status of all of the on-site sewage system components and probable reasons for system failure.
- (3) Written results of an on-site soils evaluation.

(j) Soil absorption system replacement for a residential on-site sewage system shall not be:

- (1) contrary to sections 52(a) and 60(h) of this rule; and
- (2) constructed to a depth greater than forty-eight (48) inches below final grade in any portion of a subsurface soil absorption system.

(k) If it is determined that the proposed on-site sewage system design does not meet the minimum requirements of this rule, the permit may be denied in accordance with section 55(e) of this rule.

(l) The permittee shall notify the health officer or ~~his or her~~ **the health officer's** designee when the work is ready for final inspection:

- (1) using the procedure published by the local board of health; or
- (2) at least forty-eight (48) hours or two (2) working days before any subsurface portions are to be covered if the local health board has not published inspection procedures.

(m) The construction permit for a residential on-site sewage system in violation of this section may be revoked by the health officer in accordance with section 55(e) of this rule. Requirements of permits issued for the construction of residential on-site sewage systems shall not be considered as fulfilled until the installation is completed to the satisfaction of the health officer or ~~his or her~~ **the health officer's** duly authorized representative.

(n) Individual lots in subdivisions designed to utilize residential on-site sewage systems, for which the plats were approved by the local plan commission, county health department, or ~~the~~ county recorder, and recorded prior to December 21, 1990, are exempt from the provisions of sections 70(b)(8) and 72(b)(7) of this rule if the soils on the individual lot have characteristics that would allow the soil to be rated as slight or moderate in accordance with guidelines as set forth in the soils manuals and handbooks of the NRCS. The soil absorption system to serve each lot that is exempted by this section shall meet the sizing criteria as follows:

Permeability Rating	Square Feet Needed in Trench Bottom per Bedroom
2 in. to 6 in. per hour	250 square feet per bedroom
1 in. to 2 in. per hour	330 square feet per bedroom

(o) Individual lots in subdivisions designed to utilize residential on-site sewage systems, the plats for which were approved by the local plan commission and recorded prior to December 21, 1990, will be granted an exemption by the department from the provisions of section 70(b)(8) of this rule if the health officer of the county in which the development is located certifies to the department, in writing, that:

- (1) the health department has reviewed and recommended approval to the local plan commission, either verbally, in writing, or by other locally acceptable routine procedure, when the subdivision plat was being considered by that agency; and
- (2) no lots in the subdivision currently have on-site sewage system failures as defined in section 33 of this rule.

The certification must be accompanied by a brief description of the on-site sewage system approved for each lot for which exemption is requested, including information on the design of the on-site sewage system as well as information on the type of soil on the site. An affirmative response to subdivisions (1) and (2) must be included in the certification for the exemption to the provisions of section 70(b)(8) of this rule to be granted. (*Indiana Department of Health; 410 IAC 6-8.3-53; filed Oct 19, 2012,*

SECTION 4. 410 IAC 6-8.3-57 IS AMENDED TO READ AS FOLLOWS:

410 IAC 6-8.3-57 Separation distances

Authority: IC 16-19-3-4

Affected: IC 16-19-3-4; IC 16-41-25

Sec. 57. (a) All septic tanks, dosing tanks, lift stations, and soil absorption systems shall be located in accordance with Table I as follows:

Table I Separation Distances		
Minimum Distance in Feet from	Septic Tank and Other Treatment Units, Dosing Tank, Lift Station	Soil Absorption System
Private water supply well ^{1,2}	50	50
Private geothermal well ^{1,2}	50	50
Commercial water supply well ¹	100	100
Commercial geothermal well ¹	100	100
Public water supply well, lake, ^{1,3,4} or reservoir ^{1,3,4}	200	200
Other pond, retention pond, lake, or reservoir ³	50	50
Stormwater detention area ^{3,5}	25	25
River, stream, ditch, or drainage tile ⁶	25	25
Buildings, foundations, slabs, garages, patios, barns, aboveground and belowground swimming pools, retaining walls, closed loop geothermal systems, roads, driveways, parking areas, or paved sidewalks	10 ⁷	10 ⁸
Front, side, or rear lot lines	5	5
Water lines continually under pressure	10	10
Suction water lines	50	50
Sinkhole	25	25
¹ The distances enumerated shall be doubled for soil absorption systems constructed where there exist horizons, layers, or strata within thirty-four (34) inches of the ground surface with a soil loading rate greater than seventy-five hundredths (0.75) gallons per day per square foot as determined from Table IV of section 70(b)(8) of this rule, unless that hazard can be overcome through on-site sewage system design.		
² The separation distance to a private water supply well abandoned in accordance with 312 IAC 13-10-2(e) may be reduced to ten (10) feet.		
³ Measured from the normal or ordinary high water mark.		
⁴ See subsections (b) and (c).		
⁵ Stormwater detention area: area designated for the temporary detention of stormwater, with the outlet located at the lowest elevation of the depression.		
⁶ See section 59(f) of this rule for subsurface drainage system separation.		
⁷ Patios without footers, aboveground swimming pools, and sidewalks may be located within ten (10) feet of a septic tank, as long as no required access points are obstructed.		
⁸ A minimum separation of ten (10) feet is required on all sites.		

(b) A residential on-site sewage system shall not be located within two hundred (200) feet of a public water supply lake or reservoir. However, ~~any~~ a residential on-site sewage system that includes secondary treatment ~~and meets the following requirements~~ may be less than two hundred (200) feet, but not less than fifty (50) feet, from the normal or ordinary high water mark of the lake or reservoir **if it:**

- (1) meets the minimum requirements of section 60(h)(1) through 60(h)(3) of this rule; or
- (2) is a system component independent of the soil absorption field that meets the effluent quality requirements of NSF/ANSI for certification under Standard 40 as a Class I plant, and that is approved by the department under the provisions of section 52(h) of this rule.

(c) ~~Any~~ A residential on-site sewage system approved under the provisions of subsection (b) must be maintained for the life of the system through an operating permit issued under the provisions of section 54 of this rule.

(d) Sewers shall not be located within fifty (50) feet of ~~any~~ a water supply well or subsurface pump suction line, except as follows:

(1) Sewers constructed of waterworks grade ductile iron pipe with tyton or mechanical joints, or PVC pressure sewer pipe with an SDR rating of twenty-six (26) or less with compression gasket joints, may be located within the fifty (50) foot distance.

(2) In no case shall sewers be located closer than twenty (20) feet to dug and bored water supply wells, or closer than ten (10) feet to drilled and driven water supply wells or subsurface pump suction lines.

(e) Water lines and sewers shall not be laid in the same trench, as follows:

(1) A horizontal separation of ten (10) feet shall be maintained between water lines and sewers.

(2) Where crossings are necessary, a minimum of eighteen (18) inches vertical clearance must be maintained with the water line positioned above the sewer line when possible.

(3) When it is impossible to maintain proper horizontal and vertical separation, the sewer shall be constructed of ductile iron pipe with mechanical joints or PVC pressure sewer pipe with an SDR rating of twenty-six (26) or less, having mechanical or compression gasket joints within ten (10) feet of the water line with the water line positioned above the sewer line when possible. The sewer shall be pressure tested to assure watertightness prior to back filling.

(Indiana Department of Health; 410 IAC 6-8.3-57; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; filed Apr 9, 2014, 9:51 a.m.: 20140507-IR-410130350FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA)

SECTION 5. 410 IAC 6-8.3-67 IS AMENDED TO READ AS FOLLOWS:

410 IAC 6-8.3-67 Pipe specifications

Authority: IC 16-19-3-4

Affected: IC 16-19-3-4; IC 16-41-25

Sec. 67. (a) Piping used in a residential on-site sewage system shall meet or exceed the following applicable standards:

(1) Gravity sewer pipe and gravity effluent sewer pipe shall meet the following standards:

(A) For PVC pipe, the following:

(i) ~~ASTM D 2665-12~~ **D 2665-20** for four (4) inch and six (6) inch pipe only.

(ii) ~~ASTM F 891-10 SDR 35 for four (4) inch through eight (8) inch cellular core pipe with minimum pipe stiffness of 50 (PS 50).~~

(iii) ~~(ii)~~ **ASTM D 3034-08 D 3034-2021** for the following:

~~(AA)~~ SDR 26 and SDR 35 for four (4) inch through fifteen (15) inch pipe.

~~(BB) SDR 26 with gasketed compression type joints for special crossings above or below potable water lines where the vertical clearance of eighteen (18) inches required in section 57(c)(2) of this rule cannot be met.~~

(B) For ABS pipe, the following:

(i) ~~ASTM D 2661-11~~ **D 2661-21** for four (4) inch and six (6) inch pipe only.

(ii) ~~ASTM D 2680-01 (Reapproved 2009)~~ **D 2680-2020** for eight (8) inch through fifteen (15) inch pipe.

(iii) ~~ASTM D 2751-05 SDR 23.5 or SDR 35 for four (4) inch and six (6) inch pipe only.~~

(C) ~~ASTM F 480-12~~ **F 480-14 (2022)**, Schedule 40 and 80.

(D) Waterworks grade ductile iron pipe with mechanical or tyton joints.

(2) Pressure sewer, effluent force main, manifold, and pressure distribution lateral pipe shall meet the following standards:

(A) For PVC pipe, the following:

(i) ~~ASTM D 2241-09~~ **D 2241-20** SDR 13.5, SDR 17, SDR 21, or SDR 26.

(ii) ~~ASTM D 1785-06~~ **D 1785-21a** Schedule 40, 80, or 120.

~~(B) For ABS pipe, the following:~~

~~(i) ASTM D 1527-99 (Reapproved 2005) Schedule 40, 80, or 120, with solvent weld fittings.~~

~~(ii) ASTM D 2282-99 (Reapproved 2005) SDR 13.5, SDR 17, SDR 21, or SDR 26.~~

(B) ASTM D 3035-22 DR 7, 9, 11, 13.5, 17, or 21 with the required heat fusion joints being made in accordance with ASTM F2620-20ac2.

(b) Gasketed compression-type joints must be used on pressure sewers when they are located ten (10) feet or less from

a water line.

(c) Soil absorption system gravity distribution laterals shall meet one (1) of the following standards:

- (1) Four (4) inch diameter sewer pipe listed in subsection (a)(1) and (a)(2).
- (2) Four (4) inch diameter PVC pipe meeting ASTM ~~D 2729-11~~ **D 2729-2021**.
- (3) Four (4) inch diameter smooth interior wall polyethylene pipe meeting ASTM ~~F 810-07~~ **F 810-12 (2018)** or AASHTO ~~M 252-09~~ **M 252-23** Type SP.

(d) Gravity distribution laterals shall have two (2) or three (3) rows of holes separated by one hundred twenty (120) degrees with a five-eighths (5/8) inch or three-quarters (3/4) inch hole diameter with holes spaced at five (5) inches or less.

(e) Pipe for subsurface drainage systems shall meet the following standards for polyethylene pipe:

- (1) ASTM F 405-05.
- (2) ASTM ~~F 667-12~~ **F 667-16 (2021)**.
- (3) NRCS 606, ~~September 2003~~ **July 2022**.

(Indiana Department of Health; 410 IAC 6-8.3-67; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA)

SECTION 6. 410 IAC 6-8.3-69 IS AMENDED TO READ AS FOLLOWS:

410 IAC 6-8.3-69 Barrier materials

Authority: IC 16-19-3-4

Affected: IC 16-19-3-4; IC 16-41-25

Sec. 69. (a) The physical characteristics of barrier materials shall have the following minimum average roll values:
(~~MARV~~)

- (1) A grab tensile strength equal to or greater than eighty (80) pounds in machine direction (MD) and cross-machine direction (CD) in accordance with ASTM ~~D 4632-08~~ **D 4632-15a (2023)**.
- (2) A grab tensile elongation ~~@~~ **at** break of equal to or greater than fifty percent (50%) in MD and CD in accordance with ASTM ~~D 4632-08~~ **D 4632-15a (2023)**.
- (3) A trapezoidal tear strength equal to or greater than thirty (30) pounds in MD and CD in accordance with ASTM ~~D 4533-11~~ **D 4533-15**.
- (4) A CBR puncture resistance equal to or greater than one hundred seventy-five (175) pounds in accordance with ASTM ~~D 6241-04 (Reapproved 2009)~~ **D 6241-22a**.
- (5) A permittivity of equal to or greater than 0.5 sec⁻¹ in accordance with ASTM ~~D 4491-99a (Reapproved 2009)~~ **D 4491-22**.
- (6) A water flow rate equal to or greater than one hundred fifty (150) gallons per minute per square foot in accordance with ASTM ~~D 4355-07~~ **D 4355-21**.
- (7) A UV resistance at five hundred (500) hours equal to or greater than seventy percent (70%) strength retained in accordance with ASTM ~~D 4491-99a (Reapproved 2009)~~ **D 4491-22**.
- (8) An apparent opening size (~~AOS~~) (U.S. Sieve) equal to or greater than forty (40) and equal to or less than seventy (70) sieve in accordance with ASTM ~~D 4751-04~~ **D 4751-21a**.

(b) The chemical characteristics of barrier materials shall be:

- (1) nonbiodegradable;
- (2) resistant to acids and alkalis within a pH range of four (4) to ten (10); and
- (3) resistant to common solvents.

(Indiana Department of Health; 410 IAC 6-8.3-69; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA)

SECTION 7. 410 IAC 6-8.3-91 IS AMENDED TO READ AS FOLLOWS:

410 IAC 6-8.3-91 Matters incorporated by reference

Authority: IC 16-19-3-4

Affected: IC 16-19-3-4; IC 16-41-25

Sec. 91. (a) Bulletin SE 11, "The Sanitary Vault Privy", ~~1986~~ **2021** Edition, is incorporated by reference as part of this rule. It is available at the department at 2 North Meridian Street, Indianapolis, ~~Indiana~~ **IN** 46204.

(b) NSF/ANSI Standard 40-2010 and Standard 46-2010a are incorporated by reference as part of this rule. Two (2) copies of each standard are available for reference in the files of the department. Copies of the standards may be obtained by mailing a request to the National Sanitation Foundation, 789 North Dixboro Road, P.O. Box 130140, Ann Arbor, ~~Michigan~~ **MI** 48113-0140, or at www.techstreet.com/cgi-bin/joint.cgi/nsf.

(c) ASTM Standards C 923-08, C 990-09, C 1644-06, ~~D 1527-99 (Reapproved 2005), D 1785-06, D 2241-09, D 2282-99 (Reapproved 2005), D 2661-11, D 2665-12, D 2680-01 (Reapproved 2009), D 2729-11, D 2751-05, D 3034-08, D 4355-07, D 4491-99a (Reapproved 2009), D 4533-11, D 4632-08, D 4751-04, D 6241-04 (Reapproved 2009),~~ **D 1785-21a, D 2241-2020, D 2661-2021, D 2665-2020, D 2680-2020, D 2729-2021, D 3034-2021, D 4355-21, D 4491-2022, D 4533-15, D 4632-2023, D 4751-21a, D 6241-22a**, F 405-05, ~~F 480-12, F 667-12, F 810-07, and F 891-10,~~ **F 480-14 (2022), F 667-16 (2021), and F 810-12 (2018)** are incorporated by reference as part of this rule. Two (2) copies of each standard are available for reference in the files of the department. ASTM standards may be obtained at <http://www.astm.org/Standard/index.shtml>.

(d) AASHTO Standard ~~M252-09~~ **M252-23** is incorporated by reference as part of this rule. Two (2) copies of the standard are available for reference in the files of the department. This standard may be obtained at <https://store.transportation.org/Item/PublicationDetail?ID=5093>.

(e) NRCS Standard 606, ~~September 2003~~ **July 2022**, is incorporated by reference as part of this rule. Two (2) copies of the standard are available for reference in the files of the department. This standard may be obtained at https://www.nrcs.usda.gov/sites/default/files/2022-10/Subsurface_Drain_606_NHCP_CPS_2022.pdf.—
<https://www.nrcs.usda.gov/resources/guides-and-instructions/subsurface-drain-ft-606-conservation-practice-standard>

(f) INDOT 2012 Standard Specifications, Section 904, Aggregates is incorporated by reference as part of this rule. Two (2) copies of the standard are available for reference in the files of the department. The standard may be obtained at <https://www.in.gov/dot/div/contracts/standards/book/sep11/2012Master.pdf>. **<https://www.in.gov/indot/files/2012Master.pdf>**

(g) NEMA 250-2008 is incorporated by reference as part of this rule. Two (2) copies of the standard are available for reference in the files of the department. The standard may be obtained at <https://webstore.ansi.org/standards/nema/nema2502008>. (*Indiana Department of Health; 410 IAC 6-8.3-91; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA*)