**FINAL RULE**

SECTION 1. 410 IAC 6-8.3-5.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-5.1 "Base flood elevation" or "BFE" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 5.1. "Base flood elevation" or "BFE" means the elevation of surface water resulting from a flood for which there is a one percent (1%) probability of equaling or exceeding that level in any given year, as calculated by a method and procedure approved by the natural resources commission. The base flood elevation is also referred to as the regulatory or one hundred (100) year flood elevation.**

*(Indiana Department of Health; 410 IAC 6-8.3-5.1)*

SECTION 2. 410 IAC 6-8.3-7.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-7.1 "Best judgment" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 7.1. "Best judgment" means the process by which a local health department reviews the site and soil evaluation report and site characteristics in a situation where a residential on-site sewage system has failed, and a replacement soil absorption system cannot meet the requirements of this rule for new construction. The local health department may use their best judgment to approve deviations from this rule on a case-by-case basis to permit the optimal approach to soil absorption system replacement that meets the requirements of this rule to the greatest extent possible.**

*(Indiana Department of Health; 410 IAC 6-8.3-7.1)*

SECTION 3. 410 IAC 6-8.3-7.2 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-7.2 "Cesspool" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 7.2. "Cesspool" means a relatively shallow underground reservoir from which effluent seeps out of the sidewalls. A cesspool is typically not preceded by a septic tank.**

*(Indiana Department of Health; 410 IAC 6-8.3-7.2)*

SECTION 4. 410 IAC 6-8.3-8.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-8.1 "Construction, new" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 8.1. "Construction, new" means either:**

**(1) construction of a new residence or residential outbuilding where there previously was no residence or residential outbuilding; or**

**(2) replacing, rebuilding, or remodeling an existing home or residential outbuilding when the design daily flow of the new structure or structures exceeds what was previously at the site.**

**Best judgment, as described in this rule for replacement of failed soil absorption systems, may not be used for new construction.**

*(Indiana Department of Health; 410 IAC 6-8.3-8.1)*

SECTION 5. 410 IAC 6-8.3-8.2 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-8.2 "Construction, repair or replacement" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 8.2. "Construction, repair or replacement" means either:**

**(1) repair or replacement of a residential on-site sewage system for an existing home or residential outbuilding; or**

**(2) rebuilding or remodeling an existing home or residential outbuilding without an increase in the design daily flow of the project.**
**In accordance with this rule, the best judgment of the local health department may be used, when necessary and appropriate, for the repair or replacement of a soil absorption system in a failing residential on-site sewage system.**

*(Indiana Department of Health; 410 IAC 6-8.3-8.2)*

SECTION 6. 410 IAC 6-8.3-12 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-12 "Design daily flow" or "DDF" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 12. **(a)** "Design daily flow" or "DDF" means the calculated peak daily sewage flow from a residence used to design a residential on-site sewage system. ~~It is one hundred fifty (150) gallons per day times the number of bedrooms and bedroom equivalents.~~

**(b) For dwellings that are not tiny houses or recreational vehicles, the DDF is one hundred fifty (150) gallons per day times the number of bedrooms and bedroom equivalents.**

**(c) For tiny houses, the DDF is a minimum of three hundred (300) gallons per day.**

**(d) For recreational vehicles used as dwelling units that will be connected to a residential on-site sewage system via a residential sewer that discharges to a septic tank or a holding tank, the DDF is fifty (50) gallons per day times the maximum occupancy number indicated by the recreational vehicle manufacturer. This does not apply to recreational vehicles in campgrounds that are regulated under 410 IAC 6-7.1, et. seq.**

*(Indiana Department of Health; 410 IAC 6-8.3-12; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 7. 410 IAC 6-8.3-12.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-12.1 "Designer" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 12.1. "Designer" means an individual who designs and submits detailed on-site sewage system construction plans to the local health department for review as part of an on-site sewage system construction permit application.**

*(Indiana Department of Health; 410 IAC 6-8.3-12.1)*

SECTION 8. 410 IAC 6-8.3-14 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-14 "Drainageway" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 14. "Drainageway" means the channel portion of the landscape, **or ephemeral stream,** in which surface water or rainwater runoff ~~gathers intermittently to flow~~ **flows** to a lower elevation.

*(Indiana Department of Health; 410 IAC 6-8.3-14; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 9. 410 IAC 6-8.3-14.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-14.1 "Drywell" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 14.1. "Drywell" means a subsurface excavation, typically reinforced along the outer walls with brick, blocks, metal, or precast concrete, and may contain aggregate in the interior of the lining. A drywell is often bottomless. A drywell may or may not be preceded by a septic tank and is usually deeper than thirty-six (36) inches. Sewage seeps out of the sidewalls and bottom of a drywell.**

*(Indiana Department of Health; 410 IAC 6-8.3-14.1)*

SECTION 10. 410 IAC 6-8.3-16.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-16.1 "Fixed reference point" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 16.1. "Fixed reference point" means a location that is readily identifiable, from which measurements can be taken to describe the location of soil borings, soil pits, and system components, and must remain in place until the project is completed. Measurements to fixed reference points may be made using distance measuring tools as long as they are accurately and precisely replicable.**

*(Indiana Department of Health; 410 IAC 6-8.3-16.1)*

SECTION 11. 410 IAC 6-8.3-17.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-17.1 "Fragic soil properties" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 17.1. "Fragic soil properties" means a diagnostic soil characteristic associated with some soil aggregates in subsoil horizons of mineral soils. Aggregates with fragic properties are firm or firmer and brittle when the moisture content is at or near field capacity. Air-dry fragments slake when submerged in water, but are weakly cemented or not cemented. In addition, the aggregates show evidence of pedogenesis and are restrictive to roots. In effect, fragic soil properties are recognized in materials exhibiting all the characteristics of a fragipan except for continuity or thickness. Fragic soil properties are diagnostic for fragic subgroups (intergrades to other soil classes having a fragipan). Soil horizons that exhibit fragic properties, including those that qualify as fragipans, are designated by the suffix "x" (e.g., Bx or Btx).**

*(Indiana Department of Health; 410 IAC 6-8.3-17.1)*

SECTION 12. 410 IAC 6-8.3-17.2 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-17.2 "Fragipan" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 17.2. "Fragipan" means a natural, diagnostic subsurface horizon with very low organic matter, high bulk density, or high mechanical strength relative to overlying and underlying horizons, and has a hard or very hard consistence (seemingly cemented) when dry, but showing a moderate to weak brittleness when moist. The layer typically has redoximorphic features, is slowly or very slowly permeable to water, is considered root restricting, and usually has few to many bleached, roughly vertical planes that are faces of coarse or very coarse polyhedrons or prisms, as classified in the U.S. Department of Agriculture's Soil Taxonomy.**

*(Indiana Department of Health; 410 IAC 6-8.3-17.2)*

SECTION 13. 410 IAC 6-8.3-18 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-18 "Health officer" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 18. "Health officer" means ~~the health officer of a local board of health.~~ **an individual that is appointed pursuant to:**

**(1) IC 16-20-2-16; or**
**(2) IC 16-22-8-30.**

*(Indiana Department of Health; 410 IAC 6-8.3-18; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 14. 410 IAC 6-8.3-18.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-18.1 "High strength waste" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 18.1. "High strength waste" means either of the following:**

**(1) Influent to a septic tank or other pretreatment component having any of the following:**

**(A) A five (5) day biochemical oxygen demand ($BOD_5$) greater than three hundred (300) mg/L.**

**(B) Total suspended solids (TSS) greater than two hundred (200) mg/L.**

**(C) Fats, oils, and grease (FOGs) greater than fifty (50) mg/L.**

**(2) Effluent from a septic tank or other pretreatment component discharged to a soil absorption field having any of the following:**

**(A) A $BOD_5$ greater than one hundred seventy (170) mg/L.**

**(B) TSS greater than sixty (60) mg/L.**

**(C) FOGs greater than twenty-five (25) mg/L.**

*(Indiana Department of Health; 410 IAC 6-8.3-18.1)*

SECTION 15. 410 IAC 6-8.3-18.2 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-18.2 "IAPMO" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 18.2. "IAPMO" means the International Association of Plumbing and Mechanical Officials.**

*(Indiana Department of Health; 410 IAC 6-8.3-18.2)*

SECTION 16. 410 IAC 6-8.3-19.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-19.1 "Inspector" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 19.1. "Inspector" means an individual who performs inspections of existing on-site sewage systems in compliance with section 54.1 of this rule to determine system compliance with this rule.**

*(Indiana Department of Health; 410 IAC 6-8.3-19.1)*

SECTION 17. 410 IAC 6-8.3-19.2 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-19.2 "Installer" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 19.2. "Installer" means an individual who performs any work in furtherance of the:**

**(1) construction;**

**(2) installation;**

**(3) replacement;**

**(4) alteration;**

**(5) repair;**

**(6) expansion; or**

**(7) abandonment;**

**of a residential on-site sewage system subject to the provisions of this rule.**

*(Indiana Department of Health; 410 IAC 6-8.3-19.2)*

SECTION 18. 410 IAC 6-8.3-20 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-20 "Interceptor drain" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 20. "Interceptor drain" means a subsurface drainage system constructed only on the upslope side or sides of a soil absorption system for the purpose of **lowering a seasonal high-water table and** diverting subsurface water around the soil absorption system site.

*(Indiana Department of Health; 410 IAC 6-8.3-20; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 19. 410 IAC 6-8.3-20.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-20.1 "Involuntary" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 20.1. "Involuntary" means a need to modify or improve a dwelling or residential outbuilding due to factors outside the owner's control, such as destruction by wind, fire, flood, or other natural disaster, or condemnation of a dwelling.**

*(Indiana Department of Health; 410 IAC 6-8.3-20.1)*

SECTION 20. 410 IAC 6-8.3-20.2 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-20.2 "Limiting layer" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 20.2. (a) "Limiting layer" means a soil horizon that restricts the suitability of a site for a soil absorption system or the depth of installation of a soil absorption system. A limiting layer can be a restrictive soil horizon or poor filter.**

**(b) A restrictive limiting layer is a soil horizon:**

**(1) with a soil loading rate less than twenty-five hundredths (0.25) gpd/ft$^2$, as assigned in Table IV in section 70(b)(7) of this rule or Table V in section 72(b)(6) of this rule; or**

**(2) that is transitional to dense till, developed from Wisconsinan glacial till, which shows effervescence when treated with a ten percent (10%) hydrochloric acid solution, unless:**

**(A) the on-site soils evaluation report shows that the presence of the soil horizon is not detrimental to an on-site sewage system properly functioning, as determined by a registered professional soil scientist; and**

**(B) the determination in clause (A) is made using the guidelines set forth in the soil manuals, technical bulletins, and handbooks of the NRCS.**

**(c) A poor filter limiting layer is a soil horizon with:**

**(1) a soil loading rate greater than seventy-five hundredths (0.75) gpd/ft$^2$, as assigned in Table IV in section 70(b)(7) of this rule or Table V in section 72(b)(6) of this rule, for a gravity fed or flood dosed subsurface trench on-site sewage system;**

**(2) a soil loading rate greater than one and twenty-hundredths (1.20) gpd/ft$^2$, as assigned in Table IV in section 70(b)(7) of this rule or Table V in section 72(b)(6) of this rule, for any type of on-site sewage system;**

**(3) less than twenty percent (20%) clay by volume and greater than thirty-five percent (35%) coarse fragments by volume; or**

**(4) greater than or equal to twenty percent (20%) clay by volume and greater than sixty percent (60%) coarse fragments by volume.**

*(Indiana Department of Health; 410 IAC 6-8.3-20.2)*

SECTION 21. 410 IAC 6-8.3-27 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-27 "Perimeter drain" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 27. "Perimeter drain" means a subsurface drainage system that completely surrounds a soil absorption system for the purpose of lowering a seasonal high-water table ~~or~~ **and** preventing movement of subsurface water into a soil absorption system site.

*(Indiana Department of Health; 410 IAC 6-8.3-27; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 22. 410 IAC 6-8.3-30.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-30.1 "Recreational vehicle used as a dwelling unit" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 30.1. "Recreational vehicle used as a dwelling unit" means a travel trailer, park model, collapsible trailer, truck-mounted camper, or motor home that is used as a dwelling unit and connected to a permanent on-site sewage system via a residential sewer to a septic or holding tank. A recreational vehicle used as a dwelling unit does not include recreational vehicles in campgrounds that are regulated under 410 IAC 6-7.1, et seq., or those that use a properly maintained portable sewage tank and are not connected to an on-site sewage system.**

*(Indiana Department of Health; 410 IAC 6-8.3-30.1)*

SECTION 23. 410 IAC 6-8.3-32 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-32 "Residential on-site sewage system" or "on-site sewage system" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 32. "Residential on-site sewage system" or "on-site sewage system" means all equipment and devices necessary for proper conduction, collection, storage, **and on-site** treatment and ~~on-site disposal~~ **dispersal** of sewage from:

(1) a one (1) or two (2) family dwelling;

(2) a residential outbuilding; or

(3) two (2) single-family dwellings on the same property, with a combined DDF of less than or equal to seven hundred fifty (750) gallons per day.

The term includes, but is not limited to, residential sewers, **grease traps,** septic tanks, **secondary treatment units, dosing tanks, effluent pumps, distribution boxes,** soil absorption systems, ~~temporary~~ **subsurface drainage systems, dispersal areas,** sewage holding tanks, and sanitary vault privies. **The term also includes any miscellaneous components that may be required to ensure proper operation and function of the system as described in this rule.**

*(Indiana Department of Health; 410 IAC 6-8.3-32; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 24. 410 IAC 6-8.3-32.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-32.1 "Residential on-site sewage system expansion" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 32.1. "Residential on-site sewage system expansion" means the addition of any system component or components, or an increase in the size of a soil absorption system to try to prevent, stop, or abate a residential on-site sewage system failure or to increase the capacity of the system without a voluntary increase in the design daily flow of the structure or structures served.**

*(Indiana Department of Health; 410 IAC 6-8.3-32.1)*

SECTION 25. 410 IAC 6-8.3-33 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-33 "Residential on-site sewage system failure" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 13-18-12-9; IC 16-19-3**

Sec. 33. "Residential on-site sewage system failure" means a residential on-site sewage system that exhibits **at least** one (1) ~~or more~~ of the following:

(1) The on-site sewage system refuses to accept sewage at the rate of design application thereby interfering with the normal use of residential plumbing fixtures.

(2) Effluent discharge exceeds the absorptive capacity of the soil, resulting in ponding, seepage, or other discharge of the effluent to the ground surface or ~~to~~ surface waters.

(3) Effluent is discharged from the on-site sewage system, causing contamination of a potable water supply, groundwater, ~~or~~ surface waters, **or is discharged to something other than a soil absorption field.**

**(4) A dwelling or residential outbuilding with plumbing that is not connected to a sanitary sewer and does not have a residential on-site sewage system, as defined herein, or an onsite residential sewage discharging disposal system in compliance with IC 13-18-12-9(d).**

**(5) Sewage or effluent discharged to a drywell or cesspool.**

A failed residential on-site sewage system is a **public and an environmental** health hazard.

*(Indiana Department of Health; 410 IAC 6-8.3-33; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 26. 410 IAC 6-8.3-33.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-33.1 "Residential on-site sewage system malfunction" or "malfunction" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 33.1. "Residential on-site sewage system malfunction" or "malfunction" means a residential on-site sewage system component that is not functioning in accordance with this rule or the manufacturers' requirements. Residential on-site sewage system malfunction does not have to meet the definition of residential on-site sewage system failure, but there may also be failure. Malfunction may include, but is not limited to, at least one (1) of the following:**

**(1) The backup of sewage into an upstream on-site sewage system component.**

**(2) The liquid level in a septic tank above the invert of the septic tank outlet.**

**(3) An outlet filter that is plugged sufficiently to cause backup in the septic tank.**

**(4) The liquid level in a dosing tank above the level of the pump activation float.**

**(5) The liquid level in a treatment unit above that recommended by the manufacturer.**

**(6) The liquid level in a distribution box consistently above the invert of the outlets.**

**(7) A distribution box that does not provide equal distribution.**

**(8) Structural failure of a septic tank, dosing tank, treatment unit, distribution box, or other required component.**

**(9) Electrical failure of any electrical component of an on-site sewage system.**

**(10) Removal of any system component required in the construction or operating permit.**

*(Indiana Department of Health; 410 IAC 6-8.3-33.1)*

SECTION 27. 410 IAC 6-8.3-33.2 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-33.2 "Residential on-site sewage system repair" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 33.2. "Residential on-site sewage system repair" means an activity undertaken to replace or modify an existing component or components of an existing on-site sewage**

**system. The repair may include the addition, repair, or replacement of a component or components:**

**(1) such as a tank, a sewer pipe, an effluent pump, etc.; or**

**(2) of the existing soil absorption system, such as a pipe, chamber, or a distribution box.**

**Residential on-site sewage system repair does not include routine maintenance of the system.**

*(Indiana Department of Health; 410 IAC 6-8.3-33.2)*

SECTION 28. 410 IAC 6-8.3-33.3 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-33.3 "Residential on-site sewage system replacement" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 33.3. "Residential on-site sewage system replacement" means an activity undertaken to replace a soil absorption system. Residential on-site sewage system replacement may also include adding, replacing, or repairing any other system component or components needed for the system to comply with this rule. In accordance with this rule, the best judgment of the local health department may be used, when necessary and appropriate, for the repair or replacement of a soil absorption system in a failing residential on-site sewage system.**

*(Indiana Department of Health; 410 IAC 6-8.3-33.3)*

SECTION 29. 410 IAC 6-8.3-35.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-35.1 "Responsible charge of installers" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 35.1. "Responsible charge of installers" means the direct control and personal supervision by a registered installer of the work being performed at a job site for the installation of an on-site sewage system, including, but not limited to, site preparation work, tilling, construction, finish grading, and soil stabilization for all components of the on-site sewage system being installed.**

*(Indiana Department of Health; 410 IAC 6-8.3-35.1)*

SECTION 30. 410 IAC 6-8.3-35.2 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-35.2 "Secondary safety device" defined**

**Authority: IC 16-19-3-4**

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

**Sec. 35.2. "Secondary safety device" means a device installed below a riser cover of a tank that is commercially manufactured for the purpose of preventing accidental entry into the tank and is compliant with IC 16-41-25-3.**

*(Indiana Department of Health; 410 IAC 6-8.3-35.2)*

SECTION 31. 410 IAC 6-8.3-39 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-39 "Segment drain" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 39. "Segment drain" means a subsurface drainage system constructed between two (2) soil absorption fields in the same on-site sewage system for the purpose of **lowering a seasonal high-water table and** intercepting and diverting subsurface water away from the downslope soil absorption field.

*(Indiana Department of Health; 410 IAC 6-8.3-39; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 32. 410 IAC 6-8.3-41.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-41.1 "Sewage holding tank" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 41.1. "Sewage holding tank" means a tank or series of tanks designed to hold sewage until it is pumped by a licensed septage management vehicle, and the outlet of the tank or the last tank in the series has been sealed to prevent sewage from discharging.**

*(Indiana Department of Health; 410 IAC 6-8.3-41.1)*

SECTION 33. 410 IAC 6-8.3-41.2 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-41.2 "Soil" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3; IC 25-31.5-1-9**

**Sec. 41.2. "Soil" has the meaning set forth in IC 25-31.5-1-9.**

*(Indiana Department of Health; 410 IAC 6-8.3-41.2)*

SECTION 34. 410 IAC 6-8.3-43 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-43 "Soil absorption system" or "soil absorption field" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 43. "Soil absorption system" or "soil absorption field" means pipes or chambers laid in a system of subsurface trenches, or pipes laid in elevated beds, into which the effluent from the septic tank is discharged into the soil for treatment and dispersal. **The soil absorption system also includes the distribution box and the effluent sewers after the distribution box, or the pressure manifold.**

*(Indiana Department of Health; 410 IAC 6-8.3-43; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 35. 410 IAC 6-8.3-43.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-43.1 "Soil boring" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 43.1. "Soil boring" means an excavation made by a soil auger, a probe, or similar small diameter soil sampling equipment used to pull soil samples out of the ground that are used to provide a description and characterization of the soil.**

*(Indiana Department of Health; 410 IAC 6-8.3-43.1)*

SECTION 36. 410 IAC 6-8.3-44 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-44 "Soil horizon" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 44. "Soil horizon" means a layer of soil or soil material approximately parallel to the land surface and differing from adjacent genetically related layers in physical, chemical, and biological properties or characteristics, such as:

(1) color;

(2) structure, **including grade, shape, and size;**

(3) texture;

(4) consistence;

**(5) percent coarse fragments;**

~~(5)~~ **(6)** kinds and numbers of organisms present; and

~~(6) degree of~~ **(7)** acidity or alkalinity.

*(Indiana Department of Health; 410 IAC 6-8.3-44; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 37. 410 IAC 6-8.3-45 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-45 "Soil loading rate" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 45. "Soil loading rate" means the ~~allowable~~ rate of application of septic tank effluent, ~~to the~~ **expressed in U.S. gallons, that may be applied daily per square foot of** soil. ~~It is expressed in gallons per day per square foot.~~

*(Indiana Department of Health; 410 IAC 6-8.3-45; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 38. 410 IAC 6-8.3-45.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-45.1 "Soil pit" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 45.1. "Soil pit" means an excavation that is wide, deep, and long enough for the soil scientist to enter safely, according to the federal Occupational Safety and Health Administration and any other federal, state, or local requirements, to directly observe, characterize, and describe the soil profile.**

*(Indiana Department of Health; 410 IAC 6-8.3-45.1)*

SECTION 39. 410 IAC 6-8.3-46 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-46 "Soil profile analysis" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 46. "Soil profile analysis" means the observation and evaluation of the physical, **chemical, and biological** characteristics of the soil horizons or layers to:

(1) a depth of at least five (5) feet; or

(2) if shallower, ~~a~~ **to the depth of the limiting** layer. ~~that cannot be readily penetrated.~~

*(Indiana Department of Health; 410 IAC 6-8.3-46; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 40. 410 IAC 6-8.3-49 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-49 "Subsurface drainage system" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 49. "Subsurface drainage system" means any pipe with or without a layer of gravel, stone, or ~~coarse~~ sand, placed below the surface of the ground and designed or constructed in ~~such~~ a ~~manner as to:~~ **way that:**

(1) effectively ~~lower~~ **lowers** a seasonal high-water table; ~~or~~ **and**

(2) ~~prevent~~ **prevents** movement of subsurface water into a soil absorption system site.

Interceptor, ~~drains,~~ perimeter, ~~drains,~~ and segment drains are types of subsurface drainage systems.

*(Indiana Department of Health; 410 IAC 6-8.3-49; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 41. 410 IAC 6-8.3-50 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-50 "Technology new to Indiana" or "TNI" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3-27.5**

Sec. 50. "Technology new to Indiana" or "TNI" means on-site sewage treatment or disposal methods, processes, or equipment not described in this rule that have been approved by the: ~~department in accordance with section 52(h) of this rule.~~

**(1) Technical Review Panel for TNI components that meet the requirements of NSF/ANSI 40, NSF/ANSI 245, or NSF/ANSI 350 in accordance with IC 16-19-3-27.5; or**

**(2) The department for TNI that does not meet the requirements of NSF/ANSI 40, NSF/ANSI 245, or NSF/ANSI 350 in accordance with section 52(h) of this rule.**

*(Indiana Department of Health; 410 IAC 6-8.3-50; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 42. 410 IAC 6-8.3-50.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-50.1 "Temporary benchmark" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 50.1. "Temporary benchmark" means an object whose actual elevation, or an arbitrarily assumed elevation of that object, is used as a point of reference until the project is completed.**

*(Indiana Department of Health; 410 IAC 6-8.3-50.1)*

SECTION 43. 410 IAC 6-8.3-50.2 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-50.2 "Tiny house" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 50.2. "Tiny house" means a structure used as a dwelling that is not more than four hundred (400) square feet in floor area, not including lofts.**

*(Indiana Department of Health; 410 IAC 6-8.3-50.2)*

SECTION 44. 410 IAC 6-8.3-50.3 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-50.3 "Upgraded piping" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 50.3. "Upgraded piping" means:**

**(1) waterworks grade ductile iron pipe, with tyton or mechanical joints; or**

**(2) PVC pressure sewer pipe, with an SDR rating of twenty-six (26) or less, with compression gasket joints.**

*(Indiana Department of Health; 410 IAC 6-8.3-50.3)*

SECTION 45. 410 IAC 6-8.3-50.4 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-50.4 "Voluntary" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 50.4. "Voluntary" means an owner's intentional or deliberate action to modify or improve a dwelling or residential outbuilding.**

*(Indiana Department of Health; 410 IAC 6-8.3-50.4)*

SECTION 46. 410 IAC 6-8.3-50.5 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-50.5 "Watertight tank" defined**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 50.5. "Watertight tank" means that water or effluent cannot leak into or out of the tank except through piping in the designated pipe penetration ports or connectors in the tank. Pipe penetrations or connections in all tanks must result in a connection that does**

**not allow liquid to flow around the pipe penetration into or out of the tank. Results of watertightness testing, as specified in IAPMO/ANSI Z1000-2019 9.1, may be provided to confirm watertightness of new tanks. For existing tanks, the water test procedure outlined in IAPMO/ANSI Z1000-2019 9.1.3 may be used for watertightness testing.**

*(Indiana Department of Health; 410 IAC 6-8.3-50.5)*

SECTION 47. 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 13-18-12-9; 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~~ **a** local ~~boards of~~ health **department** through their health officer and the health officer's authorized representatives.

(b) Each local health department residential on-site sewage system permit program is subject to review by the department. 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) In accordance with IC 16-41-25-10 and IC 16-41-25-11, the department or its agent, or the health officer or ~~the health officer's~~ **their** 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.

**(e) Residential onsite sewage discharging disposal systems, as regulated by IC 13-18-12-9:**

**(1) are not regulated by this rule; and**

**(2) may be used if all of the requirements of IC 13-18-12-9 are met.**

*(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; filed Feb 27, 2024, 10:34 a.m.: 20240327-IR-410220395FRA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 48. 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 13-18-12-9; IC 16-19-3-27.5; IC 16-41-25-9**

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 **or** permit ~~or suffer~~ to be thrown, run, drained, allowed to seep, or otherwise disposed into those waters, 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) If a residential on-site sewage system failure occurs, the local health officer may require the residence and residential outbuilding, if applicable, to make a direct connection to a sanitary sewer, if the sanitary sewer is available within three hundred (300) feet of the affected property line and available for connection at a construction cost and connection fee estimated not to exceed one hundred fifty percent (150%) of the cost estimated for installing an on-site sewage system to serve the residence or residential outbuilding.**

~~(b)~~ **(c)** The:

(1) design;

(2) construction;

(3) installation;

(4) location;

(5) maintenance; and

(6) operation;

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

~~(c) All~~ **(d)** Residential on-site sewage systems ~~utilizing~~ **using** sanitary privies ~~shall~~ **must** conform to department bulletin S.E. 11, "The Sanitary Vault Privy", 2021 edition.

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

**(1) A residential on-site sewage system in compliance with this rule that includes a:**

**(A) septic tank and soil absorption system that is not in failure;**

**(B) sewage holding tank in compliance with IC 16-41-25-9 and this rule; or**

**(C) sanitary vault privy installed in compliance with Bulletin S.E. 11, 2021 edition. A sanitary vault privy may be used as the sole method of sewage disposal only if the dwelling or residential outbuilding does not have interior plumbing, including fixtures, water lines, waste collection piping, or residential drains. A sanitary vault privy may also be used in conjunction with another type of on-site sewage system.**

**(2) An onsite residential sewage discharging disposal system in compliance with IC 13-18-12-9(d).**

~~(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 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.~~

**(f) A cesspool or drywell, with or without a septic tank, is not a suitable means of residential sewage disposal.**

(g) If any conditions preclude the installation of a residential on-site sewage system ~~as~~ described in this rule, the local ~~board of~~ health **department** may not approve the use

of 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 **on-site sewage system** 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 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~~ **TNI may be approved as follows:**

**(1) The Technical Review Panel may approve TNI that meets the requirements of NSF/ANSI 40, NSF/ANSI 245, or NSF/ANSI 350 in accordance with IC 16-19-3-27.5; or**

**(2) The department may approve a TNI component or components that do not meet the requirements of NSF/ANSI 40, NSF/ANSI 245, or NSF/ANSI 350 if:**

**(A) extensive experience or records of use have not been developed in Indiana; and**

**(B) the applicant for the approval submits 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~~ **a** residential on-site sewage system or its associated drainage system, **a sewage holding tank, or a sanitary vault privy** shall be constructed ~~upon~~ **on** property other than that from which the sewage originates unless ~~easements~~ **an easement or a declaration of an on-site sewage system easement, if both properties are owned by the same person,** which ~~grant~~ **grants** permission for the construction and access for system maintenance, ~~have~~ **has** been obtained for that property and ~~have~~ **has** 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.

These sewage systems shall 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) A jetted bathtub with a capacity of greater than one hundred twenty-five (125) gallons ~~shall~~ **must** be treated as an extra bedroom for the on-site sewage system sizing requirements of this rule.

**(l) An existing residential on-site sewage system may be considered for connection or reconnection to a new or replacement dwelling or residential outbuilding if the following apply:**

**(1) The system is inspected as described in section 54.1 of this rule and found to consist minimally of an on-site sewage system described in this rule that is neither in failure nor malfunctioning.**

**(2) Either:**

**(A) the original system installation was permitted through the local health department and the permit file contains enough information to verify that the system location, design, and sizing are compliant with the rule in place at the time of the system installation; or**

**(B) an installer or inspector develops a plan of the site and system, a soil scientist completes an on-site soil evaluation, and the system is shown to be compliant with the rule in place at the time of the system installation.**

**(3) The existing system is appropriately sized for the structure to be served as follows:**

**(A) If the connection or reconnection is due to involuntary events, the local health department may use their best judgment for the soil absorption field when approving a connection or reconnection to an existing system; or**

**(B) If the connection or reconnection is due to voluntary events, the system being connected to must meet the requirements of this rule.**

**(4) An on-site sewage system construction permit for connection or reconnection to an existing on-site sewage system must be obtained before construction of the residence or residential outbuilding begins.**

*(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; filed Feb 27, 2024, 10:34 a.m.: 20240327-IR-410220395FRA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 49. 410 IAC 6-8.3-52.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-52.1 Professional standards for on-site sewage system installers**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3; IC 16-41-25-12**

**Sec. 52.1. (a) On-site sewage system installers shall abide by all associated requirements in state statutes, rules, and local ordinances regarding on-site sewage systems.**

**(b) An installer shall register with the local health department if they wish to install, expand, replace, alter, repair, or abandon a residential on-site sewage system. Registration requires:**

**(1) applying for installer registration on a form provided by the local health department; and**

**(2) completing one of the following if the local health department requires competency testing:**

**(A) passing an examination offered by the department or local health department; or**

**(B) passing an examination offered by another entity approved by the department or local health department; or**

**(C) providing proof of registration in another Indiana county and a certificate issued by the Indiana Onsite Wastewater Professionals Association in accordance with IC 16-41-25-12(b).**

**(c) A registered installer has responsible charge for the work being performed on the on-site sewage system.**

**(d) An installer who only abandons on-site sewage systems is exempt from competency testing.**

**(e) A lapse of certification or registration, or repeated violation of any state statute, rule, or ordinance regarding on-site sewage systems, may result in the revocation or denial of registration renewal by the local health officer.**

*(Indiana Department of Health; 410 IAC 6-8.3-52.1)*

SECTION 50. 410 IAC 6-8.3-53 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-53 On-Site Sewage System Construction permits**

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

**Affected: IC 16-19-3-27.6; IC 16-19-3-27.8; IC 16-41-25**

Sec. 53. (a) For 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 **on-site sewage system** construction permit, signed by the health officer, for construction of a residential on-site sewage system ~~prior to~~ **before** 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 a dwelling, place of residence, or residential outbuilding that includes plumbing;

(5) reconstruction of 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) **installation of any component of an on-site sewage system or the** addition to, alteration of, **expansion 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; **or**

**(9) connection or reconnection to an existing on-site sewage system.**

(b) A local health department shall not issue **an on-site sewage system** construction permit for a new on-site sewage system, 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~~ **Before a permit is issued, an** application for **an on-site sewage system** construction permit ~~shall~~ **must** be made ~~on a form provided by~~ **to** the local health department. ~~The~~ **A complete** application ~~shall~~ **must** contain, or include as attachments, the following:

(1) ~~Information on~~ **A completed form provided by the local health department containing** the following:

(A) The name, ~~and address,~~ **physical and mailing addresses, and contact information** of the property owner **and agent, if applicable.**

(B) The **physical address, if available, or specific** location of the property.

(C) The number of bedrooms and bedroom equivalents **or the manufacturer's occupancy rating for a recreational vehicle used as a dwelling unit.**

**(D) The inclusion of grinder and sewage ejector pumps, or water using appliances that affect the waste strength characteristics or volume from the dwelling or residential outbuilding in the residential plumbing.**

**(2) A floor plan of the residence showing all rooms and levels.**

**(3) A plat or legal description of the property.**

~~(2)~~ **(4)** 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)~~ **(5)** Written plans of **the site and residential on-site sewage system created by a designer, with** sufficient clarity that it can be verified that the design of the residential on-site sewage system ~~shall comply~~ **complies** with the provisions of this rule, **including, but not limited to, the following:**

**(A) The location and type of water supply source to serve the dwelling or residential outbuilding.**

**(B) A detailed list of components and materials to be included in the on-site sewage system.**

**(C) The location and elevation assigned to the temporary benchmark.**

**(D) The location of all soil borings and pits and two (2) fixed reference points, if available. At least one reference point is required.**

**(E) Sufficient elevations to determine and confirm:**

**(i) the slope of all sewers;**

**(ii) the total dynamic head for effluent pump sizing;**

**(iii) that the soil absorption field is placed along the contour of the site;**

**(iv) the maximum installation depth of the soil absorption field;**

**(v) the depth of subsurface drainage from grade and the invert of the adjacent trench bottom elevation; and**

**(vi) the slope of the subsurface drainage tile throughout the subsurface drain and outlet.**

**(F) The applicable separation distances to items listed in Table I in section 57 of this rule from any on-site sewage system component.**

**(G) Landscape features in the general vicinity of the proposed on-site sewage system that would impact the system layout, installation, or function.**

~~(4)~~ **(6) Before issuing an on-site sewage system construction permit for the repair, expansion, or alteration of an existing residential on-site sewage system, the local health department must confirm that:**

**(A) the system proposed for repair, expansion, or alteration is a residential on-site sewage system as defined in section 32;**

**(B) an inspection of the existing system, as defined in section 54.1 of this rule, is completed and identifies all system components needing replaced, repaired, altered, or expanded;**

**(C) the proposed repair, expansion, or alteration of the system has a reasonable probability of correcting a system failure or malfunction, if necessary, or will adequately increase the DDF of the system, if proposed;**

**(D) the components proposed to be added to, altered, or expanded in the system will be compliant with this rule; and**

**(E) all other requirements for issuance of an on-site sewage system construction permit in this section are fulfilled.**

**(7) Any** other information deemed necessary by the health officer **to verify compliance with this rule for the on-site sewage system.**

**(e) Prior to the abandonment of an on-site sewage system or a septic, dosing, or holding tank, an on-site sewage system construction permit for abandonment must be obtained. The application for an on-site sewage system construction permit for abandonment must contain the name, physical and mailing addresses, and contact information of the property owner and agent, if applicable, and the physical address, if available, or specific location of the property.**

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

~~(g)~~ **(h)** 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

thirty (30) days ~~of receipt of an~~ **after receiving a complete** application and plan submittal **verified compliant with this rule:**

**(1) by the local health department in accordance with subsection (d) of this section; or**

**(2) in accordance with IC 16-41-25-5(b), IC 16-41-25-8(a), or IC 16-19-3-27.6(c).**

~~(h)~~ **(i)** 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~~ **compacting,** or ~~the removal of~~ **removing** soil, until a new on-site evaluation has been conducted and a modified **on-site sewage system** construction permit has been issued.

~~(i)~~ **(j)** A soil absorption system replacement for a residential on-site sewage system ~~shall~~ **must** meet or exceed the minimum provisions of this rule. When **a** replacement **soil absorption field** 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:~~ **department as follows:**

**(1) Best judgment of the local health department must be based on the following:**

~~(1)~~ **(A)** Limitations of the site.

~~(2)~~ **(B)** Written results of an ~~evaluation of the operational status of all of the~~ **inspection of the existing** on-site sewage system ~~components and~~ **as described in section 54.1 of this rule, which identifies the** probable reasons for system failure.

~~(3)~~ **(C)** Written results of an on-site soils evaluation.

~~(j)~~ **(2)** Soil absorption system replacement for a residential on-site sewage system ~~shall not be:~~ **using best judgment may have trenches constructed to a maximum depth of forty-eight (48) inches below final grade, if necessary, and if the site and soil conditions allow.**

~~(1)~~ **(3) Soil absorption system replacements must not be** 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.~~

**(4) Deviations to this rule for soil absorption system replacement must be identified and recorded on the on-site sewage system construction permit issued for the replacement soil absorption system.**

~~(j)~~ **(k) For a residential on-site sewage system failure, the local health department may require an approved aeration unit, in compliance with section 60(h) of this rule, for aerobic digestion after the septic tank and before the soil absorption field, if high strength waste is confirmed to be a contributing factor to the failure. The aeration unit manufacturer shall confirm that the specified unit will reduce the waste strength below that of high strength waste. No sizing reduction for the septic tank or soil absorption field shall be allowed for the use of an aeration unit in this way. The aeration unit may not be required if the homeowner agrees to an appropriate plan approved by the local health officer to reduce the waste strength in another way.**

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

(1) using the procedure ~~published by the local board of health;~~ **in a local ordinance in compliance with IC 16-19-3-27.8;** or

(2) at least forty-eight (48) hours or two (2) working days before any ~~subsurface portions~~ **portion of the system is** ~~are~~ to be covered, if the local health ~~board has not published~~ **department does not have alternative final** inspection procedures **in a local ordinance in compliance with IC 16-19-3-27.8.**

~~(m)~~ **(n)** The **on-site sewage system** 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 fulfilled until the installation is completed, ~~to the satisfaction of~~ **in compliance with this rule and the approved residential on-site sewage system construction plan and approved by** the health officer or the health officer's duly authorized representative.

~~(n)~~ **(o)** Individual lots in subdivisions designed to ~~utilize~~ **use** residential on-site sewage systems, for which the plats were approved by the local plan commission, county health department, or county recorder and recorded ~~prior to~~ **before** December 21, 1990, are exempt from the provisions of sections ~~70(b)(8)~~ **70(b)(7)** and ~~72(b)(7)~~ **72(b)(6)** 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~~ **must** 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)~~ **(p)** Individual lots in subdivisions designed to ~~utilize~~ **use** residential on-site sewage systems, the plats for which were approved by the local plan commission and recorded ~~prior to~~ **before** December 21, 1990, will be granted an exemption by the department from the provisions of section ~~70(b)(8)~~ **70(b)(7)** of this rule if the health officer of the county ~~in which~~ **where** 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)~~ **70(b)(7)** of this rule to be granted.

*(Indiana Department of Health; 410 IAC 6-8.3-53; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; filed Feb 27, 2024, 10:34 a.m.: 20240327-IR-410220395FRA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 51. 410 IAC 6-8.3-54 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-54 Operating permits**

**Authority: IC 16-19-3-27**

**Affected: IC 16-19-3-27; IC 16-41-25-9**

Sec. 54. (a) Local health departments may require written operating permits ~~in accordance with IC 16-19-3-27(b)(2),~~ **for on-site sewage systems as described in IC 16-19-3-27, for on-site sewage systems where best judgment of the local health department was used for permit issuance, and for sanitary vault privies. Local health departments shall issue operating permits for sewage holding tanks in accordance with IC 16-41-25-9 and section 62.1(j) of this rule. Operating permits shall be issued** as follows:

(1) A written operating permit issued by a local health department ~~shall~~ **must** be signed by the health officer.

(2) An operating permit ~~shall~~ **must** be renewed as follows:

(A) At least once every three (3) years for on-site sewage systems having **mechanical** components, ~~other than a septic tank, requiring scheduled inspection and maintenance.~~ **in addition to a septic tank and soil absorption field. Mechanical components include, but are not limited to, effluent pumps, floats, control panels, control sensors, blowers, and flush valves.**

(B) At least once every five (5) years for ~~all other~~ **gravity fed** on-site sewage systems **that consist of only a septic tank and soil absorption field with no mechanical components.**

**(C) At least once every two (2) years for a sewage holding tank or sanitary vault privy.**

(b) An operating permit ~~shall~~ **must** identify all components of an on-site sewage system requiring inspection and maintenance.

(c) The records for an operating permit requiring scheduled inspection and maintenance ~~shall~~ **must** contain the following:

(1) The name, address, and telephone number of the service company contracted to perform inspection and maintenance.

(2) A description of the operation and maintenance document or documents used for scheduled inspection and maintenance.

(d) ~~The~~ **An** owner shall provide the local health department with the following:

(1) Written documentation of all scheduled and unscheduled inspection and maintenance within one (1) month of the date performed.

(2) A copy of the inspection and maintenance contract.

**(e) The local health department may require a system to be inspected, as described in section 54.1 of this rule, detailing the functionality of the system components and maintenance concerns before operating permit renewal.**

**(f) If a service contract is discontinued for any reason, the owner or service provider shall contact the local health department and a new service contract for operation and maintenance must be provided to the local health department within one (1) month of the lapse in contract.**

~~(e)~~ **(g)** The operating permit for a residential on-site sewage system in violation of subsection (d) may be revoked by the health officer in accordance with section 55(e) of this rule.

*(Indiana Department of Health; 410 IAC 6-8.3-54; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 52. 410 IAC 6-8.3-54.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-54.1 Requirements for inspection of existing on-site sewage systems**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

**Sec. 54.1. (a) When an on-site sewage system is to be inspected for:**

**(1) connection or reconnection to an existing on-site sewage system described in section 52(l) of this rule;**

**(2) use of best judgment described in section 53(j) of this rule;**

**(3) operating permit renewal described in section 54(e) of this rule; or**

**(4) other inspections that will be submitted to the local health department for inclusion in the property file;**

**the requirements of this section apply.**

**(b) Before an existing on-site sewage system is inspected, the inspector shall obtain a copy of the on-site sewage system construction permit and operating permit files, if available, including, but not limited to, the permit or permits, construction plan, final inspection documentation, and any complaint information related to the on-site sewage system being inspected from the local health department.**

**(c) The system must minimally include a residential on-site sewage system as defined in this rule as follows:**

**(1) If the system being inspected does not contain, at a minimum, a residential on-site sewage system as specified in section 52(e)(1) of this rule, the inspector shall document that the system does not meet the minimum requirements of this rule.**

**(2) The system being inspected must be evaluated with respect to the appropriate on-site sewage system rule in place during the system permitting and installation.**

**(3) If the system was installed before May 26, 1978, there is no rule with which to comply, but the system must at least consist of a system described in section 52(e)(1) of this rule.**

**(d) Each component of the on-site sewage system must be thoroughly inspected and documented, including, but not limited to the following:**

**(1) The septic tank, holding tank, or privy vault must be pumped by a licensed septage management vehicle and inspected for:**

**(A) working capacity;**

**(B) watertightness and root intrusion;**

**(C) concrete corrosion or tank deformation;**

**(D) functional, intact inlet baffle;**

**(E) functional, intact outlet baffle or outlet filter assembly;**

**(F) functional and safe high-water alarm and electrical box in a holding tank; and**

**(G) riser to grade, securely fastened lid, and secondary safety device, if applicable.**

**(2) The dosing tank, if present, should be pumped if needed, and must be thoroughly inspected and documented, including, but not limited to:**

**(A) working capacity;**

**(B) watertightness and root intrusion;**

**(C) concrete corrosion or tank deformation;**

**(D) riser to grade, securely fastened lid, and secondary safety device, if applicable; and**

**(E) functional and safe effluent pump, pump controls, high-water alarm, and electrical box. If the pump is removed during the inspection, the manufacturer and model of the pump should be documented.**

**(3) If there is a distribution box, the box should be opened for inspection. The box should be visually inspected and documented, including, but not limited to:**

**(A) watertightness and root intrusion;**

**(B) concrete corrosion, box deformation, or cracking;**

**(C) functional, intact inlet baffle with vent hole, if needed;**

**(D) the number of outlets in use;**

**(E) invert of the outlets all at the same level to ensure equal distribution; and**

**(F) the presence of solids or soil in the distribution box.**

**(4) The soil absorption system must be thoroughly observed and traversed. The following must at least be documented:**

**(A) Soft or wet areas.**

**(B) Lush vegetation or areas lacking vegetation.**

**(C) Any blockage or collapse of soil absorption field components.**

**(D) Depth of soil cover over the soil absorption system, as estimated by using a tile probe or similar tool, and final grading to promote surface water runoff.**

**(E) Approximate maximum depth of installation from grade.**

**(F) Signs of disturbance, construction, or compaction in the soil absorption system or dispersal area.**

**(G) Sources of water directed toward the soil absorption system area such as downspouts, sump pump discharge, or hard surface runoff.**

**(5) Drainage, including surface diversion and subsurface drainage, must be inspected, including, but not limited to:**

**(A) the need for surface diversion and the presence or absence of sufficient diversion of surface water;**

**(B) the presence or absence of subsurface drainage; and**

**(C) observation of the subsurface drainage outlet, if accessible.**

**(6) Areas of solid piping should be observed for evidence of crushed piping and wet areas that could indicate a broken pipe.**

**(7) Applicable separation distances must be confirmed.**

**(8) Information obtained from the owner or owner's agent, or from interior inspection of the structure of any sump pump, condensate drain, or other non-sewage source of water discharging to the on-site sewage system.**

**(e) For an operating permit required by the local health department, within thirty (30) days of a completed inspection, a written report of the system evaluation shall be submitted to the local health department, including, but not limited to the following:**

**(1) A sketch of the site and system indicating any changes to the system design from the construction plan in the permit file, areas of concern, inadequate separation distances, and other information necessary to confirm compliance with this rule. A copy of the original construction plan may be used if it is accurate.**

**(2) Indication of system failure, as defined in this rule, or malfunction of any component, if observed.**

*(Indiana Department of Health; 410 IAC 6-8.3-54.1)*

SECTION 53. 410 IAC 6-8.3-55 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-55 Violations; permit denial and revocation**

**Authority: IC 16-19-3-4**

**Affected: IC 4-21.5**

Sec. 55. (a) ~~Should~~ **If** a residential on-site sewage system ~~fail,~~ **fails,** the failure ~~shall~~ **must** be corrected by the owner within the time limit set by the health officer.

(b) If any component of a residential on-site sewage system is found to be:

(1) defective;

(2) malfunctioning; or

(3) in need of service;

the health officer may require the repair, replacement, or service of that component. The repair, replacement, or service ~~shall~~ **must** be conducted within the time limit set by the health officer.

(c) ~~Any~~ **A** person found to be violating this rule may be served by the health officer with a written order stating the nature of the violation and providing a time limit for satisfactory correction thereof.

(d) After receiving an order in writing from the local ~~board of~~ health **department** or ~~the~~ health officer, the owner of the property shall comply with the provisions of this rule, as set forth in the order, and within the time limit specified therein. The order ~~shall~~ **must** be served on the owner or ~~the~~ agent of the owner, but may be served on any person who, by contract with the owner, has assumed the duty of complying with the provisions of an order.

(e) The health officer may deny an application for a construction or **an** operating permit, or may revoke a permit previously issued, for reasons including, but not limited to, any of the following:

(1) An on-site sewage system design does not meet the minimum requirements of this rule or local sewage ordinances, or both.

(2) Failure to comply with any provisions of this rule or local sewage ordinances, or both.

(3) Failure to comply with limitations, terms, or conditions of a permit that has been issued.

(4) Failure to disclose all the facts relevant to the construction and use of an on-site sewage system.

(5) Misrepresentation.

(6) Any change relating to the design, construction, or use of the on-site sewage system not approved, in writing, by the local health department.

(f) The written denial or revocation ~~shall~~ **must** state the following:

(1) The basis for the denial or revocation.

(2) The method or methods available for compliance, if applicable.

(3) The time frame for compliance, if applicable.

(4) That the owner has the right to appeal the denial or revocation.

(5) The procedure for registering ~~any such~~ **an** appeal.

(g) The parties involved may agree to use the appeal procedures set forth in IC 4-21.5, the Administrative Orders and Procedures Act.

*(Indiana Department of Health; 410 IAC 6-8.3-55; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; errata filed Dec 12, 2012, 2:16 p.m.: 20121226-IR-410120156ACA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 54. 410 IAC 6-8.3-56 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-56 On-site soil evaluation**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 56. (a) Before issuance of ~~any~~ **a** permit for construction of a residential on-site sewage system or the replacement or alteration of a soil absorption system, an on-site evaluation, which ~~shall include~~ **includes** a description of the soil profile, ~~shall~~ **must** be conducted.

(b) Properties of the soil at each site ~~shall~~ **must** be described by a **registered professional** soil scientist using the guidelines set forth in the soil manuals, technical bulletins, and handbooks of the NRCS.

**(c) At least three (3) soil profile descriptions must be completed in the area of the soil absorption field and provide good coverage of the entire soil absorption field area. All soil profile descriptions must be representative of the area of the soil absorption field, but do not necessarily have to be located within the footprint of the soil absorption field.**

~~(c)~~ **(d)** Soil profile information ~~shall~~ **must** be recorded:

(1) to a depth of five (5) feet; or

(2) until a **limiting** layer is encountered; ~~that cannot be readily penetrated;~~

whichever is shallower.

~~(d)~~ **(e)** The on-site evaluation ~~shall~~ **must** be conducted before application and plan submittal.

~~(e)~~ **(f)** The information in the written on-site soils evaluation report ~~shall~~ **must** include the following:

(1) For topographic information, the following:

(A) The slope and slope aspect.

(B) Surface drainage characteristics and patterns, including swales, ditches, and streams.

(C) The proposed or existing location of house and well or other water supply.

(D) The location of other major features or structures.

(E) The location of soil evaluation sites **related to two (2) fixed reference points when possible, but at least one fixed reference point must be identified on all sites,** and appropriate soil type boundaries.

(F) The topographic position of the site.

(2) For soil characteristics, the following:

(A) Parent material.

(B) The approximate depths of soil horizons.

(C) The soil color, structure, and texture at each horizon.

(D) The horizon designation for each horizon.

(E) The depth to any layer that has a soil loading rate greater than seventy-five hundredths (0.75) gallons per day, per square foot or less than twenty-five hundredths (0.25) gallons per day, per square foot.

(F) The depth to seasonal high groundwater ~~as~~ indicated by soil wetness characteristics.

(G) The depth to bedrock.

(H) The soil consistence at each horizon.

(I) The soil effervescence at each horizon.

(J) The percent coarse fragments at each horizon.

(K) The percent clay at each horizon, by field estimation, for any horizon where the percent coarse fragments is greater than thirty-five percent (35%) by volume.

(L) The presence or absence of roots.

(M) Frost penetration depth, if applicable.

~~(f)~~ **(g)** When soil characteristics are to be used for calculations for the depth of a subsurface drainage system, the following information ~~shall~~ **must** be recorded to a depth of eighty (80) inches:

(1) The information required in subsection ~~(e)(2)~~ **(f)(2).**

(2) Particle size family.

**(h) On-site soil evaluation reports created from the evaluation of the soil profiles to be used for obtaining an on-site sewage system construction permit must be signed by the registered professional soil scientist and submitted directly to the local health department by the soil scientist.**

*(Indiana Department of Health; 410 IAC 6-8.3-56; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 55. 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; IC 16-41-25-7.2**

Sec. 57. (a) ~~All~~ Septic tanks, dosing tanks, lift stations, and soil absorption systems ~~shall~~ **must** 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, **Sewage Holding Tank** | Soil Absorption System |
|---|---|---|
| Private water supply well[1,2], **subsurface cistern[1]** | 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, **perennial or intermittent** 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 **[9]** | 25 | 25 |

[1] The distances enumerated ~~shall~~ **must** be doubled for soil absorption systems constructed where ~~there exist~~ horizons, layers, or strata **exist** 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)~~ **70(b)(7)** 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. |
| **[9] Sinkhole as defined in IC 16-41-25-7.2(a).** |

(b) A residential on-site sewage system ~~shall~~ **may** not be located within two hundred (200) feet of a public water supply lake or reservoir. However, a residential on-site sewage system that includes secondary treatment 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) 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~~ **may** not be located within fifty (50) feet of 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,~~ **upgraded piping** may be located within the fifty (50) foot distance.

(2) In no case ~~shall~~ **may** 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~~ **may** not be laid in the same trench, as follows:

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

(2) Where crossings are necessary, ~~a minimum of~~ **at least** 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~~ **must** 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~~ **upgraded piping** within ten (10) feet of the water line, with the water line positioned above the sewer line when possible. The sewer ~~shall~~ **must** be pressure tested to assure watertightness ~~prior to~~ **before** 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; filed Feb 27, 2024, 10:34 a.m.: 20240327-IR-410220395FRA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 56. 410 IAC 6-8.3-58 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-58 Dispersal area**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 58. (a) A dispersal area is required for a soil absorption system when:

(1) the soil loading rate used to determine the size of the soil absorption system is five-tenths (0.5) gallons per day, per square foot (gpd/$ft^2$) or less; or

(2) there is a horizon in the upper sixty (60) inches of the profile description with **a restrictive limiting layer.**

~~(A) bedrock;~~

~~(B) densic material;~~

~~(C) dense till;~~

~~(D) soil with fragic properties; or~~

~~(E) layers transitional to dense till (horizons in a soil developed from Wisconsin glacial till that shows effervescence when treated with a ten percent (10%) hydrochloric acid solution), unless:~~

~~(i) the on-site soils evaluation report shows that the presence of the horizon is not detrimental to the proper functioning of an on-site sewage system; and~~

~~(ii) the determination in item (i) is made using the guidelines as set forth in the soil manuals, technical bulletins, and handbooks of the NRCS guidelines and as approved by the department.~~

(b) When the conditions in subsection (a) apply, the following requirements ~~shall~~ **must** be met:

(1) For soil absorption system sites with a slope of one-half percent (½%) or less, a minimum dispersal area ~~as~~ described in Table II in subsection (c) ~~shall~~ **must** be maintained on each side of the outside edge of the:

(A) outer trench parallel to the length of the trench; or

(B) INDOT Specification 23 sand and parallel to the long axis of the elevated sand mound.

(2) For soil absorption system sites with a slope of greater than one-half percent (½%), a minimum dispersal area ~~as~~ described in Table II in subsection (c) ~~shall~~ **must** be maintained on the downslope side of the soil absorption system from the outside edge of the:

(A) downslope trench parallel to the length of the trench; or

(B) INDOT Specification 23 sand downslope and parallel to the long axis of the elevated sand mound.

(c) For sites that do not meet the conditions of subsection (a), the minimum dispersal area ~~shall~~ **must** be ten (10) feet. For sites that meet the conditions of subsection (a), the dispersal area ~~shall~~ **must** be as indicated in Table II as follows:

| | |
|---|---|
| Table II - Minimum Dispersal Areas[1] for Soil Absorption Systems | |
| Slope ≤ ½ %[2]: On-site sewage system without perimeter drain | One-fourth (¼) width of soil absorption system[5] |
| Slope > ½ %[3]: On-site sewage system without perimeter drain | One-half (½) width of soil absorption system[5] |
| Any slope: On-site sewage system with perimeter drain[4] | Ten (10) feet or the distance to the perimeter drain |

| |
|---|
| [1]No buildings, foundations, slabs, garages, patios, barns, aboveground and belowground swimming pools, retaining walls, roads, driveways, parking areas, or paved sidewalks are allowed in the dispersal area. |
| [2]Dispersal area is located on each side of the outside edge of the outer trench parallel to the length of the trench, or on each side of the outside edge of the sand area and parallel to the long axis of an elevated sand mound. |
| [3]Dispersal area is located on the downslope side of the soil absorption system. |
| [4]For on-site sewage systems with a subsurface perimeter drain without a seasonal high-water table, the design and construction of the drain ~~shall~~ **must** meet the requirements of section 59 of this rule. |
| [5]Dispersal area width ~~shall~~ **must** not be less than ten (10) feet. A dispersal area width of more than twenty-five (25) feet is not required. |

(d) ~~Any~~ **A** disturbance within a dispersal area ~~shall~~ **must** not create compacted soil material.

(e) The location of the dispersal area ~~shall~~ **must** meet the following requirements:

(1) A dispersal area ~~shall~~ **must** be located on the property, or adjoining property with easement, ~~except that~~ **but** the easement is not required for lots platted ~~prior to~~ **before** January 1, 2011.

(2) Nothing that would impede the flow of water ~~shall be~~ **is** allowed in a dispersal area. This includes, but is not limited to, the following:

(A) Buildings.

(B) Foundations.

(C) Slabs.

(D) Garages.

(E) Patios.

(F) Barns.

(G) Aboveground and belowground swimming pools.

(H) Retaining walls.

(I) Roads.

(J) Driveways.

(K) Parking areas.

(L) Paved sidewalks.

(M) Closed loop geothermal systems. ~~or~~

(N) Other structures.

(3) A dispersal area ~~shall~~ **must** not be located in a closed depression where surface runoff or subsurface water movement will have an adverse effect on on-site soil absorption system performance or in areas subject to ponding.

(4) For soil absorption system sites with a slope of greater than one-half percent (½%), no part of the dispersal area may slope toward the soil absorption system.

*(Indiana Department of Health; 410 IAC 6-8.3-58; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 57. 410 IAC 6-8.3-59 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-59 Drainage**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 59. (a) A surface diversion:

(1) ~~shall~~ **must** be constructed if drainage from an adjoining upslope landscape affects the soil absorption system site;

(2) ~~shall~~ **must** have a positive grade of at least two and four-tenths (2.4) inches per one hundred (100) feet, or a grade of two-tenths percent (0.2%);

(3) ~~shall~~ **must** be of sufficient depth and width to move surface water away from the soil absorption system;

(4) ~~shall~~ **must** be located:

(A) for subsurface trench on-site sewage systems that do not require additional soil cover, at least ten (10) feet from the soil absorption system, ~~as~~ measured from the downslope edge of the surface diversion to the outside edge of the nearest soil absorption system trench;

(B) for subsurface trench on-site sewage systems that require additional soil cover, at least ten (10) feet from the soil absorption system, ~~as~~ measured from the downslope edge of the surface diversion to the upslope edge of the additional soil cover; or

(C) for elevated sand mound on-site sewage systems, at least ten (10) feet from the soil absorption system, ~~as~~ measured from the downslope edge of the surface diversion to the upslope edge of the soil cover; and

(5) may be used in combination with an on-site subsurface drainage system.

(b) When a subsurface drainage system is constructed, it ~~shall~~ **must** be sufficiently deep to lower a seasonal high-water table as required in subsection (d) or (e).

(c) If the site has a slope of equal to or less than two percent (2%), the subsurface drain ~~shall~~ **must** surround the on-site sewage system. If the site slope exceeds two percent (2%), the subsurface drain may be constructed only on the upslope side of the on-site sewage system.

(d) If the seasonal high-water table is perched, the subsurface drain trench ~~shall~~ **must** be constructed at least two (2) inches into structureless massive compact clay with firm or very firm consistence, glacial till, or fragipan whenever site and soil conditions permit. When the drain cannot be constructed at least two (2) inches into the structureless massive compact clay with firm or very firm consistence, glacial till, or fragipan, the depth of the drain ~~shall~~ **must** be the following unless calculations are used to determine drain depth:

(1) For trench on-site sewage systems, the invert elevation of the subsurface perimeter, interceptor, or segment drain ~~shall~~ **must** be at least thirty-six (36) inches below the invert elevation of any adjacent soil absorption trench bottom.

(2) For elevated sand mound on-site sewage systems, the invert elevation of the subsurface perimeter or interceptor drain ~~shall~~ **must** be at least thirty-two (32) inches below existing grade.

(e) If drainage calculations are used to determine drain depth, drainage formulas and calculations ~~shall~~ **must** be submitted to the local health department as part of the plan submittal, showing a lowering of the seasonal high-water table:

(1) for subsurface trench on-site sewage systems, at least twenty-four (24) inches below the trench bottoms in the center of the soil absorption field; or

(2) for elevated sand mound on-site sewage systems, at least twenty (20) inches below original grade.

(f) Subsurface drainage systems ~~shall~~ **must** be located at soil absorption system sites as follows:

(1) All portions of a subsurface drainage system ~~shall~~ **must** be installed at least ten (10) feet from the outside edge of any soil absorption trench.

(2) All portions of a subsurface drainage system ~~shall~~ **must** be installed at least ten (10) feet from the outside edge of the INDOT Specification 23 sand.

(3) Spacing of subsurface perimeter drains and segment drains installed parallel to the trench lengths along the contour of the site for a subsurface trench system or parallel to the long axis of an elevated sand mound must be less than or equal to sixty-five (65) feet, unless a greater spacing is determined through calculations.

(4) The subsurface drain ~~shall~~ **must** not cross any portion of the soil absorption system.

(g) ~~The~~ **A** subsurface drain pipe ~~shall~~ **must** be:

(1) at least four (4) inches in diameter;

(2) slotted; and

(3) wrapped with a geotextile fabric with an effective opening size not smaller than two-tenths (0.2) millimeter and not larger than eighty-five hundredths (0.85) millimeter when installed in:

(A) sands;

(B) loamy sands;

(C) sandy loams;

(D) fine sandy loams;

(E) loams;

(F) silt loams; or

(G) silts.

(h) The subsurface drain trench ~~shall:~~ **must:**

(1) have a positive slope of at least two-tenths (0.2) foot per one hundred (100) feet when a four (4) inch drain pipe is used;

(2) have a positive slope of at least one-tenth (0.1) foot per one hundred (100) feet when a six (6) inch drain pipe is used; and

(3) be constructed with no sags **or high points** in the line.

(i) A subsurface drain trench installed upslope from a residential on-site sewage system ~~shall~~ **must** be:

(1) backfilled to final grade with aggregate that meets the minimum requirements of subsection (k); or

(2) filled to within six (6) inches of final grade with aggregate that meets **the requirements in** subsection (k) and the final six (6) inches to final grade with cover soil material.

(j) A subsurface drain trench installed on sides or downslope, and segment drain trenches may be:

(1) backfilled to final grade with aggregate that meets the minimum requirements of subsection (k); or

(2) filled to within six (6) inches of final grade with aggregate that meets the minimum requirements of subsection (k) and the final six (6) inches to final grade with cover soil material.

(k) The aggregate backfill for subsurface drain trenches ~~shall~~ **must** meet the minimum requirements of:

(1) section 68 of this rule;

(2) washed aggregate with a gradation in the range of INDOT Specification 8 through 11; or

(3) INDOT Specification 23 sand or equivalent.

(l) When INDOT Specification 23 sand is used for backfill, the drainpipe ~~shall~~ **must** be wrapped with a geotextile fabric.

(m) The aggregate used as backfill in the perimeter, interceptor, or segment drain trenches described in subsections (i)(2) and (j)(2) ~~shall~~ **must** be covered with a geotextile fabric barrier that meets the minimum requirements in section 69 of this rule in ~~such~~ a ~~manner as to prevent~~ **way that prevents** the aggregate from becoming clogged with the earth fill.

(n) The subsurface drain trench and the associated discharge piping ~~shall~~ **must** be constructed to permit water to flow by gravity throughout its length. No pumps or siphons shall be ~~utilized~~ **used** to effect the movement of the collected water.

(o) Tile outlets ~~shall~~ **must** be provided with rodent guards.

*(Indiana Department of Health; 410 IAC 6-8.3-59; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 58. 410 IAC 6-8.3-60 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-60 Septic tanks: general requirements**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 60. (a) Septic tanks ~~shall~~ **must** be:

(1) watertight and constructed of ~~durable material such as~~ **pre-cast** concrete, ~~fiberglass, polyethylene, or polypropylene;~~ **fiber-reinforced polyester, or thermoplastic material as described in IAPMO Z1000 2019 sections 5, 6, or 7;** and

(2) protected from corrosion.

(b) Cast in place, concrete block, wood, or metal septic tanks are prohibited.

(c) Every septic tank ~~shall~~ **must** have a minimum capacity below the water line as specified in Table III as follows:

| Table III - Required Minimum Capacities for Septic Tanks | |
|---|---|
| Number of Bedrooms in Dwelling | Capacity of **Septic** Tank in Gallons |
| 2 or less | 750 |
| 3 | 1,000 |
| 4 | 1,250 |
| 5 | 1,500 |
| 5+ | 1,500 plus 300 multiplied by the number of bedrooms over 5 |

(d) ~~All~~ Septic tank effluent, including effluent from tanks fitted with aeration units for aerobic digestion, ~~shall~~ **must** discharge into a soil absorption system or other treatment system ~~as~~ approved in accordance with section 52(h) of this rule.

(e) Two-compartment tanks ~~shall~~ **must** meet the following requirements:

(1) The liquid volume of the first compartment ~~shall~~ **must** be between one-half (½) and two-thirds (⅔) of the total tank volume.

(2) The divider wall ~~shall~~ **must** be:

(A) monolithically cast in the tank; or

(B) permanently secured within the tank body using noncorrosive fasteners or fittings.

(3) The transfer port or ports between the compartments ~~shall~~ **must** consist of **at least** two (2) ~~or more~~ openings, with a combined area of at least fifty (50) square inches. A continuous port across the width of the divider wall is also acceptable.

(4) The transfer port or ports ~~shall~~ **must** be located in the middle twenty-five percent (25%) of the liquid depth.

(5) An access opening meeting the requirements of section 61(o) of this rule must be provided above each compartment, including riser meeting the requirements of section 61(p) of this rule, for maintenance pumping.

(f) When multiple tanks are used in series, no single tank may be less than seven hundred fifty (750) gallons. The larger of the two (2) tanks must be upstream of the other.

(g) When sewage is pumped into a septic tank using a grinder pump:

(1) a two-compartment tank must be used with the sewage pumped into the first compartment; or

(2) two (2) tanks in series must be used, with the sewage pumped into the first tank.

(h) Tanks fitted with aeration units for aerobic digestion ~~shall:~~ **must:**

(1) conform to NSF/ANSI Standard ~~40-2010~~ **40-2023,** Residential Wastewater Treatment Systems, for Class I plants or ~~to~~ standards of an equivalent third-party product testing laboratory acceptable to the department that meet or exceed the NSF/ANSI standards;

(2) bear a current registered certification mark;

(3) provide a minimum aerobic treatment capacity of one hundred fifty (150) gallons per bedroom, per day;

(4) be preceded by a septic tank that meets all ~~of~~ the requirements of this section and sections 61 and 63 of this rule; and

(5) discharge into a soil absorption system or other treatment system ~~as~~ approved in accordance with section 52(h) of this rule.

(i) Water softener backwash ~~shall~~ **must** be discharged to:

(1) the building sewer;

(2) a secondary treatment device;

(3) the effluent sewer on the downstream side of either the septic tank or ~~the~~ secondary treatment device;

(4) the dosing tank serving the soil absorption system; or

(5) a separate soil absorption system constructed specifically for the water softener backwash.

*(Indiana Department of Health; 410 IAC 6-8.3-60; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 59. 410 IAC 6-8.3-61 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-61 Septic tanks: construction details**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 61. (a) The minimum water depth in any compartment ~~shall~~ **must** be thirty (30) inches.

(b) The maximum water depth for calculating septic tank capacity ~~shall~~ **must** not exceed six and one-half (6 ½) feet.

(c) The inlet baffle or sanitary tee ~~shall~~ **must** extend at least:

(1) eight (8) inches below the liquid level; and

(2) to the top of the inlet sewer.

(d) ~~All~~ New septic tanks must be provided with an outlet filter that meets or exceeds the requirements of section 64 of this rule.

(e) ~~Any~~ **A** septic tank not provided with an outlet filter in the interior of the tank ~~shall~~ **must** be provided with:

(1) an outlet baffle or sanitary tee that extends below the liquid level at least ten (10) inches, but not more than forty percent (40%) of the tank liquid depth; and

(2) a gas deflection baffle that is:

(A) constructed of durable materials not subject to corrosion or decay; and

(B) configured to deflect rising gas bubbles toward the interior of the tank.

(f) There ~~shall~~ **must** be at least one (1) inch clear space between the underside of the septic tank lid and ~~the~~ top of the inlet and outlet baffles or tees.

(g) Scum storage capacity (space between the liquid level and ~~the~~ top of the outlet baffle or tees) ~~shall~~ **must** be not less than twelve and one-half percent ~~(12.5%)~~ **(12 ½%)** of the liquid depth of the septic tank.

(h) The inlet baffle ~~shall~~ **must** not be more than twelve (12) inches nor less than four (4) inches from the inside of the inlet end of the tank. The outlet baffle ~~shall~~ **must** not be more than

twelve (12) inches nor less than four (4) inches from the outlet end of the septic tank. Baffles ~~shall~~ **must** be constructed of durable materials not subject to corrosion or decay.

(i) The bottom of the septic tank inlet ~~shall~~ **must** not be less than two (2) inches nor more than four (4) inches above the liquid level.

(j) Reinforced concrete septic tanks ~~shall~~ **must** be constructed of concrete **designed to withstand all structural, hydraulic, hydrostatic, earth loads, and any anticipated traffic loads, and** with a compressive strength of four thousand (4,000) pounds per square inch or greater.

(k) Concrete septic tank walls ~~shall~~ **must** be at least two and one-half (2 ½) inches or greater in thickness. The design must allow at least one (1) inch cover over reinforcing steel or welded wire fabric.

(l) Concrete septic tank bottoms ~~shall~~ **must** conform to the specifications set forth for septic tank walls.

(m) Concrete septic tank tops ~~shall~~ **must** be ~~a minimum of~~ **at least** four (4) inches in thickness and reinforced with three-eighths (3/8) inch reinforcing rods in a twelve (12) inch grid or equivalent.

(n) Type III fibers, **meeting ASTM C 1116-10a(2015),** are permitted only as a secondary reinforcing material. Fiber additions will be considered only for the purpose of resisting temperature and shrinkage efforts, and not as primary reinforcing material.

(o) ~~All~~ Access openings ~~shall~~ **must** meet the following requirements:

(1) At least one (1) opening eighteen (18) inches in minimum dimension per compartment for pumping access.

(2) An access opening ~~shall~~ **must** be located over each of the following:

(A) The inlet.

(B) The outlet.

(C) The sanitary tee or baffle, if present, on the partition or divider wall of a two-compartment septic tank.

(3) ~~All~~ Access openings ~~shall~~ **must** be sized and positioned in ~~such~~ a way ~~as to allow~~ **that allows** for maintenance, cleaning, and servicing of septic tanks and outlet filters.

(p) ~~All~~ Risers ~~shall~~ **must** meet the following requirements:

(1) Risers and riser covers ~~shall~~ **must** be made of corrosion resistant materials and withstand design external loads.

(2) The lower section of the riser assembly ~~shall~~ **must** be:

(A) cast into the tank lid; or

(B) sealed to the top of the tank with butyl sealant meeting ASTM ~~C 990-09~~ **C990-24** to provide a watertight seal.

(3) ~~All~~ Risers ~~shall~~ **must** be fitted with watertight, securely fastened covers.

(q) Pipe connectors ~~shall~~ **must** be provided that meet the following requirements:

(1) Each pipe penetration ~~shall~~ **must** be sealed with a resilient rubber pipe connector that uses an expansion ring, **a** tension band, or a take-up device for mechanically compressing the resilient portion of the connector against the pipe.

(2) ~~All~~ Metallic mechanical devices, including expansion rings, tension bands, take-up devices, and screws, ~~shall~~ **must** be constructed of series 300 stainless steel.

(3) Connectors ~~shall~~ **must** conform to:

(A) ASTM ~~C 1644-06~~ **C1644-24,** Standard Specification for Resilient Connectors Between Reinforced Concrete On-Site Wastewater Tanks and Pipes; or

(B) ASTM ~~C 923-08~~ **C923-20,** Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants.

*(Indiana Department of Health; 410 IAC 6-8.3-61; 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; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 60. 410 IAC 6-8.3-62 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-62 Dosing tanks**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 62. (a) Dosing tanks **must be:**

(1) ~~must be~~ watertight and constructed of ~~durable material such as~~ **pre-cast** concrete, ~~fiberglass, polyethylene, or polypropylene~~ **fiber-reinforced polyester, or thermoplastic material;** and

(2) ~~shall be~~ protected from corrosion.

(b) Cast in place, concrete block, wood, or metal dosing tanks are prohibited.

(c) Reinforced concrete dosing tanks ~~shall~~ **must** be constructed of concrete **designed to withstand all structural, hydraulic, hydrostatic, earth loads, and any anticipated traffic loads, and** with a **minimum** compressive strength of four thousand (4,000) pounds per square inch or greater.

(d) Concrete dosing tank walls ~~shall~~ **must** be at least two and one-half (2 ½) inches or greater in thickness. The design ~~shall~~ **must** allow at least one (1) inch cover over reinforcing steel or welded wire fabric.

(e) The required liquid holding capacity of the dosing tank ~~shall~~ **must** not be considered as any portion of the required liquid volume of the septic tank.

(f) The liquid holding capacity of a dosing tank must equal the dose volume required by this rule for each type of soil absorption system, in addition to the volume of liquid that will drain back from any effluent force main when pumping ~~ceases.~~ **stops.** Additional capacity must be provided to:

(1) keep the dosing tank effluent pump submerged at all times; and

(2) provide sufficient freeboard for a high-water alarm.

(g) Dosing tanks ~~shall~~ **must** be provided with pipe connectors that meet the following requirements:

(1) Each pipe penetration ~~shall~~ **must** be sealed with a flexible, resilient rubber pipe connector that uses an expansion ring, **a** tension band, or a take-up device for mechanically compressing the resilient portion of the connector against the pipe.

(2) ~~All~~ Metallic mechanical devices, including expansion rings, tension bands, take-up devices, and screws, ~~shall~~ **must** be constructed of series 300 stainless steel.

(3) Conform to:

(A) ASTM ~~C 1644-06~~ **C 1644-24,** Standard Specification for Resilient Connectors Between Reinforced Concrete On-Site Wastewater Tanks and Pipes; or

(B) ASTM ~~C 923-08~~ **C923-20,** Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants.

(h) Each dosing tank ~~shall~~ **must** be fitted with an effluent pump sized in conformance with section 65 **of this rule** and section 76(b), 78(d), 78(q), 82(b), or 82(j) of this rule, whichever is applicable, with controls and ~~with~~ a high-water alarm switch set at a level above the design high-water mark. The alarm ~~shall:~~ **must:**

(1) be on a separate circuit from the effluent pump; and

(2) include an audible and **a** visible alarm.

(i) Switches or sensors that are comparable to mercury float level switches ~~shall~~ **must** be used for dosing tank effluent pump start and stop controls and for high-water alarms.

*(Indiana Department of Health; 410 IAC 6-8.3-62; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 61. 410 IAC 6-8.3-62.1 IS ADDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-62.1 Sewage holding tanks**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3; IC 16-41-25-9**

**Sec. 62.1. (a) A sewage holding tank is an alternative method of sewage disposal in accordance with IC 16-41-25-9.**

**(b) Sewage holding tanks must be:**

**(1) watertight and constructed of pre-cast concrete, fiber-reinforced polyester, or thermoplastic material; and**

**(2) protected from corrosion.**

**(c) A temporary sewage holding tank may be used:**

**(1) where necessary to prevent continued discharge of sewage from a failed existing residential on-site sewage system;**

**(2) 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**

**(3) when soil conditions exist that preclude the prompt construction of a soil absorption system on a site that has already received an on-site sewage system construction permit.**

**(d) Sewage holding tanks must have the minimum capacity of:**

**(1) a septic tank, or a septic tank and dosing tank, as required by this rule, for tanks that will eventually precede a soil absorption field; or**

**(2) for permanent sewage holding tanks, the greater of:**

**(A) one thousand (1,000) gallons; or**

**(B) at least three (3) times the design daily flow of the residence or residential outbuilding as determined by this rule.**

**(e) Reinforced concrete sewage holding tanks must be constructed of concrete designed to withstand all structural, hydraulic, hydrostatic, earth loads, and any anticipated traffic loads, and with a compressive strength of four thousand (4,000) pounds per square inch or greater.**

**(f) Concrete sewage holding tank walls and bottoms must be at least two and one-half (2 ½) inches or greater in thickness. The design must allow at least one (1) inch cover over reinforcing steel or welded wire fabric.**

**(g) Concrete sewage holding tank tops must be at least four (4) inches in thickness and reinforced with three-eighths (⅜) inch reinforcing rods in a twelve (12) inch grid or equivalent.**

**(h) ASTM C 1116-10a(2015) type III fibers are permitted only as a secondary reinforcing material. Fiber additions will be considered only for the purpose of resisting temperature and shrinkage efforts, and not as primary reinforcing material.**

**(i) Sewage holding tanks must have at least one (1) opening eighteen (18) inches in minimum diameter for pumping access positioned in a way that allows for maintenance, cleaning, and servicing.**

**(j) Holding tanks are required to have an operating permit issued by the local health department.**

**(k) Receipts from pumping and maintenance of a sewage holding tank, and other documents for repair or modification of a sewage holding tank, must be submitted to the local health department within thirty (30) days of the service provided or a time frame approved by the local health department.**

**(l) If a sewage holding tank is not operated in a safe and sanitary way and in accordance with IC 16-41-25-9 and this rule, the local health department may require the residence or residential outbuilding to:**

**(1) connect to sanitary sewer, if the sanitary sewer is available within three hundred (300) feet of the affected property line and available for connection at a construction cost and connection fee estimated not to exceed one hundred fifty percent (150%) of the cost estimated for installing an on-site sewage system to serve the residence or residential outbuilding; or**

**(2) install an on-site sewage system with a soil absorption field in compliance with this rule or connect to an existing soil absorption system that has not failed.**

*(Indiana Department of Health; 410 IAC 6-8.3-62.1)*

SECTION 62. 410 IAC 6-8.3-63 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-63 Septic tanks, dosing tanks, and sewage holding tanks: installation and maintenance**

**Authority: IC 16-19-3-4**

**Affected: IC 16-41-25-3**

Sec. 63. (a) Septic, ~~tanks and~~ dosing, **and sewage holding** tanks ~~shall~~ **must** be installed level on:

(1) undisturbed soil;

(2) sand;

(3) aggregate not larger than one and one-half (1½) inches in diameter; or

(4) an engineered base.

(b) ~~All~~ Drain holes in septic, ~~tanks and~~ dosing, **and sewage holding** tanks ~~shall~~ **must** be:

(1) fitted with a threaded fitting, cast in place, and plugged with a threaded plug; or

(2) plugged with an expandable pipe plug with a wing nut.

(c) When the top of the septic, ~~tank or~~ dosing, **or sewage holding** tank is installed at or above grade, all access openings ~~shall~~ **must** be fitted with watertight, securely fastened covers.

(d) When the top of the septic, ~~tank or~~ dosing, **or sewage holding** tank is installed below grade, risers ~~shall:~~ **must:**

(1) be installed over access openings used for pumping and ~~for~~ maintenance of the outlet filter in the septic tank;

(2) be large enough for access to the tank through the access opening in the top of the septic, ~~tank or~~ dosing, **or sewage holding** tank to clean the tanks and ~~to~~ maintain floats, sensors, filters, and pumps;

(3) have the lower section sealed to the top of the tank with butyl sealant meeting ASTM ~~C 990-09~~ **C 990-24** to provide a watertight seal, if the riser assembly is not cast into the tank lid;

(4) have joints between riser sections sealed in accordance with the manufacturer's instructions so as to be watertight;

(5) extend to or above final grade;

(6) be fitted with a watertight cover securely fastened to the riser; and

(7) ~~comply~~ **have a secondary safety device installed in compliance** with the requirements of IC 16-41-25-3.

~~(e) Septic tanks and dosing tanks shall not be installed with the top of the riser below the RFE.~~

~~(f) All~~ **(e) The** joints in the sewer connecting septic tanks in series or septic tanks to dosing tanks ~~shall~~ **must** be sealed in accordance with the manufacturer's instructions ~~in order~~ to be watertight and ~~to~~ withstand the pressures exerted on them.

**(f) All tanks must be installed using the manufacturer's recommended buoyancy controls when conditions necessitate.**

*(Indiana Department of Health; 410 IAC 6-8.3-63; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 63. 410 IAC 6-8.3-64 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-64 Outlet filters**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 64. (a) An outlet filter ~~shall~~ **must** be installed in the septic tank of new on-site sewage systems and existing on-site sewage systems requiring a new septic tank.

(b) For on-site sewage systems requiring repair, or soil absorption systems requiring replacement, the local health department may require an outlet filter. The outlet filter, if required by the local health department, must meet the requirements of this section.

(c) Outlet filters ~~shall~~ **must** be located in the outlet end of:

(1) a single septic tank when not used in series;

(2) the second compartment of two-compartment septic tanks;

(3) the last septic tank when two (2) or more tanks are used in series; or

(4) a secondary watertight structure located after the last septic tank ~~prior to~~ **before** a dosing tank, distribution box, or secondary treatment unit.

(d) An access opening of eighteen (18) inches in minimum dimension ~~shall~~ **must** be:

(1) located over the outlet filter; and

(2) provided with a riser to grade that meets the minimum requirements of section 63(d) of this rule.

(e) Outlet filters ~~shall:~~ **must:**

(1) conform to NSF/ANSI Standard ~~46-2010a~~ **46-2023,** Evaluation of Components and Devices Used in Wastewater Treatment Systems, maintain a current product listing with an ANSI accredited third-party certifier, and bear a listing mark;

(2) be rated by the manufacturer for a daily flow equal to or greater than the liquid capacity of the septic tank;

(3) prevent the passage of solids larger than one-eighth (⅛) ~~of an~~ inch;

(4) have inlets and outlets of at least four (4) inches in diameter;

(5) function without a bypass of unfiltered sewage, sludge, or scum during normal use;

(6) be made of a noncorrosive material designed for use in sewage applications;

(7) maintain structural integrity, not tearing or distorting so as to make it inoperable during normal operation, throughout the life of the device; and

(8) have removable outlet filter cartridges.

(f) The outlet filter housing ~~shall:~~ **must:**

(1) connect to the outlet pipe or structure wall with noncorrosive fasteners;

(2) extend at least five (5) inches above the liquid level of the tank;

(3) be installed so the bottom of the filter inlet extends below the liquid level at least ten (10) inches, but not more than forty percent (40%) of the septic tank liquid depth;

(4) include a gas deflection device that remains in place when the filter cartridge is removed; and

(5) be solvent welded to a PVC Schedule 40 outlet pipe that meets the minimum requirements of section 67(a)(1) or 67(a)(2) of this rule, creating a watertight and mechanically sound joint.

(g) A filter alarm may be installed in the septic tank to indicate when the outlet filter is in need of service.

(h) An outlet filter with cartridge ~~shall~~ **must** remain in service for the life of the septic tank.

(i) Outlet filter manufacturers shall provide installation and maintenance instructions with each outlet filter. Outlet filters ~~shall~~ **must** be:

(1) installed according to manufacturer's recommendations;

(2) located so they do not interfere with pumping and cleaning of the septic tank; and

(3) placed to allow accessibility for routine maintenance without entering the septic tank or outlet structure, if separate from the septic tank.

(j) Outlet filters ~~shall~~ **must** be serviced according to the manufacturer's service recommendations, but ~~no~~ **not** less frequently than each time the septic tank is cleaned, as follows:

(1) The outlet filter ~~shall~~ **must** be:

(A) cleaned and washed so ~~that~~ the filter waste enters the septic tank; or

(B) exchanged with a clean filter.

(2) ~~All~~ Contaminated effluent filters ~~shall~~ **must** be treated as untreated sewage and handled properly during the cleaning or exchange process.

*(Indiana Department of Health; 410 IAC 6-8.3-64; 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; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 64. 410 IAC 6-8.3-65 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-65 Effluent pumps**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 65. (a) ~~All~~ Effluent pumps ~~shall~~ **must** be:

(1) submersible pumps suitable for use in a corrosive atmosphere;

(2) sized to deliver the total design flow rate while meeting the total dynamic head requirements of the on-site sewage system;

(3) connected to pump discharge piping that is adequately secured; and

(4) installed in ~~such~~ a ~~manner as to allow~~ **way that allows** for removal without entering ~~the dosing tank~~ or dewatering the dosing tank.

(b) Effluent pumps ~~shall~~ **must** be provided with a suitable means of quick, convenient disconnection from the discharge piping, as follows:

(1) Fittings and valves ~~shall~~ **must** be of compatible corrosion resistant material.

(2) A quick disconnect coupling, breakaway flange, or similar disconnect device ~~shall~~ **must** be provided for each pump discharge pipe.

(3) Quick disconnect couplings and valves ~~shall~~ **must** be readily accessible from the ground surface without entering the dosing tank.

(4) Submersible pumps ~~shall~~ **must** be provided with a corrosion resistant lifting apparatus, such as a rope or chain, to facilitate removal of the pump.

(c) ~~All~~ Floats for pump operation ~~shall~~ **must** be mounted according to manufacturer's specifications using fasteners manufactured for that purpose.

(d) Controls other than liquid level sensors ~~shall~~ **must** not be located within the dosing tank.

(e) Junction boxes ~~shall~~ **must** be rated as a NEMA 4X, National Electrical Manufacturers Association, NEMA ~~250-2008 All~~ **250-2020. The** connectors to the junction box ~~shall~~ **must** form a watertight seal:

(1) to the junction box; and

(2) between connector openings and incoming wires.

(f) ~~Any~~ **A** connector not used for wiring ~~shall~~ **must** be fitted with a watertight plug.

*(Indiana Department of Health; 410 IAC 6-8.3-65; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 65. 410 IAC 6-8.3-66 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-66 Distribution box specifications**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 66. (a) Concrete distribution boxes ~~shall~~ **must** be constructed of concrete with a compressive strength of four thousand (4,000) pounds per square inch or greater. Other materials may be considered on a case-by-case basis. ~~All materials must:~~

**(b) The distribution box material must:**

**(1) be watertight;**

~~(1)~~ **(2)** be resistant to corrosion and decay; and

~~(2)~~ **(3)** have sufficient structural strength to contain sewage and resist lateral compressive and bearing loads.

**(c) All pipe penetrations in the distribution box shall be made in a way that minimizes the potential for water to enter or exit around the pipe penetrations.**

~~(b)~~ **(d)** The minimum interior dimension of a distribution box ~~shall~~ **must** be twelve (12) inches.

~~(c)~~ **(e)** The distribution box ~~shall~~ **or top of the distribution box riser must** be fitted with a watertight, **securely fastened** removable lid for access. The distribution box may be fitted with a riser to the ground surface. The riser joints and the lid connection to the riser must be watertight.

**(f) Distribution boxes must be stabilized to prevent movement during installation and operation.**

~~(d)~~ **(g)** The interior bottom of the distribution box ~~shall~~ **must** be at least four (4) inches below the invert elevation of the effluent ports. ~~A minimum of~~ **At least** eight (8) inches freeboard above the invert elevation of the effluent port ~~shall~~ **must** be provided.

~~(e)~~ **(h)** The influent port ~~shall~~ **must** be located or baffled to prevent unequal distribution of effluent to the distribution system **as follows:**

**(1)** If baffles are provided, the baffles and their mounts or retainers ~~shall:~~ **must:**

~~(1)~~ **(A)** provide a passageway for effluent between the box bottom and ~~the~~ bottom edge of the baffle of not more than two (2) inches; and

~~(2)~~ **(B)** extend to one (1) inch above the top of the inlet.

~~(f)~~ **(2)** An elbow or **a** sanitary tee in the vertical position may be used in place of a baffle, as follows:

~~(1)~~ **(A)** If an elbow is used, the elbow must:

~~(A)~~ **(i)** be a ninety (90) degree elbow;

~~(B)~~ **(ii)** be turned down into the distribution box with the end of the elbow not more than two (2) inches above the bottom of the distribution box; and

~~(C)~~ **(iii)** include a ~~weep~~ **vent** hole in the upper part of the elbow.

~~(2)~~ **(B)** If a sanitary tee is used, the bottom of the sanitary tee must be not more than two (2) inches above the bottom of the distribution box and the top of the sanitary tee **must be** at least one (1) inch below the lid.

~~(g)~~ **(i)** Each distribution box ~~shall~~ **must** be designed to split the effluent flow equally among the effluent ports. ~~All~~ **The** effluent ports ~~shall~~ **must** be:

(1) at the same elevation;

(2) of the same diameter; and

(3) located at an elevation at least one (1) inch lower than the influent port.

*(Indiana Department of Health; 410 IAC 6-8.3-66; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 66. 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; IC 16-41-25**

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

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

(A) For PVC pipe, the following:

(i) ASTM ~~D 2665-20~~ **D 2665-24** for four (4) inch and six (6) inch pipe only.

(ii) ASTM ~~D 3034-2021~~ **D 3034-24,** for SDR 26 and SDR 35, for four (4) inch through fifteen (15) inch pipe.

(B) For ABS pipe, the following:

(i) ASTM ~~D 2661-21~~ **D 2661-24** for four (4) inch and six (6) inch pipe only.

(ii) ASTM ~~D 2680-2020~~ **D 2680-20** for eight (8) inch through fifteen (15) inch pipe.

(C) ASTM 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~~ **must** meet the following standards:

(A) For PVC pipe, the following:

(i) ASTM ~~D 2241-20~~ **D 2241-24** SDR 13.5, SDR 17, SDR 21, or SDR 26.

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

(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 F2620-20ae2.

(b) ~~Gasketed compression type joints~~ **Upgraded piping** must be used on ~~pressure~~ sewers when they ~~are located ten (10) feet or less from a water line~~ **do not meet the required horizontal and vertical separations required in section 57(e) of this rule.**

(c) Soil absorption system gravity distribution laterals ~~shall~~ **must** 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 2729-2021.~~ **D 2729-21.**

(3) Four (4) inch diameter smooth interior wall polyethylene pipe meeting ASTM F 810-12 (2018) or AASHTO M 252-23 Type SP.

(d) Gravity distribution laterals ~~shall~~ **must** have two (2) or three (3) rows of holes separated by one hundred twenty (120) degrees, with a five-eighths (⅝) inch or three-quarters (¾) inch hole diameter with holes spaced at five (5) inches or less.

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

~~(1) ASTM F 405-05.~~

~~(2)~~ **(1)** ASTM F 667-16 (2021).

~~(3)~~ **(2)** NRCS 606, 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; filed Feb 27, 2024, 10:34 a.m.: 20240327-IR-410220395FRA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 67. 410 IAC 6-8.3-68 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-68 Aggregate specifications**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 68. (a) Aggregate to be used in soil absorption systems ~~shall~~ **must** be gravel, stone, or other materials listed by the department. Crushed limestone aggregate, if used, ~~shall~~ **must** be

rated as forty percent (40%) or less on the Los Angeles abrasion quality requirement of the INDOT ~~2012~~ **2024** Standard Specifications, Section 904, Aggregates.

(b) Aggregate **must be:**

(1) ~~shall be~~ a mixture with no aggregate smaller in size than one-half (½) inch in diameter nor any aggregate larger than two and one-half (2½) inches in diameter; and

(2) ~~must be~~ larger than the openings in the gravity distribution laterals.

(c) Tire chips may be used in place of stone for soil absorption systems on a one-for-one basis, volumetrically. Tire chips used for soil absorption systems must have a nominal size of two (2) inches, with chip dimensions being not less than one-half (½) inch and not greater than four (4) inches.

(d) Fines, sand, and clay ~~shall~~ **must** be removed from the aggregate ~~prior to~~ **before** its placement in the trench.

*(Indiana Department of Health; 410 IAC 6-8.3-68; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 68. 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; IC 16-41-25**

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

(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 4632-15a(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 4632-15a(2023).

(3) A trapezoidal tear strength equal to or greater than thirty (30) pounds in MD and CD in accordance with ASTM ~~D 4533-15~~ **D 4533-15(2023).**

(4) A CBR puncture resistance equal to or greater than one hundred seventy-five (175) pounds in accordance with ASTM D 6241-22a.

(5) A permittivity of equal to or greater than 0.5 $sec^{-1}$ in accordance with ASTM 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 4355-21~~ **ASTM D 4491-22**.

(7) A UV resistance at five hundred (500) hours equal to or greater than seventy percent (70%) strength retained in accordance with ~~ASTM D 4491-22~~ **ASTM D 4355-21**.

(8) An apparent opening size (U.S. Sieve) equal to or greater than forty (40), and equal to or less than seventy (70) sieve in accordance with ASTM D 4751-21a.

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

(1) nonbiodegradable;

(2) resistant to acids and alkalies 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; filed Feb 27, 2024, 10:34 a.m.: 20240327-IR-410220395FRA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 69. 410 IAC 6-8.3-70 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-70 Subsurface trench on-site sewage system site suitability**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3; IC 16-41-25-1; IC 16-41-25-6**

Sec. 70. (a) On-site sewage system feasibility, location, and selection ~~shall~~ **must** be based on the:

(1) site evaluation;

(2) information obtained from the on-site soils evaluation; and

(3) DDF.

If site conditions are acceptable, subsurface trench soil absorption systems are the systems of choice.

(b) ~~All of~~ The following site conditions in this section must be met if subsurface trench on-site sewage systems are to be constructed:

(1) Sufficient area exists on the lot for an appropriately sized subsurface trench on-site sewage system, while meeting the:

(A) separation distances of section 57 of this rule; and

(B) dispersal area requirements of section 58 of this rule.

(2) The topographic position of the site on which the on-site sewage system is to be built is convex, hill slope, or flat. If surface and subsurface drainage can be diverted around the site, a toe slope position can be used.

(3) The site has a slope of fifteen percent (15%) or less.

(4) Site conditions permit distribution of effluent to each trench of the subsurface soil absorption system so that each trench can be loaded with a proportionate volume of effluent.

(5) Site conditions permit any seasonal high-water table at the site of the proposed subsurface trench soil absorption system to be lowered to at least thirty-four (34) inches below original grade, in accordance with section 59 of this rule.

(6) When there are no **limiting layer** horizons from original grade to thirty-four (34) inches below original grade. ~~in a soil developed from Wisconsin glacial till that shows effervescence when treated with a ten percent (10%) hydrochloric acid solution, unless:~~

~~(A) the on-site soils evaluation report shows that the presence of the horizon is not detrimental to the proper functioning of an on-site sewage system; and~~

~~(B) the determination in clause (A) is made using the guidelines as set forth in the soil manuals, technical bulletins, and handbooks of the NRCS guidelines and as approved by the department.~~

~~(7) When there are no soil horizons at the site from the original grade to thirty-four (34) inches below the original grade with:~~

~~(A) less than twenty percent (20%) clay by volume and greater than thirty-five percent (35%) coarse fragments by volume; or~~

~~(B) greater than or equal to twenty percent (20%) clay by volume and greater than sixty percent (60%) coarse fragments by volume.~~

~~(8) All~~ **(7) The** soil horizons at the site from the original grade to thirty-four (34) inches below the original grade have a soil loading rate of not less than twenty-five hundredths (0.25) and not more than one and twenty-hundredths (1.20) gallons per day, per square foot, as determined from Table IV as follows:

| Table IV - Soil Loading Rates for Subsurface Trench On-Site Sewage Systems (in gpd/ft$^2$) |
|---|
| SOIL STRUCTURE CLASSES |

| SOIL TEXTURE CLASSES[3] | Single Grain | Granular | Strong: Angular, Sub-Angular Blocky, Prismatic | Moderate: Angular, Sub-Angular Blocky, Prismatic | Weak: Angular, Sub-Angular Blocky, Prismatic; Platy[1] | Fragic Characteristics: Very Coarse Prismatic | Structureless, Massive, Friable, V. Friable | Structureless, Massive, Compact, Firm, V. Firm; Platy[2] |
|---|---|---|---|---|---|---|---|---|
| Gravel, Coarse Sand | >1.20 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Loamy Coarse Sand, Medium Sand | 1.20 | 1.20 | N/A | N/A | 1.20 | N/A | N/A | N/A |
| Fine Sand, Loamy Sand, Loamy Fine Sand | 0.75 | 0.60 | N/A | 0.75 | 0.75 | N/A | 0.75 | N/A |
| Very Fine Sand, Loamy V. Fine Sand | 0.50 | 0.50 | N/A | 0.75 | 0.60 | N/A | 0.60 | N/A |
| Sandy Loam, Coarse Sandy Loam | N/A | 0.75 | N/A | 0.60 | 0.60 | 0.00 | 0.60 | 0.00 |
| Fine Sandy Loam, V. Fine Sandy Loam | N/A | 0.75 | N/A | 0.60 | 0.60 | 0.00 | 0.60 | 0.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Loam | N/A | 0.75 | 0.75 | 0.50 | 0.50 | 0.00 | 0.50 | 0.00 |
| Silt Loam, Silt | N/A | 0.75 | 0.75 | 0.50 | 0.30 | 0.00 | 0.30 | 0.00 |
| Sandy Clay Loam | N/A | 0.60 | 0.60 | 0.50 | 0.30 | 0.00 | 0.30 | 0.00 |
| Silty Clay Loam, Clay Loam, Sandy Clay | N/A | 0.60 | 0.60 | 0.30 | 0.25 | 0.00 | 0.25 | 0.00 |
| Silty Clay, Clay | N/A | 0.60 | 0.50 | 0.30 | 0.25 | N/A | 0.25 | 0.00 |
| Organic Soil Materials | N/A | N/A | N/A | N/A | N/A | N/A | 0.00 | N/A |
| Limnic Soil Materials | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.00 |
| Bedrock | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A NOT APPLICABLE | | | | | | | | |
| [1]Naturally occurring platy structure. | | | | | | | | |
| [2]Platy structure caused by mechanical compaction has a soil loading rate of 0.00 gpd/ft$^2$ unless broken up by methods approved by the department. | | | | | | | | |
| **[3]Fill soil is not assigned a soil loading rate unless the provisions of IC 16-41-25-1 have been met.** | | | | | | | | |

(c) Subsurface trench soil absorption systems ~~shall~~ **must** not be constructed as follows:

(1) In areas where surface runoff or subsurface drainage will have an adverse effect on the on-site sewage system, unless the surface runoff or subsurface drainage can be effectively diverted around the system.

(2) With the bottom of any of the trenches below the ~~RFE.~~ **BFE.**

(3) In areas subject to ponding.

(4) Wholly or partly located in a drainage way.

(5) Where compacted soil material is identified in the soil at a depth greater than twelve (12) inches, unless:

**(A)** the compaction is broken up by a method approved by the department; **or**

**(B) a soil scientist certifies that the compacted soil may be made suitable in accordance with IC 16-41-25-6.**

*(Indiana Department of Health; 410 IAC 6-8.3-70; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 70. 410 IAC 6-8.3-71 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-71 Subsurface trench on-site sewage system type selection criteria**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 71. (a) On-site sewage system feasibility, location, and selection ~~shall~~ **must** be based on the:

(1) site evaluation;

(2) information obtained from the on-site soils evaluation; and

(3) DDF.

(b) A subsurface trench gravity system may be constructed if the:

(1) DDF of the project is equal to or greater than four hundred fifty (450) gallons per day;

(2) soil loading rate of the site is equal to or greater than twenty-five hundredths (0.25) gallons per day, per square foot, and equal to or less than seventy-five hundredths (0.75) gallons per day, per square foot, as determined from Table IV in section ~~70(b)(8)~~ **70(b)(7)** of this rule;

(3) trench bottoms will be at least thirty (30) inches above any ~~horizon with~~ **limiting layer; and**

~~(A) a soil loading rate less than twenty-five hundredths (0.25) gallons per day per square foot or greater than seventy-five hundredths (0.75) gallons per day per square foot;~~

~~(B) any soil horizon in a soil developed from Wisconsin glacial till that shows effervescence when treated with a ten percent (10%) hydrochloric acid solution, unless:~~

~~(i) the on-site soils evaluation report shows that the presence of the horizon is not detrimental to the proper functioning of an on-site sewage system; and~~

~~(ii) the determination in item (i) is made using the guidelines as set forth in the soil manuals, technical bulletins, and handbooks of the NRCS guidelines and as approved by the department;~~

~~(C) less than twenty percent (20%) clay by volume and greater than thirty-five percent (35%) coarse fragments by volume; or~~

~~(D) greater than or equal to twenty percent (20%) clay by volume and greater than sixty percent (60%) coarse fragments by volume; and~~

(4) soil absorption system, including either half of a subsurface trench alternating field on-site sewage system, is designed with a total absorption trench length that does not exceed five hundred (500) ~~lineal~~ **linear** feet.

(c) A subsurface trench gravity on-site sewage system may also be constructed if the:

(1) DDF of the proposed on-site sewage system is less than four hundred fifty (450) gallons per day;

(2) site has a soil loading rate of equal to or greater than twenty-five hundredths (0.25) gallons per day, per square foot, and equal to or less than seventy-five hundredths (0.75) gallons per day, per square foot, as determined from Table IV in section ~~70(b)(8)~~ **70(b)(7)** of this rule;

(3) trench bottoms will be at least twenty-four (24) inches above any ~~horizon with:~~ **limiting layer; and**

~~(A) a soil loading rate less than twenty-five hundredths (0.25) gallons per day per square foot or greater than seventy-five hundredths (0.75) gallons per day per square foot;~~

~~(B) any soil horizon in a soil developed from Wisconsin glacial till that shows effervescence when treated with a ten percent (10%) hydrochloric acid solution, unless:~~

~~(i) the on-site soils evaluation report shows that the presence of the horizon is not detrimental to the proper functioning of an on-site sewage system; and~~

~~(ii) the determination in item (i) is made using the guidelines as set forth in the soil manuals, technical bulletins, and handbooks of the NRCS guidelines and as approved by the department;~~

~~(C) less than twenty percent (20%) clay by volume and greater than thirty-five percent (35%) coarse fragments by volume; or~~

~~(D) greater than or equal to twenty percent (20%) clay by volume and greater than sixty percent (60%) coarse fragments by volume; and~~

(4) soil absorption system, including either half of a subsurface trench alternating field on-site sewage system, is designed with a total absorption system trench length that does not exceed five hundred (500) ~~lineal~~ **linear** feet.

(d) A subsurface trench on-site sewage system that ~~utilizes~~ **uses** alternating fields or is dosed using pump assisted distribution may be constructed if the:

(1) soil loading rate of the site is equal to or greater than twenty-five hundredths (0.25) gallons per day, per square foot, and equal to or less than seventy-five hundredths (0.75) gallons per day, per square foot, as determined from Table IV in section ~~70(b)(8)~~ **70(b)(7)** of this rule; and

(2) trench bottoms will be at least twenty-four (24) inches above any ~~horizon with:~~ **limiting layer.**

~~(A) a soil loading rate less than twenty-five hundredths (0.25) gallons per day per square foot;~~

~~(B) any soil horizon in a soil developed from Wisconsin glacial till that shows effervescence when treated with a ten percent (10%) hydrochloric acid solution, unless:~~

~~(i) the on-site soils evaluation report shows that the presence of the horizon is not detrimental to the proper functioning of an on-site sewage system; and~~

~~(ii) the determination in item (i) is made using the guidelines as set forth in the soil manuals, technical bulletins, and handbooks of the NRCS guidelines and as approved by the department;~~

~~(C) less than twenty percent (20%) clay by volume and greater than thirty-five percent (35%) coarse fragments by volume; or~~

~~(D) greater than or equal to twenty percent (20%) clay by volume and greater than sixty percent (60%) coarse fragments by volume.~~

(e) If ~~any~~ **a** soil absorption system, including either half of an alternating field on-site sewage system, is designed with a total absorption trench length greater than five hundred (500) ~~lineal~~ **linear** feet, the absorption system ~~shall~~ **must** be dosed using pump assisted distribution.

(f) If ~~any~~ **a** soil horizon within twenty-four (24) inches of the proposed trench bottom has a soil loading rate of one and twenty-hundredths (1.20) gallons per day, per square foot, as determined from Table IV in section ~~70(b)(8)~~ **70(b)(7)** of this rule, the on-site sewage system ~~shall utilize~~ **must use** pressure distribution.

*(Indiana Department of Health; 410 IAC 6-8.3-71; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 71. 410 IAC 6-8.3-72 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-72 Elevated sand mound on-site sewage system site suitability**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3; IC 16-41-25-1; IC 16-41-25-6**

Sec. 72. (a) On-site sewage system feasibility, location, selection, and design ~~shall~~ **must** be based on the:

(1) site evaluation;

(2) information obtained from the on-site soils evaluation; and

(3) DDF.

(b) Elevated sand mound on-site sewage systems may be constructed if the following site conditions are met:

(1) Sufficient area exists on the lot for an appropriately sized elevated sand mound on-site sewage system, while meeting the:

(A) separation distances of section 57 of this rule; and

(B) dispersal area requirements of section 58 of this rule.

(2) The topographic position of the site on which the elevated sand mound on-site sewage system is to be built is convex, hill slope, or flat. If surface and subsurface drainage can be diverted around the site, a toe slope position can be ~~utilized.~~ **used.**

(3) The site on which the elevated sand mound on-site sewage system is to be built has a slope of six percent (6%) or less.

(4) Site conditions permit any seasonal high-water table at the site of the proposed elevated sand mound on-site sewage system to be lowered to at least twenty (20) inches below original grade, in accordance with section 59 of this rule.

(5) When **there is** no ~~soil horizon~~ **limiting layer** from the ground surface to twenty (20) inches below the ground surface. ~~in a soil developed from Wisconsin glacial till shows effervescence when treated with a ten percent (10%) hydrochloric acid solution, unless:~~

~~(A) the on-site soils evaluation report shows that the presence of the horizon is not detrimental to the proper functioning of an on-site sewage system; and~~

~~(B) the determination in clause (A) is made using the guidelines as set forth in the soil manuals, technical bulletins, and handbooks of the NRCS guidelines and as approved by the department.~~

~~(6) When there are no soil horizons from the ground surface to twenty (20) inches below the ground surface with:~~

~~(A) less than twenty percent (20%) clay by volume and greater than thirty-five percent (35%) coarse fragments by volume; or~~

~~(B) greater than or equal to twenty percent (20%) clay by volume and greater than sixty percent (60%) coarse fragments by volume.~~

~~(7) All~~ **(6) The** soil horizons from the original grade to twenty (20) inches below the original grade have a soil loading rate of not less than twenty-five hundredths (0.25) gallons per day, per square foot, and not more than one and twenty-hundredths (1.20) gallons per day, per square foot, as determined from Table V as follows:

| Table V - Soil Loading Rates for Elevated Sand Mound On-Site Sewage Systems (in gpd/ft$^2$) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SOIL STRUCTURE CLASSES | | | | | | | | |
| SOIL TEXTURE CLASSES[3] | Single Grain | Granular | Strong: Angular, Sub-Angular Blocky, Prismatic | Moderate: Angular, Sub-Angular Blocky, Prismatic | Weak: Angular, Sub-Angular Blocky, Prismatic; Platy[1] | Fragic Characteristics: Very Coarse Prismatic | Structureless, Massive, Friable, V. Friable | Structureless, Massive, Compact, Firm, V. Firm; Platy[2] |
| Gravel, Coarse Sand | >1.20 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Loamy Coarse Sand, Medium Sand | 1.20 | 1.20 | N/A | N/A | 1.20 | N/A | N/A | N/A |
| Fine Sand, Loamy Sand, | 0.60 | 0.60 | N/A | 0.60 | 0.60 | N/A | 0.60 | N/A |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Loamy Fine Sand | | | | | | | | |
| Very Fine Sand, Loamy V. Fine Sand | 0.50 | 0.50 | N/A | 0.50 | 0.50 | N/A | 0.50 | N/A |
| Sandy Loam, Coarse Sandy Loam | N/A | 0.60 | N/A | 0.60 | 0.60 | 0.00 | 0.60 | 0.00 |
| Fine Sandy Loam, V. Fine Sandy Loam | N/A | 0.60 | N/A | 0.60 | 0.60 | 0.00 | 0.60 | 0.00 |
| Loam | N/A | 0.50 | 0.50 | 0.50 | 0.50 | 0.00 | 0.50 | 0.00 |
| Silt Loam, Silt | N/A | 0.50 | 0.50 | 0.50 | 0.50 | 0.00 | 0.50 | 0.00 |
| Sandy Clay Loam | N/A | 0.50 | 0.50 | 0.50 | 0.50 | 0.00 | 0.50 | 0.00 |
| Silty Clay Loam, Clay Loam, Sandy Clay | N/A | 0.25 | 0.25 | 0.25 | 0.25 | 0.00 | 0.25 | 0.00 |
| Silty Clay, Clay | N/A | 0.25 | 0.25 | 0.25 | 0.25 | N/A | 0.25 | 0.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Organic Soil Materials | N/A | N/A | N/A | N/A | N/A | N/A | 0.00 | N/A |
| Limnic Soil Materials | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.00 |
| Bedrock | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A NOT APPLICABLE | | | | | | | | |
| [1] Naturally occurring platy structure. | | | | | | | | |
| [2] Platy structure caused by compaction has a soil loading rate of 0.00 gpd/ft$^2$ unless broken up by methods approved by the department. | | | | | | | | |
| **[3]Fill soil is not assigned a soil loading rate unless the provisions of IC 16-41-25-1 have been met.** | | | | | | | | |

(c) Elevated sand mound soil absorption systems ~~shall~~ **must** not be constructed as follows:

(1) In areas where surface runoff or subsurface drainage will have an adverse effect on the on-site sewage system, unless the surface runoff or subsurface drainage can be effectively diverted around the system.

(2) Where the original grade is below the ~~RFE.~~ **BFE.**

(3) In areas subject to ponding.

(4) Wholly or partly located in a drainage way.

(5) Where compacted soil material is identified in the soil at a depth greater than twelve (12) inches, unless:

**(A)** the compaction is broken up by a method approved by the department; **or**

**(B) a soil scientist certifies that the compacted soil may be made suitable in accordance with IC 16-41-25-6.**

*(Indiana Department of Health; 410 IAC 6-8.3-72; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 72. 410 IAC 6-8.3-73 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-73 Table for on-site sewage system selection**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 73. On-site sewage system selection may be summarized in Table VI as follows:

| Table VI - Table for On-Site Sewage System Selection Based on Requirements of 410 IAC 6-8.3 | | | | | | |
|---|---|---|---|---|---|---|
| Site Requirements | Subsurface Trench On-Site Sewage Systems | | | | | Elevated Sand Mound On-Site Sewage Systems (Sec. 72) |
| | Gravity Flow[1] (Sec. 70, 71) | | Flood Dosing or Alt. Fields[1] (Sec. 70, 71) | Flood Dosing[1] (Sec. 70, 71) | Pressure Dist. (Sec. 70, 71) | |
| Slope | ≤ 15% | | ≤ 15% | ≤ 15% | ≤ 15% | ≤ 6% |
| Design Daily Flow | ≥ 450 | < 450 | Any | Any | Any | Any |
| Acceptable Loading Rate Range for Determining System Size | ≥ 0.25 | ≥ 0.25 | ≥ 0.25 | ≥ 0.25 | ≥ 0.25 | ≥ 0.25 |
| | ≤ 0.75 | ≤ 0.75 | ≤ 0.75 | ≤ 0.75 | ≤ 1.20 | ≤ 1.20 |
| Distance from Trench Bottom (Ground Surface for Mounds) to Layer with a Soil Loading Rate < 0.25 gpd/ft$^2$ | ≥ 30 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 20 |
| Distance from Trench Bottom (Ground Surface for Mounds) to Layer with a Soil Loading Rate > 1.20 gpd/ft$^2$ | ~~≥ 24~~ **≥ 30** | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 20 |
| Distance from Trench Bottom (Ground Surface for Mounds) to Layer with a | ~~≥ 24~~ **≥ 30** | ≥ 24 | ≥ 24 | ≥ 24 | Press. Dist. required | ≥ 0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Soil Loading Rate = 1.20 gpd/ft$^2$ | | | | | for SLR = 1.20 | |
| Distance from Trench Bottom (Ground Surface for Mounds) to a Soil Horizon Developed from Wisconsin Glacial Till That Shows Effervescence[3] | ≥ 30 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 20 |
| Distance from Trench Bottom (Ground Surface for Mounds) to Soil Horizon with < 20% Clay and > 35% Coarse Fragments by Volume | ≥ 30 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 20 |
| Distance from Trench Bottom (Ground Surface for Mounds) to Soil Horizon with ≥ 20% Clay and > 60% Coarse Fragments by Volume | ≥ 30 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 20 |
| Distance from Trench Bottom (Ground Surface for Mounds) to Seasonal High Water Table[2] | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 24 | ≥ 20 |
| Total ~~Lineal~~ **Linear** Feet of Trench | ≤ 500 | ≤ 500 | ≤ 500 for Alt. Fields | Any | Any | N/A |
| [1]These conditions are also suitable for subsurface trench pressure distribution on-site sewage systems. | | | | | | |
| [2]For subsurface trench systems, if the distance from trench bottom to seasonal high-water table is less than twenty-four (24) inches, drainage must be installed in accordance with section 59 of this rule. For elevated sand mound systems, if the depth of the seasonal high-water table is less than twenty (20) inches below the ground surface, drainage must be installed in accordance with section 59 of this rule. | | | | | | |

| |
|---|
| [3]See Sections ~~58(a)(2)(E),~~ **58(a)(2),** 70(b)(6), ~~71(b)(3)(B), 71(c)(3)(B), 71(d)(2)(B)~~ **71(b)(3), 71(c)(3), 71(d)(2),** and 72(b)(5). |
| This chart does not include considerations such as the specific landscape features that must be met, ~~the~~ size of the soil absorption system, ~~the~~ size of the area necessary for construction of the soil absorption system on the contour, with necessary setback and separation distances, dispersal area, ~~the~~ diversion of surface drainage, ~~the~~ feasibility of subsurface drainage, ~~the~~ ability to obtain easements, etc. |
| This chart does not take into consideration the necessity to pump the effluent to overcome differences in elevation (when a subsurface trench gravity system might otherwise be constructed). |

*(Indiana Department of Health; 410 IAC 6-8.3-73; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; errata filed Dec 12, 2012, 2:16 p.m.: 20121226-IR-410120156ACA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 73. 410 IAC 6-8.3-74 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-74 Subsurface trench on-site sewage systems: general design and construction requirements**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 74. (a) The minimum absorption area, in square feet, required for each subsurface trench soil absorption system ~~shall~~ **must** be based on the following:

(1) The **DDF.** ~~number of bedrooms and bedroom equivalents in the dwelling.~~

(2) The appropriate soil loading rate in gallons per day, per square foot, determined from Table IV in section ~~70(b)(8)~~ **70(b)(7)** of this rule. The soil loading rate used for this computation ~~shall~~ **must** be the soil loading rate of the most restrictive horizon in the first twenty-four (24) inches below the trench bottom.

(3) The absorption area ~~shall~~ **must** be computed using the following formula:

$$\text{Area} = \frac{\textbf{Design Daily Flow (in gpd)}\ \sout{\text{150 gal. x number of bedrooms and bedroom equivalents}}}{\text{Soil loading rate in } \sout{\text{gpd/sq. ft.}}\ \textbf{gpd/ft}^2}$$

**(b) The area of the on-site sewage system and dispersal area must be protected from disturbance before, during, and after construction of the system. The local health department may require:**

**(1) a site visit and evaluation before issuing an on-site sewage system construction permit; and**

**(2) the system components to be marked and identified at the site before the site visit.**

~~(b)~~ **(c)** Subsurface trench soil absorption systems ~~shall~~ **must** be as long and narrow as the site permits while not exceeding maximum trench length.

~~(c) All~~ **(d)** Subsurface trench on-site sewage systems ~~shall~~ **must** be located in accordance with the separation distances shown in Table I in section 57(a) of this rule.

~~(d)~~ **(e)** Special caution ~~shall~~ **must** be taken to prevent wheeled and tracked vehicles from compacting the area selected for placement of the soil absorption system before, during, and after construction of the trenches, especially during wet weather. Alteration of soil structure by movement of vehicles may be grounds for rejection of the site or ~~the~~ soil absorption system, or both.

~~(e)~~ **(f)** Subsurface soil absorption systems ~~shall~~ **must** not be constructed during periods of wet weather when the soil is sufficiently wet at the depth of installation to exceed its plastic limit, as follows:

(1) This applies to soils classified as the following:

(A) Sandy loam.

(B) Silt loam.

(C) Loam.

(D) Clay loam.

(E) Silty clay loam.

(F) Sandy clay.

(G) Silty clay.

(H) Clay.

(2) Sufficient samples ~~shall~~ **must** be evaluated throughout the soil absorption system site, from the soil surface to the proposed depth of the soil absorption system trench bottoms, to assure that the plastic limit of the soil is not exceeded.

(3) The plastic limit of a soil ~~shall be~~ **is** considered to have been exceeded when the soil can be rolled between the palms of the hands to produce threads one-eighth (⅛) inch in diameter without breaking apart and crumbling.

~~(f)~~ **(g)** Vegetation at the soil absorption system site that would interfere with the soils evaluation, system layout, or system construction ~~shall~~ **must** be cut and removed ~~prior to~~ **before** installation without causing compacted soil material.

~~(g)~~ **(h)** If trees are present within the proposed soil absorption system:

(1) soil absorption trenches may be routed around trees, provided the trenches follow the contour of the site; or

(2) tree stumps and root balls may be removed, provided the resulting excavation will not exceed the permit requirements for width and depth of the soil absorption trench.

~~(h)~~ **(i)** Excessive smearing of the usable absorption trench sidewalls or bottom during construction may:

(1) result in irreversible damage to the soil infiltrative surface; and

(2) be grounds for rejection of the site or ~~the~~ on-site sewage system, or both.

~~(i) The~~ **(j) A** residential sewer ~~shall~~ **must** be ~~a minimum of~~ **at least** four (4) inches in diameter. Four (4) inch sewers ~~shall~~ **must** be installed with a positive slope of:

(1) not less than four (4) inches in twenty-five (25) feet; and

(2) not more than thirty-six (36) inches in twenty-five (25) feet.

~~(j)~~ **(k)** A six (6) inch residential sewer, if ~~utilized, shall~~ **used, must** be installed with a positive slope of:

(1) not less than two (2) inches in twenty-five (25) feet; and

(2) not more than thirty-six (36) inches in twenty-five (25) feet.

~~(k)~~ **(l)** A vertical drop may be installed in a residential sewer. Each vertical drop ~~shall~~ **must** have a cleanout located immediately upslope.

~~(l)~~ **(m)** Effluent sewers ~~shall~~ **must** meet the following requirements:

(1) Effluent sewers ~~shall~~ **must** be ~~a minimum of~~ **at least** four (4) inches in diameter.

(2) Effluent sewer pipe ~~shall~~ **must** have a positive grade of at least two and four-tenths (2.4) inches per one hundred (100) feet or a grade of two-tenths percent (0.2%).

~~(m) All~~ **(n)** Sewer and effluent sewer joints ~~shall~~ **must** be sealed according to the manufacturer's recommendations ~~in order~~ to be watertight and ~~to~~ withstand the pressures exerted on them.

~~(n)~~ **(o)** The absorption trenches of a subsurface trench soil absorption system ~~shall~~ **must** be constructed along the contour.

~~(o)~~ **(p)** The minimum depth from original grade to the bottom of a trench of a subsurface trench soil absorption system ~~shall~~ **must** not be less than ten (10) inches, and the maximum depth from final grade to the bottom of a trench of a subsurface trench soil absorption system ~~shall~~ **must** not be more than thirty-six (36) inches.

~~(p) All~~ **(q)** Subsurface trench soil absorption systems ~~shall~~ **must** be designed to ~~utilize~~ **use** trenches with a minimum width of eighteen (18) inches and a maximum trench width of thirty-six (36) inches.

~~(q)~~ **(r)** There ~~shall~~ **must** be a minimum separation of seven and one-half (7½) feet, on center, between soil absorption system trenches, measured perpendicular to the trenches.

~~(r)~~ **(s)** No single absorption trench in a subsurface trench soil absorption system ~~shall~~ **may** exceed one hundred (100) feet in length, except for subsurface trench pressure distribution on-site sewage systems.

~~(s)~~ **(t)** Each trench and distribution lateral in a subsurface trench soil absorption system ~~shall~~ **must** be uniformly level throughout its length and width.

~~(t)~~ **(u)** The distal ends of distribution laterals and trenches ~~shall~~ **must** not be tied together.

~~(u)~~ **(v)** The distal end of each distribution lateral ~~shall~~ **must** be capped, with the cap joint sealed according to the manufacturer's recommendations, ~~in order~~ to be watertight and ~~to~~ withstand the pressures exerted on it.

~~(v)~~ **(w)** Perforated pipe distribution laterals in the absorption trench of a subsurface trench soil absorption system ~~shall~~ **must** be completely surrounded by aggregate that meets the specifications in section 68 of this rule. There ~~shall~~ **must** be at least six (6) inches of aggregate below the pipe.

~~(w)~~ **(x)** The minimum depth of aggregate above the distribution laterals ~~shall~~ **must** be:

(1) two (2) inches throughout the entire length and width of trenches having a depth of twelve (12) inches or greater; or

(2) two (2) inches above the distribution lateral for the entire length of trenches having a depth of ten (10) inches to twelve (12) inches.

~~(x)~~ **(y)** The aggregate used in a subsurface trench soil absorption system ~~shall~~ **must** be covered with a geotextile fabric barrier in ~~such~~ a ~~manner as to prevent~~ **way that prevents** the aggregate from becoming clogged with the earth fill. The barrier material ~~shall:~~ **must:**

(1) meet the minimum requirements in section 69 of this rule;

(2) be placed on the aggregate to prevent soil particle movement into the aggregate; and

(3) cover the aggregate from side to side and from end to end.

~~(y) A minimum of~~ **(z) At least** twelve (12) inches of cover ~~shall~~ **must** be provided over the aggregate in the trenches, and any fill required to provide cover ~~shall~~ **must** be crowned over the entire soil absorption system to promote surface runoff.

~~(z)~~ **(aa)** Tire chips, if used for aggregate, will have protruding wires and ~~shall~~ **must** be removed from the ground surface during site cleanup.

*(Indiana Department of Health; 410 IAC 6-8.3-74; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 74. 410 IAC 6-8.3-79 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-79 Elevated sand mound on-site sewage systems: design of aggregate bed**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 79. (a) The size of the aggregate bed ~~shall~~ **must** be determined from the following:

(1) The minimum area of the aggregate bed ~~shall~~ **must** be calculated as:

$$\text{minimum aggregate bed area } (ft^2)\ (AB) = \frac{\text{~~DDF (150 gal. x number of bedrooms and bedroom equivalents)(in gpd)~~ } \textbf{Design Daily Flow (in gpd)}}{1.2\ gpd/ft^2}$$

(2) The dimensions of the aggregate bed ~~shall~~ **must** be as long and narrow as the site allows, while not exceeding the maximum bed width calculated in subdivision (3)(A).

(3) The maximum width of the aggregate bed ~~shall~~ **must** meet the following requirements:

(A) The maximum aggregate bed width (ft.)($AB_W$) =

$$0.83\ ft^2/gpd \times \sqrt{\frac{DDF\ (gpd) \times SLR\ (gpd/ft^2)}{n}}$$

**(i)** where: 0.83 is a conversion factor ($ft^2$/gpd) SLR is soil loading rate; and

**(ii)** where: DDF is design daily flow, and n is determined by the DDF in this chart:

| DDF (gpd) | n |
|---|---|
| ≤ 1500 | 3 |
| 1501-3000 | 4 |
| 3001-4000 | 5 |

**(iii)** This number may be rounded down to the nearest whole number.

(B) For on-site sewage systems with a DDF of seven hundred fifty (750) gallons per day or less, the width of the aggregate bed ~~shall~~ **must** be at least four (4) feet and not greater than ten (10) feet. The aggregate bed width ~~shall~~ **must** not exceed the maximum bed width calculated in clause (A).

(C) For on-site sewage systems with a DDF of greater than seven hundred fifty (750) gallons per day, the following apply:

(i) If the soil loading rate is fifty-hundredths (0.50) gallons per day, per square foot (gpd/$ft^2$), or less, the width of the aggregate bed ~~shall~~ **must** be not greater than fifteen (15) feet and ~~shall~~ **must** not exceed the maximum bed width calculated in clause (A).

(ii) If the soil loading rate is greater than fifty-hundredths (0.50) gallons per day, per square foot (gpd/$ft^2$), the width of the aggregate bed ~~shall~~ **must** be not greater than twenty (20) feet and ~~shall~~ **must** not exceed the maximum bed width calculated in clause (A).

(4) The minimum length of the aggregate bed ~~shall~~ **must** be calculated as:

$$\text{Minimum length of the aggregate bed } (AB_L) = \frac{\text{Minimum aggregate bed area (AB)}}{\text{Maximum aggregate bed width } (AB_W)}$$

(5) The depth of the aggregate bed ~~shall~~ **must** be at least the sum of:

(A) at least six (6) inches of aggregate below the pressure distribution lateral;

(B) the outside diameter of the pressure distribution lateral; and

(C) at least two (2) inches of aggregate above the pressure distribution lateral.

(b) The aggregate bed ~~shall~~ **must** be installed on the INDOT Specification 23 sand in the basal area, as listed in Table XV in section 80(j) of this rule.

(c) The location of the aggregate bed ~~shall~~ **must** be:

(1) for sites with slopes of one-half percent (½%) or less, with its length positioned along the long axis in the center of the basal area; and

(2) for sites with slopes greater than one-half percent (½%) and less than or equal to six percent (6%), with its length positioned along the long axis at the upslope side of the basal area.

(d) The design of the aggregate bed ~~shall~~ **must** comply with the following:

(1) The long axis of the aggregate bed ~~shall~~ **must** be constructed along the contours of the absorption system site.

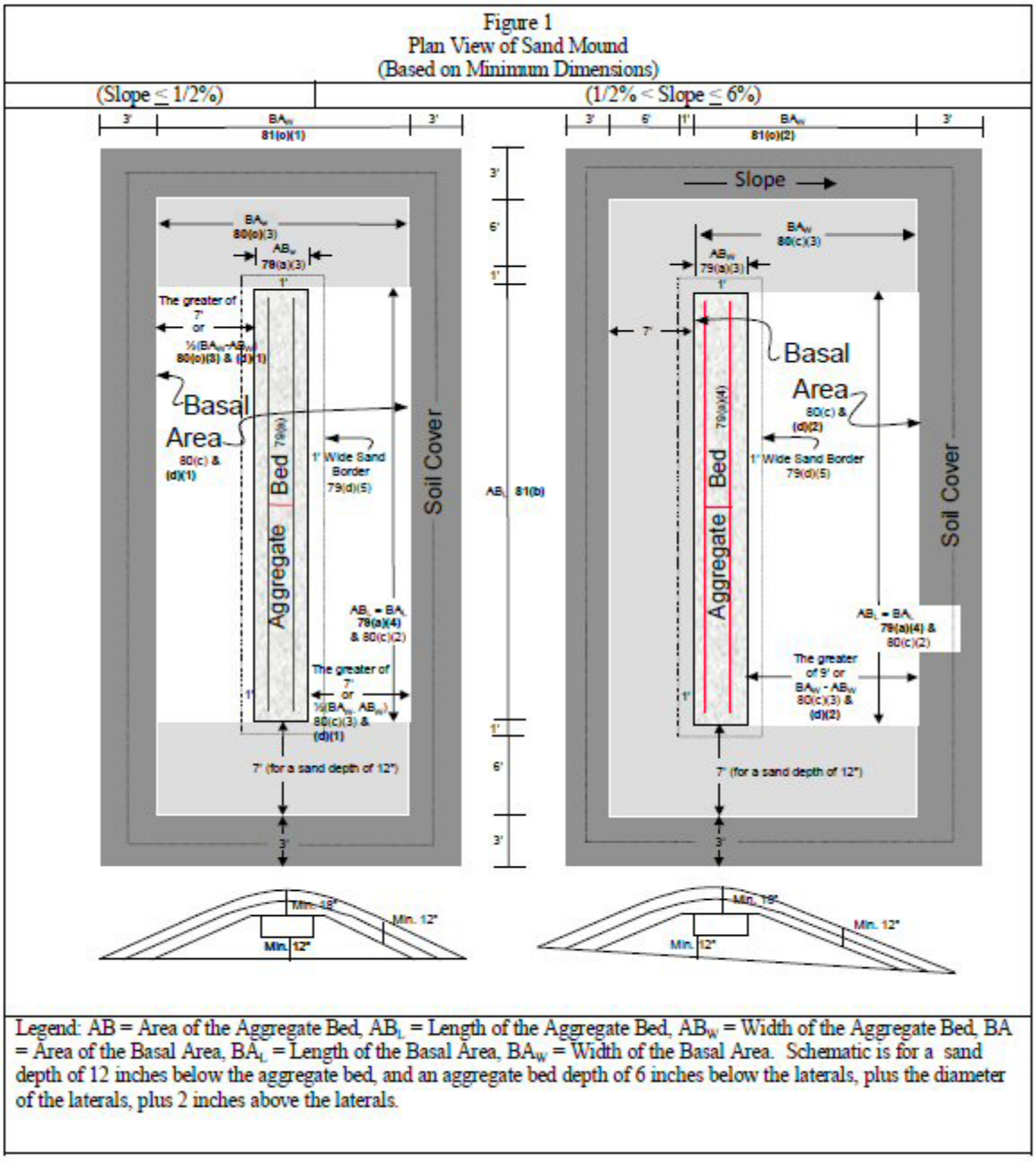
(2) The bottom of the aggregate bed ~~shall~~ **must** be level along its length and width.

(3) Aggregate used in the aggregate bed ~~shall~~ **must** comply with the requirements of section 68 of this rule.

(4) If more than one (1) aggregate bed is constructed, each of the aggregate beds ~~shall~~ **must** be equal in area.

(5) A one (1) foot wide border of INDOT Specification 23 sand, level with the top of the aggregate bed, ~~shall~~ **must** surround the aggregate bed.

Figure 1, as follows, presents a visual depiction of the location of the aggregate bed within the basal area:




*(Indiana Department of Health; 410 IAC 6-8.3-79; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; errata filed Apr 23, 2013, 11:44 a.m.: 20130508-IR-410130165ACA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 75. 410 IAC 6-8.3-80 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-80 Elevated sand mound on-site sewage systems: design of basal area**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 80. (a) The dimensions of the basal area ~~shall~~ **must** be as long and narrow as the site allows, in compliance with the requirements of subsection (c).

(b) Numerical dimensions provided in this section for basal area and elevated sand mound size are rounded up to the nearest whole number.

(c) The size of the basal area ~~shall~~ **must** be determined from the following:

(1) The minimum size of the basal area ~~shall~~ **must** be calculated as:

$$\text{Minimum basal area } (ft^2)(BA) = \frac{\text{~~DDF (150 gal. × number of bedrooms and bedroom equivalents)(in gpd)~~ } \textbf{Design Daily Flow}}{\text{soil loading rate (SLR)}}$$

using the soil loading rates from Table V in section ~~72(b)(7)~~ **72(b)(6)** of this rule. The soil loading rate used for this computation ~~shall~~ **must** be the soil loading rate of the most restrictive horizon in the first twenty (20) inches below the ground surface.

(2) The minimum length for the basal area ($BA_L$) ~~shall~~ **must** equal the length of the aggregate bed ($AB_L$).

(3) The minimum width of the basal area ($BA_W$) ~~shall~~ **must** be calculated as the greater of:

(A) $$\text{Minimum basal area width} = \frac{\text{minimum basal area } (ft.^2) \text{ (BA)}}{\text{length of aggregate bed (ft) } (AB_L)}\text{; or}$$

(B)

| Slope | Minimum Basal Area Width ($BA_W$) |
|---|---|
| 0% ≤ slope ≤ ½% | Aggregate bed width + 14 ft. |
| ½% > slope ≤ 6% | Aggregate bed width + 9 ft. |
| | |

(C) The dimensions determined from clause (A) or (B) for the INDOT Specification 23 sand ~~shall~~ **must** maintain a minimum sideslope grade of three-to-one (3:1).

(d) The location of the basal area within the elevated sand mound ~~shall~~ **must** be:

(1) on sites with slopes of one-half percent (½%) or less, the area under the aggregate bed and extending an equal distance from each side along the length of the aggregate bed; and

(2) on sites with slopes greater than one-half percent (½%) and less than or equal to six percent (6%), the area under the aggregate bed and extending directly downslope from the aggregate bed.

(e) The design of the basal area ~~shall~~ **must** be for:

(1) sites with slopes **of** one-half percent (½%) or less; or

(2) sites with slopes greater than one-half percent (½%) and less than or equal to six percent (6%).

(f) The basal area ~~shall~~ **must** be constructed on the tilled surface of the soil absorption system site in accordance with ~~the provisions of~~ section 87 of this rule.

(g) The long axis of the basal area and elevated sand mound ~~shall~~ **must** be constructed along the contour of the soil absorption system site.

(h) The minimum depth of the INDOT Specification 23 sand under the aggregate bed ~~shall~~ **must** be twelve (12) inches.

(i) The INDOT Specification 23 sand ~~shall~~ **must** have a minimum final grade on all sides of three-to-one (3:1).

(j) The INDOT Specification 23 sand used in the elevated sand mound ~~shall~~ **must** meet the following standard:

| Table XV - INDOT Specification 23 Sand* | |
|---|---|
| Sieve Sizes | Percent (%) Passing Sieve (by Weight) |
| 3/8 in (9.50 mm) | 100 |
| No. 4 (4.75 mm) | 95 - 100 |
| No. 8 (2.36 mm) | 80 - 100 |
| No. 16 (1.18 mm) | 50 - 85 |
| No. 30 (600 µm) | 25 - 60 |

| | |
|---|---|
| No. 50 (300 µm) | 5 - 30 |
| No. 100 (150 µm) | 0 - 10 |
| No. 200 (75 µm) | 0 - 3 |
| *The sand ~~shall~~ **must** not have more than forty-five percent (45%) retained between any two (2) consecutive sieves. | |

(k) Figure 1 in section 79(d) of this rule presents a visual depiction of the location of the basal area within the elevated sand mound.

*(Indiana Department of Health; 410 IAC 6-8.3-80; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 76. 410 IAC 6-8.3-81 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-81 Elevated sand mound on-site sewage systems: elevated sand mound dimensions**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 81. (a) Numerical dimensions for the soil material cover from the edge of the basal area to the edge of the elevated sand mound are based on a final grade of three-to-one (3:1) (on level sites). The plan views and numerical dimensions are for a simple slope (a slope that forms a plane). Elevated sand mounds sited on complex slopes are more difficult to design and construct on contour.

(b) The minimum length of an elevated sand mound ~~shall~~ **must** be the sum of the following:

(1) The length of the aggregate bed ($AB_L$).

(2) Plus fourteen (14) feet, representing the two **(2)** sideslopes of INDOT Specification 23 sand at both ends of the aggregate bed, including the one (1) foot level borders. A minimum endslope grade of three-to-one (3:1) ~~shall~~ **must** be maintained on the INDOT Specification 23 sand.

(3) Plus six (6) feet, representing the soil material cover at both ends of the aggregate bed. A minimum endslope grade of three-to-one (3:1) ~~shall~~ **must** be maintained on the soil cover material.

(c) The minimum width of the elevated sand mound ~~shall~~ **must** be determined from the following:

(1) On sites with slopes one-half percent (½%) or less, the minimum width of an elevated sand mound is the sum of the following:

(A) The basal area width ($BA_W$) as determined in section 80(c)(3) of this rule.

(B) Plus six (6) feet, representing the soil material cover on both sides of the aggregate bed.

(2) On sites with slopes greater than one-half percent (½%) and less than or equal to six percent (6%), the minimum width of an elevated sand mound ~~shall~~ **must** be the sum of the following:

(A) The ~~basal area width~~ $BA_W$ as determined in section 80(c)(3) of this rule.

(B) Plus seven (7) feet, representing the sideslope of INDOT Specification 23 sand on the upslope side of the aggregate bed, including the one (1) foot level border, and ~~shall~~ **must** maintain a minimum sideslope grade of three-to-one (3:1).

(C) Plus six (6) feet, representing the soil material cover on both sides of the aggregate bed. A minimum sideslope grade of three-to-one (3:1) ~~shall~~ **must** be maintained on the soil cover material.

*(Indiana Department of Health; 410 IAC 6-8.3-81; filed Oct 19, 2012, 2:06 p.m.: 20121114-IR-410120156FRA; readopted filed Sep 26, 2018, 2:48 p.m.: 20181024-IR-410180328RFA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 77. 410 IAC 6-8.3-90 IS AMENDED TO READ AS FOLLOWS:

**410 IAC 6-8.3-90 Abandonment of an on-site sewage system**

**Authority: IC 16-19-3-4**

**Affected: IC 16-19-3**

Sec. 90. **(a) The local health department shall issue a permit and require an inspection for the abandonment of an on-site sewage system in accordance with section 53(e) of this rule.**

~~(a)~~ **(b)** When the use of an on-site sewage system is discontinued, the following procedure must be followed for all tanks and electrical service:

(1) Electrical power must be disconnected at the source. All controls and panels must be removed.

(2) ~~All~~ Above ground electrical lines that will not be used for other purposes must be removed.

(3) A licensed ~~septic tank cleaner must~~ **septage management vehicle must** pump ~~all~~ **the** contents from all tanks **and distribution boxes** in the on-site sewage system.

(4) The tanks must: ~~either be~~

(A) ~~removed or the~~ **have their** lids crushed into the tanks, and the holes or tanks backfilled with debris-free sand or other granular material, concrete, or soil material that is compacted to prevent settling (if a sand mound is being abandoned, sand, aggregate, and soil cover from the sand mound may be used for filling the tank or tanks); ~~or~~

(B) **be** filled with flowable fill; **or**

**(C) be removed and disposed of at a licensed landfill.**

(5) Properly grade and establish vegetative cover.

~~(b)~~ **(c) If there are no plans to use the area for other purposes,** the components of the soil absorption system may be left intact. ~~if there are no plans to use the area for other purposes.~~ Vegetative cover must be maintained.

~~(c)~~ **(d)** If effluent has surfaced, those areas must be covered with hydrated lime followed by top soil and a vegetative cover.

~~(d)~~ **(e)** If components of the soil absorption system are to be removed, the following procedure must be used:

~~(1) A licensed septic tank cleaner must pump all contents from all distribution boxes in the on-site sewage system.~~

~~(2)~~ **(1)** Allow sufficient time after the on-site sewage system is taken out of service and the tanks pumped to make sure the entire soil absorption system is completely dry.

~~(3)~~ **(2)** A contractor must remove ~~the distribution network, aggregate, and sand (if any) from the site~~ **all piping, chambers, and distribution boxes and dispose of these materials at a licensed landfill.**

~~(4) The contractor must dispose of the materials at a licensed landfill.~~

**(3) Any aggregate, sand, and soil cover material may be used for fill material, including filling of abandoned tanks, after it has been allowed to sufficiently dry.**

~~(5)~~ **(4)** The site must be properly graded and a vegetative cover established.

~~(e)~~ **(f)** Written documentation of tank **pumping and system** abandonment must be provided to the local health department by the homeowner in the form of a receipt from the contractor **and landfill, if used.**

*(Indiana Department of Health; 410 IAC 6-8.3-90; 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; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 78. 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; IC 16-41-25**

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

(b) NSF/ANSI ~~Standard 40-2010~~ **Standards 40-2023** and ~~Standard 46-2010a~~ **46-2020** 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, 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,~~ **C 923-20, C 990-24, C 1116-10a(2015), C 1644-24,** D 1785-21a, ~~D 2241-2020, D 2661-2021, D 2665-2020, D 2680-2020, D 2729-2021, D 3034-2021,~~ **D 2241-24, D 2661-24, D 2665-24, D 2680-20, D 2729-21, D 3034-24, D 3035-22,** D 4355-21, D 4491-2022, ~~D 4533-15,~~ **D 4533-15(2023),** D 4632-2023, D 4751-21a, D 6241-22a, ~~F 405-05,~~ **F 2620-20ae2,** F 480-14(2022), F 667-16(2021), and ~~F 810-12 (2018)~~ **F 810-12(2024)** 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 M252-23 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, 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/resources/guides-and-instructions/subsurface-drain-ft-606-conservation-practice-standard.

(f) INDOT ~~2012~~ **2024** 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/indot/files/2012Master.pdf~~ https://www.in.gov/dot/div/contracts/standards/book/sep23/2024%20Standard%20Specifications.pdf**.**

(g) NEMA ~~250-2008~~ **250-2020** 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~~ https://www.nema.org/docs/default-source/standards-document-library/ansi_nema_250-2020-contents-and-scope76f809d7-afad-4aa1-80cd-e1d09b60f2e5.pdf?sfvrsn=cb4086bd_3**.**

**(h) IAPMO Z1000-2019, Prefabricated Septic Tanks, 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/SDO/IAPMO?gclid=EAIaIQobChMI-8P-vZLJ-QIVn8mUCR2xTQxTEAAYASAAEgJ9K_D_BwE**.**

**(i) Soil Taxonomy: A Basic System of Soil Classification for Making and Interpreting Soil Surveys, Second Edition, USDA, 1999 is incorporated by reference as part of this rule. This document may be obtained at** https://nrcspad.sc.egov.usda.gov/DistributionCenter/pdf.aspx?productID=703**.**

*(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; filed Feb 27, 2024, 10:34 a.m.: 20240327-IR-410220395FRA; readopted filed Nov 14, 2024, 1:24 p.m.: 20241211-IR-410230798RFA)*

SECTION 79. 410 IAC 6-8.3-30 IS REPEALED.