

## Home Owner Installer Study Information

### §64-47-61. Individual Sewage Systems.

61.1 General. The design standards apply to the site requirements, design, construction, and maintenance of individual sewage treatment systems including septic tank soil absorption systems with standard soil absorption fields; serial distribution soil absorption fields; soil absorption beds; shallow soil absorption fields; mound systems; home aeration units; effluent disposal ponds; composting toilets; grey water disposal systems; holding tanks; privies; recycle systems; and any other systems that provide waste treatment and disposal for individual dwellings and commercial establishments.

6.1.a. When applying for approval for systems using soil absorption or on-site effluent disposal, an applicant shall submit to the Commissioner one (1) copy of the completed application, the design data sheet, and the plan.

6.1.b. When applying for approval for systems using other methods of effluent disposal, an applicant shall submit to the Commissioner four (4) copies of the completed application, the design data sheet, and the plan.

#### 61.2 General Site Requirements.

6.2.a. The location of an individual sewage system shall not be in a poorly drained or filled area, or in any area where seasonal flooding occurs, without the prior written approval of the Commissioner. There may be exceptions if the construction of the fill area has been in accordance with directions of the Commissioner, or if an applicant provided evidence to the Commissioner that the fill area is suitable and of acceptable composition.

6.2.b. No part of an individual sewage system location shall be within ten (10) feet of a building, foundation or property line.

6.2.c. No part of an individual sewage system location shall be within twenty-five (25) feet of a public water supply line, or within ten (10) feet of a private water supply line.

6.2.d. The Commissioner shall determine the distance between a septic tank, home aeration unit, vault privy, or other sewage tank, and a public water system well or water supply.

6.2.e. The location of a septic tank, home aeration unit, vault privy, or other sewage tank shall be at least fifty (50) feet from a private water well or groundwater supply.

6.2.f. The location of absorption fields, serial distribution systems, absorption beds, mound systems, and other soil absorption systems shall comply with the distances contained in Table 64-47-K. at the end of this rule.

6.2.g. Roof drains, foundation drains, sump pumps, surface drains, or similar drains shall not connect to an individual sewage system.

6.2.h. The location of a septic tank or other treatment unit or disposal field shall not be under area to be paved, parking lots, driving surfaces, or any type of structure.

6.2.i. There shall be a minimum of three (3) feet between any portion of a standard soil absorption system and seasonal groundwater bedrock, and any other impermeable layer.

6.2.j. There shall be no standard septic tank soil absorption system installed in soils where percolation test results show an average percolation time of less than five (5) minutes per inch.

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### 6.3. Site Evaluation.

6.3.a. The evaluation of a site for the installation of a soil absorption system, including absorption fields, serial systems, absorption beds, and others, shall include but not be limited to, percolation test results and evaluation of soils in a six (6) foot excavation. Percolation tests shall be performed according to the following:

6.3.a.1. A minimum of four (4) test holes shall be placed at equal distances over the entire absorption field site. If the results of the tests are reasonably close, it shall be considered an average test result. If the tests results show extreme variations, it may be considered necessary to relocate the field in a more suitable area;

6.3.a.2. Holes shall be bored to the depth of the proposed soil absorption field from six (6) to eight (8) inches in diameter at the site where the installation of the soil-absorption field is to take place;

6.3.a.3. The bottom and sides of the hole shall be scratched with a sharp pointed instrument or wire brush to remove any smeared soil surfaces that interfere with the absorption of water into the soil;

6.3.a.4. The loose dirt shall be removed from the bottom of the test holes and two (2) inches of gravel shall be placed into the holes to prevent sealing;

6.3.a.5. A nail or a marked measuring device shall be placed in the wall of each hole exactly six (6) inches above the level of the gravel;

6.3.a.6. The test hole shall be completely filled with water to ground level and maintained to a depth of at least twelve (12) inches for a minimum period of four (4) hours before beginning the percolation rate measurement.

6.3.b. Percolation Rate Measurement. After completing the requirements in Paragraph 6.3.a.1. - 6.3.a.6., the water depth shall be adjusted in the holes to the six (6) inch level. Determine how many minutes it takes for all of the water to absorb into the soil. The resulting time in minutes, divided by six (6), shall be the rate of fall or absorption per inch.

6.3.b.1. The average rate of fall for all test holes shall be determined by adding the rate of fall for each test hole together and dividing by the number of test holes. This figure is the average rate of fall per inch. See Table 64-47-L at the end of this rule.

6.3.b.2. If desired, an applicant may use an alternate test, if approved by the local health department.

6.3.b.3. Observation Hole. A hole shall be excavated six (6) feet deep in the center of the proposed soil absorption system area to evaluate the soil depth to bedrock and the seasonal water table. If slopes at the proposed site exceed fifteen percent (15%), the excavated observation hole shall be placed at the location of the lowest proposed trench of the system. Additional observation holes may be required when there are extreme variations in soil or geology in the test area.

6.3.b.4. Six (6) feet deep slit trenches of a specified length may be required in limestone geology to determine depth to bedrock.

### 6.4. Septic Tanks.

6.4.a. Liquid capacities for tanks serving single-family dwellings shall be in accordance with the following:

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6.4.a.1. For four (4) or less bedrooms, the minimum tank capacity shall be one thousand (1,000) gallons; and

6.4.a.2. For each additional bedroom, the minimum tank capacity shall be two hundred fifty (250) gallons per bedroom.

6.4.b. When using a dual compartment tank or dual tanks, the volume ratio of the first compartment or tank to the second compartment or tank shall approximate two (2) to one (1). In a dual compartment tank, the connection between compartments shall be an elbow with a minimum diameter of four (4) inches, placed so that the invert at the partition is approximately sixteen (16) inches below the liquid level.

6.4.c. The construction of septic tanks may be of reinforced concrete, fiberglass or other watertight and durable materials approved by the Commissioner. All tanks shall meet the general requirements of Subdivision 6.4.g. of this rule, regardless of construction material. Septic tank construction shall comply with the following:

6.4.c.1. Precast Concrete Septic Tanks. Concrete used shall consist of at least six (6) bags of cement per yard of concrete mix or the equivalent, with a minimum compressive strength of four thousand (4000) pounds per square inch based on a twenty-eight (28) day compression test. Reinforcement shall be at least six (6) inch by six (6) inch mesh number ten (10) welded wire fabric or the equivalent. Aggregate used in the concrete shall be no larger than one (1) inch in size. There shall be vibrated concrete to minimize honey-combing. The sidewalls of the tanks shall be at least two and one-half (2½) inches in thickness. The top and bottom shall have a minimum thickness of four (4) inches.

6.4.d. The manufacturers of concrete septic tanks shall obtain approval from the Commissioner for the construction of and compliance with the Design Standards.

6.4.e. Metal Septic Tanks. Metal septic tanks shall not be approved due to their potential to leak into ground water.

6.4.f. Plastic and Fiberglass Tanks. The Commissioner shall approve plastic and fiberglass tanks.

6.4.g. General requirements for tanks shall be as follows:

6.4.g.1. The invert of the inlet pipe shall be a minimum of two (2) inches above the invert of the outlet pipe.

6.4.g.2. Inlets and outlets shall be a minimum of four (4) inches in diameter and equipped with a flexible watertight seal.

6.4.g.3. The inlet shall equip a cast-in-place or inserted baffle or a sanitary tee. The inlet baffle or sanitary tee shall extend to a minimum depth of six (6) inches, but to no more than twenty percent (20%) of the liquid depth.

6.4.g.4. The outlet shall equip a cast-in-place or inserted baffle or sanitary tee. The effluent baffle shall extend to at least thirty-five percent (35%) of the liquid depth, but to no more than forty percent (40%) of the liquid depth.

6.4.g.5. The top of the inlet and outlet baffles or tees shall extend at least six (6) inches above the flow line.

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6.4.g.6. Minimum liquid depth shall be thirty (30) inches.

6.4.g.7 There shall be a minimum of nine (9) inches clearance above the liquid level.

6.4.g.8. The top of the tank, above the outlet, shall have embossing, imprinting, stenciling or other form of marking in an indelible and legible manner with the manufacturer's name, the liquid capacity and date of manufacture.

6.4.g.9. Access. There shall be adequate access to each compartment of the tank for inspection and cleaning. Both the inlet and outlet devices shall be accessible. When installing a septic tank at a depth greater than twelve (12) inches below grade, it shall be required to install an extended manhole riser to within twelve (12) inches of final grade.

6.4.g.10. All septic tanks shall have a four (4) inch gas tight inspection port that extends to the surface of the ground to measure sludge and scum accumulations.

### 6.5. The Standard Soil Absorption System.

6.5.a. The pipe for gravity distribution systems shall have a minimum diameter of four (4) inches. Pressure distribution systems may use smaller size pipe.

6.5.b. Pipe used in the construction of soil absorption fields shall conform to the ASTM Standards for wastewater piping. This includes, but is not limited to:

6.5.c. Plastic pipe ASTM - D 2729, D 2852, D 3350, D 2751, D 2836, D 3033, D 3034, D 3298, F 789.

6.5.d. The septic tank inlet and outlet piping shall be schedule forty (40) or the equivalent. This pipe shall span the tank hole excavation and rest on a minimum of two (2) feet of undisturbed soil.

6.5.e. Perforated pipe used in the construction of soil absorption systems shall have a minimum of two (2) rows of downward facing holes approximately ninety (90) degrees apart.

6.5.f. Aggregate used in the construction of a soil absorption field shall be washed gravel, crushed stone, or slag, one-half ( $\frac{1}{2}$ ) to two and one-half ( $2\frac{1}{2}$ ) inches in size, with a hardness of three (3) on the Moh scale of hardness. The field test for hardness is that the aggregate shall scratch a copper penny without leaving a residue.

6.5.g. The installation of graveless soil absorption systems shall be in accordance with manufacturers' specifications as approved by the Commissioner.

6.5.h. The construction of the standard soil absorption field with either level or sloping topography shall be in accordance with the following specifications:

6.5.h.1. The trenches shall be one (1) to three (3) feet wide with a maximum depth of thirty-six (36) inches and a minimum depth of eighteen (18) inches.

6.5.h.2. If distribution lines of greater than one hundred (100) feet are necessary, the connection of the inlet line shall be so that the lengths on either side of the connection shall not exceed one hundred (100) feet each. Absorption fields dosed by a pump or dosing siphon may utilize trenches of greater length, if reviewed and approved by the Commissioner.

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6.5.h.3. There shall be a minimum of six (6) inches of aggregate placed in the bottom of the trench beneath the pipe, and a minimum of two (2) inches placed above the pipe.

6.5.h.4. The construction of the bottom of each trench and its distribution line shall be level. The construction of trenches shall be consistent with the topography and in such a manner so as to minimize the compaction or smearing of the sides and bottoms. Construction of the trenches shall not take place if the soil is so wet that it forms a "wire" instead of breaking apart when rolled between the hands. Construction shall not take place during rain or inclement weather that may interfere with or preclude correct construction procedures.

6.5.h.5. The surface of the aggregate shall have a cover of a minimum of three (3) inches of straw or hay, or one (1) layer of untreated building paper or filter fabric prior to backfilling.

6.5.h.6. There shall be a minimum of six (6) feet of undisturbed earth between the sidewalls of each trench. Additional separation may be a requirement in areas of severe topography and poor soil characteristics to avoid interaction between the trenches.

6.5.h.7. The design of soil absorption fields constructed in flat areas shall be to provide a closed continuous system or closed circuit design.

6.5.h.8. Performing the backfilling of the absorption field shall be in such a manner as to minimize compaction. There shall be a mound of backfill over the system to allow for settling and to promote run-off from the system. There shall be no grading to the absorption field construction area after backfilling. There shall be no backfilling if the ground is frozen.

6.5.h.9. The sewer line from the structure to the septic tank shall lay on a grade of not less than one-eighth (1/8) of an inch per foot (1%).

6.5.h.10. The installation of the absorption field shall be so that the invert of the absorption field piping is a minimum of eight (8) inches lower than the invert of the sewage tank outlet.

6.5.h.11. The construction of the standard soil absorption field in areas of sloping topography shall be in accordance with the following specifications:

6.5.h.11.A. Soil absorption fields constructed on sloping ground shall use a serial distribution system. This rule recommends the use of drop boxes;

6.5.h.11.B. The construction of soil absorption systems shall not be on ground with a slope in excess of twenty-five percent (25%);

6.5.h.11.C. The bottom of each trench and its distribution line shall be level;

6.5.h.11.D. There shall be a minimum of six (6) inches of ground cover over the gravel fill in each trench; and

6.5.h.11.E. The absorption trenches shall follow the approximate ground surface contours to minimize variation in trench depth.

6.5.h.12. Adjacent trenches shall connect with a relief line, cross over, or drop box arrangement in such a manner that each trench is completely filled with septic tank effluent to the full depth of the gravel before effluent flows to succeeding trenches. The construction of the relief line, cross-over, or drop box arrangement shall incorporate the following requirements:

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6.5.h.12.A. The relief line or crossover shall be a solid four (4) inch sewer line with tight joints and with direct connection to the distribution lines or a drop box installation.

6.5.h.12.B. The construction of relief lines, cross-overs, and drop boxes shall not be in any location or manner where they shall be subject to damage during or following construction. An applicant shall mark the location of these relief lines, cross-overs, or drop boxes prior to backfilling to avoid damage from heavy equipment. The line shall rest on undisturbed earth with care given to carefully tamping the backfill.

6.5.h.12.C. The trench for the relief pipe or cross-over shall be no deeper than the top of the gravel of the trenches being connected. The line shall rest on undisturbed earth with care given to carefully tamping the backfill. An applicant shall exercise care in construction of the relief or cross-over line to insure that an undisturbed block of earth remains between the trenches.

6.5.h.12.D. The invert of the overflow pipe in the first relief or cross-over line should be at least two (2) inches lower than the invert of the septic tank outlet.

6.5.i. When servicing a structure other than a single-family dwelling, there shall be a reservation of land for the construction of two (2) standard soil-absorptions fields, each of adequate size to serve the proposed structure.

6.5.j. If the soil absorption field is greater than one thousand five hundred (1500) square feet in area, a siphon chamber or pump chamber may be required by the Commissioner to ensure even distribution of effluent.

6.5.k. Absorption fields over three thousand (3,000) square feet in total area shall include some form of dosing.

6.5.l. When a total field area over five thousand (5,000) square feet is necessary, the field shall be split into two (2) or more fields of approximately equal size.

### 6.6. Absorption Beds.

6.6.a. The construction of absorption beds shall only be when topography or space limitations prevent installation of a standard absorption field.

6.6.b. The size of absorption beds shall be to provide an area thirty percent (30%) greater than that calculated for a standard absorption field to make up for sidewall loss.

6.6.c. The installation of the piping distribution network within the bed shall be in such a manner that the location of the pipes are eighteen (18) to thirty-six (36) inches from the sides of the bed with a minimum of three (3) feet between pipes and a maximum of six (6) feet between pipes in a continuous or closed circuit design. Construction of the bed shall be in accordance with the general design and construction requirements of the standard absorption field.

6.6.d. Maximum depth of an absorption bed shall be thirty-six (36) inches, minimum depth shall be eighteen (18) inches.

### 6.7. Dual Soil Absorption Fields.

6.7.a. Use of dual absorption fields may receive approval if percolation rates are between sixty (60) minutes and ninety (90) minutes per inch.

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6.7.b. Area reserved for absorption shall provide sufficient area for the replacement of dual soil absorption fields.

6.7.c. Construction of the dual absorption fields shall be in accordance with the dosing requirements of the standard soil absorption system, with a junction box or valving arrangement to provide for alternation of the fields. The size of each of the fields shall be in accordance with the percolation test results. Both fields shall be of the maximum sizing required for a sixty (60) minutes per inch rate.

### 6.8. Shallow and Elevated Soil Absorption Systems.

6.8.a. Due to the shallowness of many West Virginia soils, a soil absorption system shall often have to be shallow or the elevation shall be above the original ground surface to maintain the minimum distance above the seasonal high water table, rock table, or impermeable soil layer. The construction of a shallow or elevated system is permissible where there is a suitable layer of soil, sufficient room, and the natural slope is not excessive. Shallow and elevated soil absorption systems presently approved for use are: shallow fields, shallow beds, elevated fields and unique systems designed for specific situations. Shallow systems are similar to the standard absorption field and they may receive consideration for new residences.

6.8.b. Use of shallow and elevated systems using gravity distribution may receive approval under conditions where pervious rock table, an impermeable layer of any type, or seasonal water table is less than four and one-half (4½) feet of the ground surface, on either level topography or sites of up to approximately fifteen percent (15%) slope. When additional treatment precedes shallow or elevated fields, or designed as low pressure distribution systems, the Commissioner may waive the separation distance to an impermeable layer, or seasonal water table from three (3) feet to two (2) feet. Due to a potential for groundwater contamination, the depth to pervious rock table shall not be less than three (3) feet from any portion of the soil absorption system. Slope limitations of fifteen percent (15%) do not apply to low pressure systems.

### 6.9. Shallow Field..

6.9.a. The construction of shallow systems shall in general be in accordance with the procedures and requirements for standard absorption fields. However, the depth of the trenches in natural ground may vary from twelve (12) to eighteen (18) inches. The space between trenches may vary from six (6) to twelve (12) feet, and the depth of cover material may vary from six (6) to twelve (12) inches, depending on the trench depth.

6.9.b. There shall be cover material placed prior to the construction of the trench system.

6.9.c. Topography of the site may be level, less than three percent (3%) slope, or up to fifteen (15) percent slope if using a serial type distribution system.

6.9.d. The percolation rate for design considerations shall be the rate recorded for the natural soil at installation depth.

6.9.e. Elevated Systems are systems installed at a depth of six (6) inches into the original ground and have a portion of the gravel or distribution piping in select fill above the original ground. All applicable provisions of Subsection 6.2 of this rule apply to elevated systems.

### 6.10. Individual Sewage Systems with Surface Water Discharge.

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6.10.a. Individual systems with surface water discharge may receive consideration for approval under the following conditions:

6.10.a.1. To correct existing failures when other means of treatment and disposal have proven ineffective; and

6.10.a.2. On lots greater than two (2) acres in size that cannot qualify for standard or shallow soil absorption systems. All mechanical systems with surface water discharge shall have a perpetual maintenance agreement as approved by the Commissioner.

### 6.11. Individual Home Aeration Units.

6.11.a. Individual home aeration units shall be used only when there is a provision for additional treatment, such as soil absorption or other means of effluent disposal approved by the Commissioner. The Commissioner may require ownership, operation, and maintenance of a home aeration unit to be under the control of a public or private utility regulated by the Public Service Commission.

6.11.b. Individual home aeration units shall bear the NSF seal demonstrating conformance with NSF Standard 40 or other recognized testing agency approved by the Commissioner.

6.11.c. Individual home aeration units may receive approval providing an applicant meets the following criteria:

6.11.c.1. Shall have a perpetual maintenance agreement approved by the Commissioner;

6.11.c.2. May use Class I NSF plants or equivalent where there is surface water discharge; and

6.11.c.3. May use Class II NSF plants or equivalent where there is a provision for additional treatment.

### 6.12 Intermittent Surface Sand Filters.

6.12.a. Effluent from a home aeration unit may discharge to intermittent surface sand filters.

6.12.b. Effluent from a surface sand filter may discharge to a stream after disinfection in accordance with the regulations and requirements pertaining to surface discharge of waste water.

6.12.c. The design of intermittent surface sand filters preceded by a home aeration unit shall be on a filtration rate of ten (10) gallons per day per square foot. There shall be two (2) filters of design size to provide for alternation of operation.

6.12.d. Intermittent surface sand filters serving individual sewage systems shall have an insulated cover.

6.12.e. The intermittent surface sand filter shall receive dosing by either a pump or sewage siphon.

### 6.13. Composting Toilets.

6.13.a. Utilization of composting toilets may be only in conjunction with an approved grey water treatment and disposal system.



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6.13.b. The design and construction of a composting toilet shall meet the requirements of NSF Standard 41.

### 6.14. Incinerating and Chemical Toilets.

6.14.a. Use of incinerating and chemical toilets may be only in conjunction with an approved grey water disposal system.

6.14.b. The design, construction, and application of incinerating or chemical toilets shall receive approval by the Commissioner. The use of chemical or incinerating toilets may receive approval by the Commissioner in emergency situations, temporary usage situations, or for recreational residences, or isolated residences.

### 6.15. Grey Water Disposal Systems.

6.15.a. Those houses served by a grey water disposal system shall have a house sewer of not more than two (2) inches in diameter.

6.15.b. Houses served by grey water disposal systems shall not have garbage disposal units connected to the grey water disposal system

6.15.c. Manufactured grey water disposal systems shall receive approval by the Commissioner.

6.15.d. Non-commercial grey water disposal systems shall consist of the following:

6.15.d.1. A soil absorption field designed on the basis of a thirty percent (30%) reduction in water usage, and constructed in accordance with the design requirements for the standard soil absorption fields; and

6.15.d.2. A septic tank sized according to the following:

6.15.d.2.A. For four (4) or less bedrooms, the minimum tank capacity shall be one thousand (1,000) gallons; and

6.15.d.2.B. For each additional bedroom, the minimum tank capacity shall be two hundred fifty (250) gallons per bedroom.

### 6.16. Privies.

6.16.a. Every privy shall equip:

6.16.a.1. An earthen bottom pit or a watertight vault or other watertight receptacle with walls extending at least six (6) inches above ground level.

6.16.a.2. A crowned curb constructed of compacted earth or other suitable material, at least six (6) inches thick, extending from the top of the walls of the pit, vault, or receptacle, in all directions over the surface of the ground for a distance of eighteen (18) inches.

6.16.a.3. A riser that is fly tight when not in use.

6.16.a.4. There shall be an enclosed superstructure constructed with a vent pipe extending from the pit, vault, or receptacle to a point at least twenty-four (24) inches above the roof of the of the superstructure or through the wall of the superstructure. The vent shall have a screen to prevent the

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entrance of flies and other insects.

6.16.a.5. Privy pits may have an earthen bottom if:

6.16.a.5.A. The location of the privy is below and one hundred (100) feet or more from a groundwater supply or individual well, and its location is so that the disposal of any leaching from there is in a manner that does not create a nuisance or insanitary condition.

6.16.a.5.B. The pit is four (4) feet or less in depth and determined by the excavation of a seven (7) foot hole that rock or water table does not exist within three (3) feet of the bottom of the pit.

6.16.a.6. There shall be no privy located within twenty (20) feet of any dwelling, roadside cut, stream, establishment, or within ten (10) feet of any property line.

6.16.a.7. The construction and design of the privy superstructure, vault, pit or other type receptacle shall be such as to prevent access to the vault or receptacle and the contents thereof, by flies, rats, and wild or domestic animals.

6.16.a.8. Privy vaults, pits or receptacles shall have the contents removed as often as necessary to prevent creating a nuisance or unsanitary condition.

6.16.a.9. There shall be an approved grey water disposal system installed to serve those residences with indoor plumbing or running water for sinks and showers. For those residences without indoor plumbing, there shall be a shallow leach trench installed for disposal of grey water as approved by the Commissioner.

6.17. Recirculating Toilets.

6.17.a. Recirculating toilets and the piping for the toilets shall be separate from and not connected to the potable water system of any residence or other structure under any circumstances. There shall be color coded pipe used to facilitate inspection and maintenance of the installations.

6.17.b. Recirculating toilets shall:

6.17.b.1. Be installed and operated in accordance with the manufacturer's instructions; and

6.17.b.2. Be approved by the Commissioner before installation.

6.18. Self-Contained Excreta Disposal Systems.

6.18.a. The design of self-contained excreta disposal systems shall be so as to prevent flies, rats, and wild or domestic animals from having access to the contents thereof.

6.18.b. The construction of all fixtures, tanks, or receptacles shall be of impervious, easily cleanable material.

6.18.c. Tanks and receptacles shall:

6.18.c.1. Be watertight and vented to the outside air;

6.18.c.2. Be constantly supplied with sufficient amounts of an approved chemical agent to process and deodorize the contents thereof; and

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6.18.c.3. Have the contents removed and the tank or receptacle thoroughly cleaned as often as necessary to prevent creating a nuisance, or an unsanitary condition.

### 6.19. Sewage Holding Tanks.

6.19.a. The approval of sewage holding tanks shall only be for new construction after a contract awarded for the development of a public or private sewage collection system or treatment facility, or both, to serve the proposed new construction.

6.19.b. A holding tank shall be watertight and constructed of the same materials and by the same procedures as a watertight septic tank.

6.19.c. The liquid capacity of the holding tank shall be sufficient to contain a one (1) week design flow from the facility it is to service.

6.19.d. The location of holding tanks shall be in an area readily accessible for pumping under all weather conditions and where accidental spillage during pumping presents the least hazard to public health.

6.19.e. The location of holding tanks shall be in accordance with the distance requirements established for septic tanks in Subsection 6.3 of this rule.

6.19.f. Construction and installation of the holding tank shall provide adequate access to the tank for pumping, cleaning and maintenance through manhole and cleanouts.

6.19.g. A holding tank installation shall equip an audiovisual high level alarm when the tank is approximately two-thirds (2/3) full and shall require pumping shortly. The location of the alarm shall be inside the facility served.

6.19.h. A contract with a licensed sewage tank cleaner with a valid permit for pumping and maintenance of the tank on a regular schedule shall be required.

6.19.i. A letter from a wastewater treatment plant owner accepting the pumpings shall be a requirement. This facility shall be approved by the Commissioner. There shall be an examination of the receiving wastewater treatment plant to ensure there shall be adequate treatment, and there shall be no effect on the normal operation of the wastewater treatment plant.

6.19.j. When it is necessary to protect the public health, the Commissioner reserves the right to require additional assurances before approving holding tanks.

### 6.20. Alternative and Experimental Sewer Systems.

6.20.a. The construction of alternative and experimental sewer systems may be where there is a suitable layer of soil, sufficient area and the natural slope is not excessive.

6.20.b. Alternative soil absorption systems presently approved for use are: shallow fields, soil absorption mounds, shallow beds, low pressure pipe systems, elevated fields, evapotranspiration systems and unique systems designed for specific situations.

6.20.c. Alternative soil absorption systems may receive consideration for new construction on lots two(2) acres and over providing soil and site limitations can be met.

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### 6.21. Effluent Pumping for Individual Sewer Systems.

6.21.a. Pump type shall be non-clog submersible centrifugal effluent pumps or progressing cavity positive displacement pumps.

6.21.b. Pumps shall be readily removable and replaceable without dewatering the wet well.

6.21.c. The pump size should be to dose a soil absorption system two (2) to four (4) times a day. The recommended dosing cycle is twice a day, however, the dose shall be no more than seventy-five percent (75%) of the distribution pipe volume for all soil absorption systems using four (4) inch pipe.

6.21.d. The location of the pump shall be six (6) to eight (8) inches off the tank bottom to provide additional volume for sludge settlement.

6.21.e. The location of relays and electrical plug-ins or sockets shall not be inside the wet well or access manhole. The location of the devices must be above-ground in a weatherproof box or in the residence.

6.21.f. There shall be a high water alarm placed within the residence.

6.21.g. Pipe used for the distribution system, the force main, shall be PVC SDR 21, PVC SDR 26, or Schedule 40 1 1/4" to 2" diameter.

6.21.h. All parts of the distribution system, the manifold and laterals, shall slope slightly toward the inlet to avoid freezing and ponding of water in the system between dosing.

6.21.i. The installation of piping shall be below the frost line.

6.21.j. The wet well shall be watertight and constructed of materials that will not corrode.

6.21.k. The wet well shall have an access manhole of twenty four (24) inches or greater in diameter. The installation of the manhole shall be level with or above the ground surface and the cover secured.

6.21.l. The size of a wet well shall be to provide adequate volume not only for one day reserve capacity, but also for single dose capacity plus additional capacity to maintain minimum depth for operation.

6.21.m. The wet well tank shall be set lower than the septic tank to provide usage of maximum capacity of the wet well.

**TABLE 64-47-K.- MINIMUM HORIZONTAL SEPARATION DISTANCES BETWEEN SOIL ABSORPTION SYSTEMS AND NATURAL AND MANMADE FEATURES**

Distance	Feature
10 feet	Foundation drain upslope from disposal area.
20 feet	Stream banks and open drainage features, whether manmade or natural.

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20 feet	Manmade cuts in soil and curtain drains.
20 feet	Foundation drains downslope from disposal area.
50 feet	Manmade cuts that intersect rock or shale.
100 feet	Water supply springs and water supply wells.
50 feet	Water Supply Cistern

**TABLE 64-47-L.- STANDARD SEPTIC TANK SOIL ABSORPTION SYSTEM SIZING FOR SINGLE-FAMILY DWELLINGS**

Percolation Test Results (Average Time in Minutes Required for Water to Fall One Inch)	Minimum Area of Soil Absorption System (Square Feet per Bedroom)
Less than 5 minutes	Consult with local health department
5 - 30 minutes	300
31 - 60 minutes	400
over 60 minutes	Consult with local health department

**TABLE 64-47-M.- SINGLE ABSORPTION SYSTEM SIZING FOR ESTABLISHMENT OTHER THAN SINGLE-FAMILY DWELLING**

Percolation Test Results	Square Feet Per 1000 Gallons Sewage Per Day
Less than 5 minutes	Consult with your local health department
5 - 10 minutes	1650
11 - 30 minutes	2500
31 - 45 minutes	2950
46 - 60 minutes	3300
over 60 minutes	Consult with your local health department

**TITLE 64  
LEGISLATIVE RULE  
DIVISION OF HEALTH**

**SERIES 9  
SEWER SYSTEMS, SEWAGE TREATMENT SYSTEMS,  
AND SEWAGE TANK CLEANERS**

## Home Owner Installer Study Information

### '64-9-1. General.

1.1. Scope. -- This legislative rule establishes minimum requirements for sewer systems, sewage treatment or disposal plants which serve public sewer systems, and the certification of sewage tank installers.

1.2. Authority. -- W. Va. Code '16-1-7.

1.3. Filing Date. -- March 30, 1998.

1.4. Effective Date. -- May 1, 1998.

1.5. This rule amends, retitles and reenacts Sewage System Rules, 64 CSR 9, effective May 12, 1983.

1.6. Application. -- This rule applies to all sewer systems in West Virginia; to sewage treatment or disposal plants which serve public sewer systems; and persons who engage in the business of installing, collecting, removing, transporting, or disposing of the contents of sewage tanks.

1.7. Enforcement. -- This rule is enforced by the director of the West Virginia division of health.<sup>1</sup>

### '64-9-2. Definitions.

2.1. Acceptable Application. -- Completed forms, plans, specifications, fee, if required, and other data as specified by Sewage Treatment and Collection System Design Standards, 64 CSR 47.

2.2. Accessible. -- Sewers are considered accessible when a public sewer system is located adjacent to, or available by right-of-way, to a particular lot, and sewage can discharge thereto by gravity.

2.3. Approved. -- A procedure of operation or construction which is in accordance with design standards, specifications and instructions promulgated by the division of health.

2.4. Chief, Office of Water Resources. -- The chief of the office of water resources of the division of environmental protection.

2.5. Design Standards. -- Application procedures, design requirements, specifications and construction standards promulgated by the division of health.

2.6. Director. -- Director of the West Virginia division of health or his or her lawful designee.

2.7. Dwelling. -- A building, structure or place used or intended to be used for human occupancy as a single family or multi-family residence. The term "dwelling" includes, but is not limited to: house, housing, mobile homes, vacation homes and cabins.

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<sup>1</sup> The Department of Health and Human Resources (DHHR) was created by the Legislature's reorganization of the executive branch of State government in 1989. The Department of Health was renamed the Division of Health and made a part of the DHHR (W. Va. Code ' 5F-1-1 et seq.). Administratively within the DHHR the Bureau for Public Health through its Commissioner carries out the public health function of the Division of Health.

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- 2.8. Effluent. -- Liquid discharge from a sewage treatment or disposal system.
- 2.9. Establishment. -- Any building, structure or place used or intended to be used for multiple dwelling units, or for manufacturing, commercial, religious, institutional, educational or recreational purposes.
- 2.10. Individual Sewer System. -- A sewer system with a daily design flow not to exceed one thousand (1,000) gallons per day with subsurface discharge or not to exceed six hundred (600) gallons per day design flow with surface discharge. The system is owned by and maintenance is performed by a single entity.
- 2.11. Individual Sewer System Installer. -- Any person engaging in the construction, installation, modification, extension, alteration and location of an individual or an on-site sewer system, sewage tank, or an excreta disposal system.
- 2.12. Lot. -- A tract or parcel of land or part of a subdivision used as or intended to be used as a site for a dwelling or establishment.
- 2.13. Municipal Sewer System. -- A sewer system or a group of sewer systems which, as a whole, receives sewage from more than one (1) dwelling or establishment and is operated and maintained by an incorporated municipality, or public service district, or sanitary board.
- 2.14. Percolation Test. -- A method described in Sewage Treatment and Collection System Design Standards, 64 CSR 47, by which the soils in a particular area are evaluated for subsurface effluent disposal.
- 2.15. Permit. -- A written document issued by the director giving the holder permission to construct, install, extend, alter or operate an approved sewer system, or method of sewage disposal, or to collect, remove, transport or dispose of sewage.
- 2.16. Person. -- Individual, partnership, association, syndicate, company, firm, trust, corporation, government corporation, institution, department, division, bureau, agency, or any entity recognized by law.
- 2.17. Public Sewer System. -- A sewage collection system or systems with or without treatment facilities with a daily design flow exceeding one thousand (1,000) gallons per day with sub-surface discharge or exceeding six hundred (600) gallons per day with surface discharge serving one (1) or more dwellings or establishments. The system is owned by and maintenance is performed by a single entity. This definition includes municipal sewer systems.
- 2.18. Rock Strata -- A formation of indurated (hardened) material either above or below the ground surface that requires drilling, blasting or other methods of brute force for excavation.
- 2.19. Sewage. -- Any excreta or liquid waste containing animal or vegetable matter in suspension or solution including, but not limited to, waste from commodes, urinals, lavatories, bathtubs, laundry tubs, washing machines, drinking fountains, sinks, kitchen equipment, and other sanitary fixtures or facilities.
- 2.20. Sewer System. -- A sewer system, whether publicly or privately owned, which receives and treats sewage and provides for the disposal of effluent and sludge therefrom. This definition includes individual sewer systems and public sewer systems.

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2.21. Sewage Tank. -- A water-tight receptacle designed and constructed to receive and retain sewage solids. Sewage tanks include, but are not limited to, septic tanks, aeration type sewage treatment systems, privy vaults, holding tanks or receptacles and self-contained excreta disposal facilities.

2.22. Sewage Tank Cleaner. -- Any person engaged in the collection, removal, transportation or disposal of sewage.

2.23. Standard Soil Absorption System -- A system designed to receive effluent from a septic tank to be disposed of at soil depths ranging from eighteen (18) to thirty-six (36) inches from the original ground surface.

2.24. Subdivision. -- A tract of land which has been divided into two (2) or more lots, tracts, parcels, plats, sites, areas, units, interests or other division for the purpose of dwelling or establishment development and including the division of land by deed, metes and bounds description, lease, map, plat or other instrument, or by act of construction.

2.25. Wastewater. -- Water containing human, animal, or domestic waste.

2.26. Water Well. -- Any excavation or penetration in the ground, whether drilled, bored, cored, driven or jetted that enters or passes through an aquifer for purposes that may include, but are not limited to: a water supply, exploration for water, dewatering or heat pump wells, except that this definition shall not include ground water monitoring activities and all activities for the exploration, development, production, storage, and recovery of coal, oil, and gas, and other mineral resources which are regulated under

W. Va. Code ' ' 22-1-1 et seq., 22A-1-1 et seq., or 22B-1-1 et seq..

### ' 64-9-3. General Requirements.

3.1. The owner or his or her authorized agent shall obtain a permit for a sewer system prior to the construction or installation of any dwelling or establishment which will require a sewer system. Where subsurface discharge systems are used, there shall be sufficient area to install the initial system and a suitable replacement area.

3.2. Every dwelling or establishment whether publicly or privately owned, where persons reside, assemble, or are employed, shall be provided with toilet facilities, and a sewer system approved by the director.

3.3. It is the duty of the owner of the dwelling or establishment to provide toilet facilities and a sewer system approved by the director.

3.4. When, upon investigation, the director finds a person is constructing, installing, extending, altering, maintaining or operating a toilet facility or sewer system which does not comply with applicable provisions of this rule, the person shall be notified of the fact in writing, and if said person shall fail to abate or correct the condition within a period of time not to exceed thirty (30) days after the receipt of the written notice, said person shall be guilty of a misdemeanor and, upon conviction thereof, shall be punished according to the penalty set forth.

3.5. All sewer systems shall be designed, constructed, installed, maintained and operated in such a manner that excreta or sewage contained therein or effluent discharged therefrom:



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3.5.a. Not create a health hazard affecting the public; and

3.5.b. Shall not violate any federal, state or local laws, rules or regulations governing water pollution or sewage disposal.

3.6. The owner or operator of a sewer system to be abandoned shall abandon the system in the following manner:

3.6.a. The contents of the sewage tank shall be removed by a certified septic tank cleaner. The tank or excavation shall be filled to eliminate any physical hazard. If the tank is removed it shall be disposed of in a manner approved by the director. Sewage treatment lagoons (ponds) shall be abandoned in a manner approved by the director and the chief, office of water resources;

3.6.b. Any electrical service to the system shall be terminated, and electrical service boxes, switches, meters, and similar equipment, removed or rendered harmless;

3.6.c. Any water service to the system shall be disconnected; and

3.6.d. Any other potentially hazardous equipment associated with the system shall be removed or rendered harmless.

3.7. The owner and any person or persons installing or modifying a sewer system shall be jointly responsible for compliance with all applicable provisions of this rule.

3.8. Off-lot disposal of sewage or effluent requiring the use of or crossing of adjacent property shall require a recorded easement or authorization. This recorded document shall be binding to the heirs and assigns of the properties involved.

### **'64-9-4. Permits.**

4.1. In accordance with W. Va. Code '16-1-9, no sewer system shall be installed or established without first obtaining a written permit from the director.

4.2. Individual and public sewer systems shall be permitted and constructed only after an acceptable application for, and plans and specifications of, the proposed system, as prepared in accordance with Sewage Treatment and Collection System Design Standards, 64 CSR 47, have been reviewed and approved by the director. Where applicable, a discharge permit shall be obtained from the chief of the office of water resources in conformance with W. Va. Code '22-11-1 et seq. prior to construction.

4.3. An acceptable application to construct, install or modify an individual sewer system or a public sewer system shall be made in writing to the director. A permit to construct, install or modify shall be obtained prior to the construction or installation.

4.4. The director shall approve or deny any application for a permit to construct a public sewer system within a period of forty-five (45) working days from the date an application is received. The director shall approve or deny an application for an individual sewer system within a period of twenty-one (21) working days from the date an application is received.

4.5. The director shall deny a permit if the information on the application form is incomplete, inaccurate, false, or misleading, or indicates the applicable provisions of this rule cannot be met.

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4.6. A permit shall be suspended or revoked by the director for failure to comply with the provisions of the permit, improper construction or operation of the sewer system, where false or misleading information was utilized in obtaining the permit, where it is determined that the applicable provisions of this rule cannot be met, or for failure to comply with a lawful order of the director.

4.7. Any person whose application for a permit has been denied or whose permit has been suspended or revoked may request a hearing. A written request shall be made within thirty (30) days of the date of denial of the permit by the aggrieved party and a hearing date shall be established by the director within twenty (20) days of the director's receipt of the written request. The hearing shall be held by the director within a period of forty-five (45) days after receipt of the written request for the hearing.

4.8. A permittee who wishes to dispute the conditions and restrictions of the permit may request a hearing in order to appeal its provisions. A written request shall be made by the permittee within thirty (30) days of the date of issuance of the permit and a hearing date shall be established within twenty (20) days of the director's receipt of the written request. The hearing shall be held within a period of forty-five (45) days by the director after receipt of the written request for the hearing.

4.9. A permit for an individual sewer system or for a public sewer system on which construction has not begun within one (1) year from the date of issuance is invalid unless a request for a renewal is approved by the director.

4.10. Permits are not transferable or assignable and automatically become invalid upon a change in ownership, except when application for transfer or assignment is made to, and the transfer or assignment is approved by, the director. Permits shall be issued to the property owner.

4.11. A person engaging in the business of sewage tank cleaning shall receive a permit only after application has been made on a form prescribed by the director and the director has inspected, all sewage tank cleaning equipment, containers, or other devices used in the collection, removal, transportation or disposal of sewage tank contents to ascertain that the items are used, maintained and operated in compliance with all applicable provisions of this rule. The application shall include documentation that a disposal site approved by the department of environmental protection will be used for disposal of the sewage. A sewage tank cleaning permit shall expire one (1) year from the date of issuance, and the permit holder shall apply to the director for renewal of the permit prior to the expiration date. Notwithstanding any provision of the W. Va. Division of Health Legislative Rule, Fees for Permits, 64 CSR 30, any fee for authorizing an individual to engage in the business of sewage tank cleaning shall be prorated over a three-year period at \$16 (sixteen dollars) per year.

4.12. When a sewage tank cleaning permit has been suspended or revoked, the person thereby affected shall immediately discontinue engaging in the business of collecting, "removing," transporting or disposing of the contents of sewage tanks.

### **'64-9-5. Construction and Installation Requirements.**

5.1. The construction and installation or modification of all sewer systems shall be in accordance with Sewage Treatment and Collection System Design Standards, 64 CSR 47, or otherwise approved plans and specifications for which a permit has been issued by the director. Design standards may be obtained from the division of health, its district offices or local health department offices: Provided, that the director shall issue a permit for the installation of a National Sanitation Foundation Class I home

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aeration unit to be installed on a single family dwelling unit when no other approved system can be installed.

5.2. Diversion drains, ditches and curtain drains shall be installed when storm water, surface or ground water will affect the satisfactory operation of a sewer system. No foundation drains or downspouts shall be connected to the sewer system.

5.3. Percolation tests and other tests, as may be required for installation of a sewer system, shall be performed by persons whose qualifications are acceptable to the director and the tests shall be conducted in accordance with Sewage Treatment and Collection System Design Standards, 64 CSR 47. The person conducting the tests shall certify the accuracy of the results of the tests and the information shall be submitted in a form acceptable to the director.

5.4. Subsurface absorption systems shall be constructed at the site where percolation and other tests have been performed. In the event the location of the subsurface absorption system must be changed, additional testing will be required at the proposed new location.

### **'64-9-6. Inspections.**

6.1. The director may make, as many inspections as are necessary during the construction, installation, modification, or operation of sewer systems to determine compliance with the applicable provisions of this rule.

6.2. The owner or occupant of a dwelling, establishment, or land where a sewer system is located shall provide the director access to all parts of the property for the purpose of making the inspection.

6.3. No sewer system shall be used or placed into operation until the system installation has been approved in writing by the director.

6.4. No part of any sewer system utilizing soil absorption disposal of effluent shall be covered until the system installation has been approved in writing by the director. Any part of the system that is covered prior to approval shall be uncovered upon oral or written order of the director.

6.5. In addition to making inspections or causing inspections to be made of a sewer system, the director may collect or cause to be collected samples of sewage and effluent from the system, or conduct or cause to be conducted, such tests as are necessary and proper to insure that the system is in compliance with all applicable provisions of this rule.

6.6. If the director finds that the construction, installation, extension, alteration, or operation of a sewer system is not in compliance with the applicable requirements of this rule, the director may issue an order for the corrections to be made. The order shall be issued in writing to the owner of the sewer system and the order shall be effective immediately.

### **'64-9-7. Maintenance and Operation of Sewer Systems, and Sewage Treatment or Sewage Disposal Systems.**

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7.1. Upon written request by the director, the permit holder shall submit operational data such as influent, effluent, flow data, or any operational data necessary to ascertain compliance with this rule.

7.2. All mechanical sewer systems with surface discharge and all mechanical sewer systems where additional treatment is required for subsurface discharge shall have a perpetual maintenance program approved by the director.

7.3. Every sewage treatment or disposal plant serving a public sewer system shall be equipped with testing apparatus for making the physical, chemical, and bacteriological control tests which are considered necessary by the state division of health for the safe, proper, and efficient operation of the plant. The state division of health, upon written request, shall furnish a statement of the control tests necessary for a particular plant.

7.4. There shall be regularly made at each sewage treatment or disposal plant any physical, chemical, and bacteriological control tests which are considered necessary by the state division of health for the proper and safe operation of the plant. The frequency of making these physical, chemical, and bacteriological control tests shall be determined by the state division of health. The results of the control tests together with the record of sewage treatment or disposal plant operation shall be entered upon a permanent record form or ledger and maintained at the plant.

7.5. Each month, or as otherwise directed by the state division of health, the operator of the sewage treatment or disposal plant shall furnish a summary of operation and control data to the state division of health. The data shall be submitted on a standard form or another form acceptable to the state division of health.

7.6. The division of health, by specific written direction, may waive the submission of operating reports from sewage treatment or disposal plants serving five hundred (500) or less persons.

### **'64-9-8. Subdivisions.**

8.1. All subdivisions or housing developments originating after July 1, 1970, the effective date of the original regulations, shall be served by a method of sewage disposal approved by the director.

8.2. In the event individual sewer systems are proposed as the desired method of sewage disposal for a subdivision, the property owner shall obtain written approval from the director in compliance with the provisions of this rule;

W. Va. Code '16-1-7 and the procedures set forth in Sewage Treatment and Collection System Design Standards, 64 CSR 47. In addition, a permit for each individual sewer system within the subdivision shall be obtained in compliance with Section 4 of this rule.

8.3. The replatting of a prior recorded plat or of a subdivision which originated prior to July 1, 1970 is not exempt from the provisions of this rule. The prior platting of a portion of a larger tract prior to July 1, 1970, does not exempt the remainder of the tract from the provisions of this rule.

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8.4. The division of land through public or private auction sale or through the terms of a will or court order constitutes a subdivision under the provisions of this rule. It is the responsibility of the owner of the land or the executor of the will to meet all requirements of this rule.

8.5. In instances where a lot was purchased or acquired for dwelling construction, and either its deed was recorded prior to July 1, 1970, or the lot was laid out, described and designated on a map of a subdivision, which map was recorded prior to July 1, 1970 and where a public water supply system is available, but a public sewer system is not available, no individual sewer system is permissible on any lot, site or area containing less than ten thousand (10,000) square feet.

8.6. In instances where a lot was purchased or acquired for dwelling construction, and, either its deed was recorded prior to July 1, 1970 or the lot was laid out, described and designated on a map of a subdivision, which map was recorded prior to July 1, 1970 and where neither a public sewer system nor a public water supply system is available, no individual sewer system is permissible on any lot, site or area containing less than twenty thousand (20,000) square feet.

8.7. The director may waive the square footage requirements stipulated in Subsections 8.5 or 8.6 of this rule if he or she has been petitioned and has ascertained through a hearing, an on-site inspection, percolation tests and other requirements of this rule that an individual sewer system can be expected to function satisfactorily on a lot, site, or area containing less than the minimum prescribed number of square feet.

8.8. All lots originating prior to May 12, 1983, where individual sewer systems are proposed, shall comply with Subsection 3.1 of this rule.

8.9. Where the use of on-site soil absorption systems is proposed, the procedures and requirements of Subdivisions 8.9.a through 8.9.g of this rule apply. The owner of the subdivision shall obtain written approval for the proposed subdivision from the division of health prior to initiation of construction.

8.9.a. All lots less than two (2) acres in total surface area or lots with an average frontage of less than one hundred and fifty (150) feet shall contain a minimum on-site disposal area of ten thousand (10,000) square feet, which shall be set aside for the installation of standard soil absorption system(s). No development or structures are permissible on this on-site disposal area other than those comprising the individual sewer system(s). The layout of each reserve area shall be such that ten thousand (10,000) square feet is usable for the installation of standard soil absorption system(s). Where multiple reserve areas are used, each shall be three thousand (3,000) square feet or more in size.

8.9.b. Area consisting of land sloping in excess of twenty-five percent (25%), or land in an existing or proposed public road may not be utilized in establishing the minimum area for lots in accordance with the requirements of Subsection 8.9.a of this rule.

8.9.c. Area consisting of land containing rock strata or seasonal high water table within five (5) feet of the ground surface may not be utilized in establishing the minimum area for lots in accordance with the requirements of Subsection 8.9.a of this rule. Area consisting of land not in compliance with the minimum separation distances listed in Sewage Treatment and Collection System Design Standards, 64 CSR 47, may not be utilized in establishing the minimum area for lots in accordance with the requirements of Subsection 8.9.a of this rule.

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8.9.d. Area consisting of land which has been determined through testing to have a percolation rate slower than ninety (90) minutes per inch shall not be utilized in establishing the minimum area for lots in accordance with the requirements of Subsection 8.9.a of this rule.

8.9.e. Area where routine seasonal flooding occurs may not be utilized in establishing the minimum area for lots in accordance with the requirements of Subsection 8.9.a of this rule unless approved by the director.

8.9.f. All lots two (2) acres and over shall contain a minimum on-site disposal area of ten thousand (10,000) square feet, which shall be set aside for the installation of standard or alternative soil absorption system(s). No development or structures are permissible on this on-site disposal area other than those comprising the individual sewer system(s). The layout of each reserve area shall be such that ten thousand (10,000) square feet is usable for the installation of standard or alternative soil absorption system(s). Where multiple reserve areas are used, such areas shall be three thousand (3,000) square feet or more in size.

8.9.g. Alternative systems which may be considered for new construction on lots two (2) acres and over include low pressure systems, mound systems, shallow and elevated soil absorption systems, experimental systems, and unique systems designed for specific situations.

### ' 64-9-9. Correction of Health Hazards.

9.1. To correct or abate public health hazards resulting from the malfunctioning of individual sewer systems, and public sewer systems which hazards are not correctable by methods set forth in Sewage Treatment and Collection System Design Standards, 64 CSR 47, the director may permit the installation of an experimental or nonstandard sewer system upon written petition for the system.

9.2. The petition shall request the director to authorize installation of the system desired and shall contain information as to the location, reasons why a conventional system cannot be installed, information concerning the malfunctioning system, and information concerning the system desired. The director may request additional information which may include a meeting with the petitioner.

9.3. If the director determines that a potential public health hazard exists, he or she may issue a written approval authorizing installation of the system desired. The written approval shall apply only to the petitioner and the facts presented at the meeting.

### ' 64-9-10. Sewage Tank Cleaning.

10.1. No person shall engage in the business of collecting, removing, transporting, or disposing of the contents of a sewage tank without first obtaining in the county in which the business is located a state-wide permit for the activity from the director, in accordance with Section 6 of this rule. Out of state sewage tank cleaners shall obtain the permit from the county where most of their business is located.

10.2. Equipment, containers or other devices used in the collection, removal, transportation or disposal of the contents of sewage tanks shall be in compliance with Sewage Treatment and Collection System Design Standards, 64 CSR 47.

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10.3. The cleaning of sewage tanks by bailing or dipping and emptying the bailing or dipping container into a carrier tank is prohibited.

10.4. Precaution shall be taken by the sewage tank cleaner to prevent the leaking, spilling, or dripping of the sewage tank contents during collection, removal, transportation and disposal.

10.4.a. Any leakage, spillage, or drippings shall be cleaned up immediately.

10.4.b. Provisions shall be made by the sewage tank cleaner to carry chlorinated lime or similar satisfactory disinfectant for immediately treating the areas where leakage, spillage, or dripping has occurred.

10.5. The contents of sewage tanks shall not be transported in an open bed motor carrier vehicle, or any other type vehicle, unless said sewage contents are contained within approved portable receptacles.

10.6. All facilities used for the cleaning of sewage tank cleaning equipment shall, prior to use, be inspected and approved by the director.

10.7. The contents of sewage tanks shall be disposed of in a manner that will prevent the spread of disease and avoid nuisance conditions, and said contents shall be disposed of in accordance with Sewage Treatment and Collection System Design Standards, 64 CSR 47.

10.8. Special written permission from the director shall be obtained for any method of cleaning or disposal not specifically mentioned in Sewage Treatment and Collection System Design Standards, 64 CSR 47.

10.9. All sewage tank cleaners shall keep a written record of all jobs accomplished. The record shall be on a form prescribed by the director and submitted to the director quarterly.

### **'64-9-11. Individual Sewer Systems Installers Certification.**

11.1. Except as provided in Subsection 11.2 of this rule, all individual or on-site sewer system installers shall be certified by the director. An individual shall be a minimum of eighteen (18) years old to qualify for certification.

11.2. The director may grant a permit to an individual who installs, constructs, extends, alters his or her own sewer system if the individual passes an examination administered by the director which demonstrates knowledge of applicable rules.

11.3. Certification is not required of a driver delivering a part or parts of a system, a manufacturer who does not install a part or parts of a system or an employee of a contractor holding a certificate, provided, that the employee is under the direct on-site surveillance of a certified installer.

11.4. Certificates shall be issued to qualified installers of individual sewer systems in two classifications:

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11.4.a. A class I certificate applies to the installation of standard soil absorption systems, soil absorption beds, holding tanks, effluent lift stations and grey water soil absorption systems.

11.4.b. A class II certificate applies to those systems covered by the class I certificate plus all alternative and other individual or on-site sewer systems as set forth in Sewage Treatment and Collection System Design Standards, 64 CSR 47.

11.5. An application for certification as an individual sewer system installer, or renewal of certification as an individual sewer system installer, shall be made in writing to the director on a form prescribed by the director.

11.6. The director may deny certification if the information on the application form is incomplete, inaccurate, false or misleading.

11.7. In addition to filing an application for certification as an individual sewer system installer, the applicant shall pass a written examination for each classification and shall be required to demonstrate that he or she possesses adequate knowledge and skill in making installations in accordance with Sewage Treatment and Collection System Design Standards, 64 CSR 47.

11.8. Written examinations shall be administered by the director at a site and on a date designated by the director. An applicant shall attain a passing grade of seventy percent (70%) to qualify for certification. Any applicant who has failed an examination shall wait thirty (30) days before re-examination.

11.9. Certification is not transferable or assignable and becomes invalid upon suspension or revocation.

11.10. Certification expires five (5) years from date of issuance and the certificate holder shall apply to the director for renewal of the certificate prior to the expiration date. Should the expiration date be exceeded by six (6) months, renewal cannot be issued. Renewal shall be based upon recommendation of the local health department in those counties knowledgeable of the individual's work.

11.11. In the event any person certified is found to be violating any of the applicable requirements of this rule, his or her certification may be immediately suspended for a period of thirty (30) days by the director. Two separate violations shall be sufficient grounds for revocation of certification.

### **'64-9-12. Sewage Advisory Board.**

12.1. The director may establish an advisory board and designate the chairman of the board.

12.2. The advisory board membership shall consist of, but is not necessarily be limited to, the following members: two (2) representatives of the sewage industry; two (2) representatives of the division of health; one (1) representative of the division of environmental protection; and four (4) representatives of local health departments.

12.3. The duties of the advisory board shall be assigned by the director.



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### **'64-9-13. Penalties.**

13.1. Any person who violates any provision of this rule is subject to the penalties provided in W. Va. Code '16-1-18.

13.2. Each day's failure to comply with any applicable provision of this rule constitutes a separate offense.

### **'64-9-14. Administrative Due Process.**

Those persons adversely affected by the enforcement of this rule desiring a contested case hearing to determine any rights, duties, interests or privileges shall do so in a manner prescribed in this rule and in the Rules of Procedure for Contested Case Hearings and Declaratory Rulings, 64 CSR 1.