

# ***Table of Contents***

---

## **58.01.03 - Individual/Subsurface Sewage Disposal Rules**

|  |    |
|--|----|
| 000. (Reserved). .....   | 2  |
| 001. Legal Authority. ....   | 2  |
| 002. Title, Scope, Conflict And Responsibilities. ....                   | 2  |
| 003. Definitions. ....   | 2  |
| 004. General Requirements. ....  | 5  |
| 005. Permit And Permit Application. ....                                 | 6  |
| 006. Installer's Registration Permit. ....                               | 9  |
| 007. Septic Tanks Design And Construction Standards. ....                | 10 |
| 008. Standard Subsurface Disposal Facility Design And Construction. .... | 15 |
| 009. Other Components. ....  | 19 |
| 010. Variances. ....   | 19 |
| 011. Inspections. ....   | 20 |
| 012. Violations And Penalties. ....                                      | 21 |
| 013. Large Soil Absorption System Design And Construction. ....          | 21 |
| 014. -- 995. (Reserved). ....  | 23 |
| 996. Administrative Provisions. ....                                     | 23 |
| 997. Confidentiality Of Records. ....                                    | 24 |
| 998. Inclusive Gender And Number. ....                                   | 24 |
| 999. Severability. ....  | 24 |

**IDAPA 58  
TITLE 01  
CHAPTER 03**

**58.01.03 - INDIVIDUAL/SUBSURFACE SEWAGE DISPOSAL RULES**

**000. (RESERVED).**

**001. LEGAL AUTHORITY.**

Title 39, Chapter 1 and Title 39, Chapter 36, Idaho Code, grants authority to the Board of Environmental Quality to adopt rules and standards to protect the environment and the health of the State, for the installation of cottage site sewage treatment facilities and for the issuance of pollution source permits. Title 39, Chapter 1, Idaho Code, grants to the Director the authority to issue pollution source permits; charges the Director to enforce all laws, rules, regulations, and standards relating to environmental protection and health, and those relating to the storage, handling and transportation of solids, liquids and gases which may cause or contribute to water pollution, and authorizes the Department of Environmental Quality to review for approval the plans and specifications for all proposed waste treatment facilities prior to their construction. (5-7-93)

**002. TITLE, SCOPE, CONFLICT AND RESPONSIBILITIES.**

**01. Title.** These rules shall be known as Idaho Department of Environmental Quality Rules, IDAPA 58.01.03, "Individual/Subsurface Sewage Disposal Rules". (5-7-93)

**02. Scope.** The provisions of these rules establish limitations on the construction and use of individual and subsurface sewage disposal systems and establish the requirements for obtaining an installation permit and an installer's registration permit. These rules apply to every individual and every subsurface blackwaste and wastewater treatment system in Idaho. (5-7-93)

**03. Conflict of Rules, Standards, and Ordinances.** In any case where a provision of these rules is found to be in conflict with a provision of any state or local zoning, building, fire, safety, or health regulation, standard or ordinance, the provision which, in the judgment of the Director, establishes the higher standard for the promotion and protection of the health and safety of the people, shall prevail. (5-7-93)

**04. Responsibilities.** (7-1-93)

- a.** Every owner of real property is jointly and individually responsible for: (10-1-90)
  - i.** Storing, treating, and disposing of blackwaste and wastewater generated on that property. (10-1-90)
  - ii.** Connecting all plumbing fixtures on that property that discharge wastewaters to an approved wastewater system or facility. (10-1-90)
  - iii.** Obtaining necessary permits and approvals for installation of individual or subsurface blackwaste and wastewater disposal systems. (10-1-90)
  - iv.** Abandonment of an individual or subsurface sewage disposal system. (10-1-90)
- b.** Each engineer, building contractor, individual or subsurface system installer, excavator, plumber, supplier, and every other person, who for compensation shall design, construct, abandon, or provide any system or part thereof, is jointly and individually responsible for compliance with each of these rules that are relevant to that service or product. (5-7-93)

**003. DEFINITIONS.**

For the purposes of these rules, the following definitions apply. (5-7-93)

**01. Abandoned System.** A system which has ceased to receive blackwaste or wastewater due to diversion of those wastes to another treatment system or due to termination of waste flow. (10-1-90)

- 02. Alternative System.** Any system for which the Department has issued design guidelines or which the Director judges to be a simple modification of a standard system. (10-1-90)
- 03. Authorized or Approved.** The state of being sanctioned or acceptable to the Director as stated in a written document. (10-1-90)
- 04. Blackwaste.** Human body waste, specifically excreta or urine. This includes toilet paper and other products used in the practice of personal hygiene. (10-1-90)
- 05. Blackwater.** A wastewater whose principal pollutant is blackwaste; a combination of blackwaste and water. (10-1-90)
- 06. Board.** Idaho State Board Of Environmental Quality. (10-1-90)
- 07. Building Sewer.** The extension of the building drain beginning five (5) feet outside the inner face of the building wall. (10-1-90)
- 08. Central System.** Any system which receives blackwaste or wastewater in volumes exceeding twenty-five hundred (2,500) gallons per day; any system which receives blackwaste or wastewater from more than two (2) dwelling units or more than two (2) buildings under separate ownership. (10-1-90)
- 09. Construct.** To make, form, excavate, alter, expand, repair, or install a system, and, their derivations. (5-7-93)
- 10. Director.** The Director of the Idaho Department of Environmental Quality or the Director's designee or authorized agent. (10-1-90)
- 11. Existing System.** Any system which was installed prior to the effective date of these rules. (5-7-93)
- 12. Expand.** To enlarge any nonfailing system. (10-1-90)
- 13. Failing System.** Any system which exhibits one (1) or more of the following characteristics: (10-1-90)
- a.** The system does not meet the intent of these rules as stated in Subsection 004.01. (5-7-93)
  - b.** The system fails to accept blackwaste and wastewater. (10-1-90)
  - c.** The system discharges blackwaste or wastewater into the waters of the State or onto the ground surface. (10-1-90)
- 14. Ground Water.** Any water of the state which occurs beneath the surface of the earth in a saturated geological formation of rock or soil. (5-7-93)
- 15. High Groundwater Level -- Normal, Seasonal.** High ground water level may be established by the presence of low chroma mottles, actual ground water monitoring or historic records. (5-7-93)
- a.** The normal high groundwater level is the highest elevation of ground water that is maintained or exceeded for a continuous period of six (6) weeks a year. (5-7-93)
  - b.** The seasonal high groundwater level is the highest elevation of ground water that is maintained or exceeded for a continuous period of one (1) week a year. (5-7-93)
- 16. High Water Mark.** The line which the water impresses on the soil by covering it for sufficient periods of time to prevent the growth of terrestrial vegetation. (10-1-90)

17. **Individual System.** Any standard, alternative or subsurface system which is not a central system. (10-1-90)
18. **Install.** To excavate or to put in place a system or a component of a system. (10-1-90)
19. **Installer.** Any person, corporation, or firm engaged in the business of excavation for, or the construction of individual or subsurface sewage disposal systems in the State. (10-1-90)
20. **Large Soil Absorption System.** A large soil absorption system is a subsurface sewage disposal system designed to receive two thousand five hundred (2,500) gallons of wastewater or more per day, including where the total wastewater flow from the entire proposed project exceeds two thousand five hundred (2,500) gallons per day but the flow is separated into absorption modules which receive less than two thousand five hundred (2,500) gallons per day. (5-7-93)
21. **Limiting Layer.** A characteristic subsurface layer or material which will severely limit the capability of the soil to treat or absorb wastewater including, but not limited to, water tables, fractured bedrock, fissured bedrock, excessively permeable material and relatively impermeable material. (10-1-90)
22. **Mottling.** Irregular areas of different color in the soil that vary in contrast, density, number and size. Mottling generally indicates poor aeration and impeded drainage. (5-7-93)
23. **New System.** A system which is or might be authorized or approved on or after the effective date of these rules. (5-7-93)
24. **Nondischarging System.** Any system which is designed and constructed to prevent the discharge of blackwaste or wastewater. (10-1-90)
25. **Permit.** An individual or subsurface system installation permit or installer's registration permit. (10-1-90)
26. **Pollutants.** Any chemical, biological, or physical substance whether it be solid, liquid, gas, or a quality thereof, which if released into the environment can, by itself or in combination with other substances, create a public nuisance or render that environment harmful, detrimental, or injurious to public health, safety or welfare or to domestic, commercial, industrial, agricultural, recreational, aesthetic, or other beneficial uses. (10-1-90)
27. **Public System.** Any system owned by a county, city, special service district, or other governmental entity or Indian tribe having the authority to dispose of blackwaste or wastewater; a municipal wastewater treatment facility. (10-1-90)
28. **Repair.** To remake, reform, replace, or enlarge a failing system or any component thereof as is necessary to restore proper operation. (10-1-90)
29. **Scarp.** The side of a hill, canyon, ditch, river bank, roadcut or other geological feature characterized by a slope of forty-five (45) degrees or more from the horizontal. (10-1-90)
30. **Sewage.** Sewage has the same meaning as wastewater. (10-1-90)
31. **Soil Texture.** The relative proportion of sand, silt, and clay particles in a mass of soil. (10-1-90)
32. **Standard System.** Any system recognized by the Board through the adoption of design and construction regulations. (10-1-90)
33. **Subsurface System.** Any system with a point of discharge beneath the earth's surface. (10-1-90)
34. **Surface Water - Intermittent, Permanent, Temporary.** (7-1-93)

- a.** Any waters of the State which flow or are contained in natural or man-made depressions in the earth's surface. This includes, but is not limited to, lakes, streams, canals, and ditches. (10-1-90)
- b.** An intermittent surface water exists continuously for a period of more than two (2) months but not more than six (6) months a year. (10-1-90)
- c.** A permanent surface water exists continuously for a period of more than six (6) months a year. (10-1-90)
- d.** A temporary surface water exists continuously for a period of less than two (2) months a year. (10-1-90)
- 35. System.** Beginning at the point of entry physically connected piping, treatment devices, receptacles, structures, or areas of land designed, used or dedicated to convey, store, stabilize, neutralize, treat, or dispose of blackwaste or wastewater. (10-1-90)
- 36. Wastewater.** Any combination of liquid or water and pollutants from activities and processes occurring in dwellings, commercial buildings, industrial plants, institutions and other establishments, together with any groundwater, surface water, and storm water that may be present; liquid or water that is chemically, biologically, physically or rationally identifiable as containing blackwater, grey water or commercial or industrial pollutants; and sewage. (10-1-90)
- 37. Waters of the State.** All the accumulations of water, surface and underground, natural and artificial, public and private or parts thereof which are wholly or partially within, which flow through or border upon the state of Idaho. (10-1-90)
- 38. Water Table.** The surface of an aquifer. (10-1-90)

**004. GENERAL REQUIREMENTS.**

- 01. Intent of Rules.** The Board, in order to protect the health, safety, and environment of the people of the state of Idaho establishes these rules governing the design, construction, siting and abandonment of individual and subsurface sewage disposal systems. These rules are intended to insure that blackwastes and wastewater generated in the state of Idaho are safely contained and treated and that blackwaste and wastewater contained in or discharged from each system: (5-7-93)

  - a.** Are not accessible to insects, rodents, or other wild or domestic animals; (10-1-90)
  - b.** Are not accessible to individuals; (10-1-90)
  - c.** Do not give rise to a public nuisance due to odor or unsightly appearance; (10-1-90)
  - d.** Do not injure or interfere with existing or potential beneficial uses of the waters of the State. (10-1-90)
- 02. Compliance with Intent Required.** The Director shall not authorize or approve any system if, in the opinion of the Director, the system will not be (is not) in compliance with the intent of these rules. (5-7-93)
- 03. System Limitations.** Cooling water, backwash or backflush water, hot tub or spa water, air conditioning water, water softener brine, groundwater, oil, or roof drainage cannot be discharged into any system unless that discharge is approved by the Director. (10-1-90)
- 04. Increased Flows.** Unless authorized by the Director, no person shall provide for or connect additional blackwaste or wastewater sources to any system if the resulting flow or volume would exceed the design flow of the system. (10-1-90)
- 05. Failing System.** The owner of any failing system shall obtain a permit and cause the failing

system's repair: (10-1-90)

**a.** As soon as practical after the owner becomes aware of its failure; or (10-1-90)

**b.** As directed in proper notice from the Director. (10-1-90)

**06. Subsurface System Replacement Area.** An area of land which is suitable in all respects for the complete replacement of a new subsurface system disposal field shall be reserved as a replacement area. This area will be kept vacant, free of vehicular traffic and free of any soil modification which would negatively affect its use as a replacement disposal field construction site. (10-1-90)

**07. Technical Guidance Committee.** The Director shall appoint a Technical Guidance Committee composed of three (3) representatives from the seven (7) Health Districts, one (1) representative from the Department of Environmental Quality, one (1) professional engineer licensed in the state of Idaho and one (1) licensed installer. Initially two (2) committee members shall be appointed to each of one (1), two (2) and three (3) year terms. Appointments to vacancies thereafter shall be to three (3) year terms. (12-31-91)

**08. Duties of the Technical Guidance Committee.** The Committee shall maintain a technical guidance manual which shall be used in the design, construction, alteration, operation, and maintenance of conventional systems, their components and alternatives. The Committee shall review variances at the request of the Director and provide recommendations on such variances. (10-1-90)

**09. Technical Guidance Manual for Individual and Subsurface Alternative Sewage Disposal.** The manual maintained by the Technical Guidance Committee shall provide state-of-the-art technical guidance on alternative sewage disposal components and systems, soil type determination methodology and other information pertinent to the best management practices of individual and subsurface sewage disposal. (10-1-90)

**10. Alternative System.** If a standard system as described in these rules cannot be installed on a parcel of land, an alternative system may be permitted if that system is in accordance with the recommendations of the Technical Guidance Committee and is approved by the Director. (5-7-93)

**005. PERMIT AND PERMIT APPLICATION.**

**01. Permit Required.** Except as specified in Subsection 005.02 it shall be unlawful for any person to cause or to perform the modification, repair or construction of any individual or subsurface sewage disposal system within the state of Idaho unless there is a valid installation permit authorizing that activity. (12-31-91)

**02. Exceptions to Permit Requirement.** The activities listed in this subsection may be lawfully performed in the absence of a valid installation permit. They are, however, subject to all other relevant rules and regulations. (10-1-90)

**a.** Portable nondischarging systems may be installed where needed as temporary blackwater or wastewater systems if they are properly maintained and if they are of a design which has been approved by the Director. (10-1-90)

**b.** Individual and subsurface systems may be repaired when needed as a result of clogged or broken solid piping or of malfunctions in an electrical or mechanical system. Such repair may not expand the system unless authorized by the Director. (10-1-90)

**03. Permit Application.** The owner of the system or the owner's authorized representative shall make application to the Director in writing and in a manner or form prescribed by the Director. (10-1-90)

**04. Contents of Application.** A permit application will be used to help determine if the proposed construction will be in conformance with applicable rules and regulations. Information required in the application may include, but is not limited to: (10-1-90)

**a.** The name and address of the owner of the system and of the applicant, if different; (10-1-90)

- b.** The legal description of the parcel of land; (10-1-90)
- c.** The type of establishment served; (10-1-90)
- d.** The maximum number of persons served, number of bedrooms, or other appropriate measure of wastewater flow; (10-1-90)
- e.** The type of system; (10-1-90)
- f.** The construction activity (new construction, enlargement, repair); (10-1-90)
- g.** A scaled or dimensioned plot plan including, if needed, adjacent properties illustrating: (10-1-90)
- i.** The location and size of all existing and proposed wastewater systems including disposal field replacement areas; (10-1-90)
- ii.** The location of all existing water supply system features; (10-1-90)
- iii.** The location of all surface waters; (10-1-90)
- iv.** The location of scarps, cuts, and rock outcrops; (10-1-90)
- v.** Land elevations, surface contours, and ground slopes between features of interest; (10-1-90)
- vi.** Property lines, easements, and rights-of-way; and (10-1-90)
- vii.** Location and size of buildings and structures. (7-1-93)
- h.** The plans and specifications of the proposed system which include: (10-1-90)
- i.** Diagrams of all system facilities which are to be made or fabricated at the site; (10-1-90)
- ii.** The manufacturer's name and identification of any component approved pursuant to Sections 007 and 009; and (12-31-91)
- iii.** List of materials. (10-1-90)
- i.** Soil description and profile, groundwater data, percolation or permeability test results and/or a site evaluation report; (10-1-90)
- j.** The nature and quantity of blackwaste and wastewater which the system is to receive including the basis for that estimate; (10-1-90)
- k.** Proposed operation, maintenance, and monitoring procedures to insure the system's performance and failure detection; (10-1-90)
- l.** Copies of legal documents relating to access and to responsibilities for operation, maintenance, and monitoring; (10-1-90)
- m.** A statement from the local zoning or building authority indicating that the proposed system would not be contrary to local ordinances; (10-1-90)
- n.** The signature of the owner of the proposed system and, if different, of the applicant; and (10-1-90)
- o.** Any other information, document, or condition that may be required by the Director to substantiate that the proposed system will comply with applicable rules and regulations. (10-1-90)

**05. Basis for Permit Application Denial.** The Director may deny a permit application if in the Director's judgment: (10-1-90)

- a. The application is incomplete, inaccurate, or misleading; (10-1-90)
- b. The system as proposed is not in compliance with applicable rules and regulations; (10-1-90)
- c. The system as proposed would, when put into use, be considered a failing system; (10-1-90)
- d. The design and description of a public system was not made by a professional engineer; (10-1-90)
- e. Public or central wastewater treatment facilities are reasonably accessible. (10-1-90)

**06. Notice of Denial.** Upon denial of an application the Director shall notify the applicant of the reason for denial. (10-1-90)

**07. Issuance of Permit.** When, in the opinion of the Director the system as proposed will be in conformance with applicable rules and regulations, the Director shall issue an "Individual and Subsurface System Installation Permit". (10-1-90)

**08. Application and Permit Valid for One Year.** Unless otherwise stated on the application or permit, it shall become invalid if the authorized construction or activity is not completed and approved within one (1) year of the date of issuance. (10-1-90)

**09. Permit Renewal.** At the discretion of the Director, a permit may be renewed one (1) or more times upon request by the applicant or owner provided that the request is received by the Director prior to the permit's date of expiration. (10-1-90)

**10. Immediate Effect of the Permit.** A valid permit authorizes the construction of an individual or subsurface system and requires that the construction be conducted in compliance with plans, specifications, and conditions contained in the approved permit application. Any deviation from the plans, specifications, and conditions is prohibited unless it is approved in advance by the Director. (10-1-90)

**11. Cottage Site Facility Certification.** A valid permit shall constitute certification and approval for the purposes of Section 39-3611, Idaho Code. (10-1-90)

**12. Existing Installation Permits.** Individual and subsurface sewage disposal installation permits or other lot-specific approvals for systems issued prior to February 7, 1978, pursuant to Idaho Code Title 39, Chapter 1 and Title 39, Chapter 36, will become invalid one (1) year after written notice is given by the Director notifying the owner or holder of such a permit or approval that the permit or approval will no longer be valid unless construction or installation of the system provided for in the permit or approval is commenced within one (1) year after giving of the notice. This provision does not apply to certificates filed to satisfy a sanitary restriction pursuant to Section 50-1326, Idaho Code. (10-1-90)

**13. Abandonment May Be Required.** The Director may require as a condition for issuing a permit that the system be abandoned by a specified date or under specific predetermined circumstances. The date or circumstances will be established before the issuance of the permit and be contained in the permit application. These conditions may relate to a specific date, dwelling density, completion of a municipal system or other circumstances relative to the availability of central sewerage system services. (10-1-90)

**14. Operation, Maintenance and Monitoring.** The Director may require as a condition of issuing a permit, that specific operation, maintenance, and monitoring procedures be observed. Those procedures will be contained in the permit application. (10-1-90)

**15. As-Built Plans and Specifications.** The Director may require as a condition of issuing a permit, that complete and accurate record drawings and specifications depicting the actual construction be submitted to the



Director within thirty (30) days after the completion of the construction. Alternately, if the construction proceeded in compliance with the approved plans and specifications, a statement to that effect may be submitted. (10-1-90)

**16. Permit Fee.** All applications shall be accompanied by payment of the fee specified in Idaho Department of Health and Welfare Rules, IDAPA 16.05.05, Subsections 110 through 110.02, "Rules Governing Fees for Health Operating Permits, Licenses, and Inspection Services". (5-7-93)

**006. INSTALLER'S REGISTRATION PERMIT.**

**01. Permit Required.** Every installer shall secure from the Director, an installer's registration permit. Two (2) types of installer permits are available: (5-7-93)

**a.** A standard and basic alternative system installer's registration permit is required to install all individual systems not listed under Subsection 006.01.b. (5-7-93)

**b.** A complex alternative system installer's registration permit is required to install evapotranspiration systems, extended treatment systems, lagoon systems, large soil absorption systems, pressure distribution systems, intermittent sand filter, in-trench sand filter, sand mound or other systems as may be specified by the Director. (5-7-93)

**02. Examination.** The initial issuance of the installer's permit shall be based on the completion of an examination, with a passing score of seventy (70) or more, of the applicant's knowledge of the principles set forth in this chapter and the applicable sections of the Technical Guidance Manual. The examination will be prepared, administered and graded by the Director. (5-7-93)

**03. Permits Required Annually.** Registration permits expire annually on the first (1st) day of January and all permits issued thereafter will be issued for the balance of the calendar year. Additionally, at least one (1) refresher course approved by the state of Idaho, Department of Environmental Quality, be attended every three (3) years. (5-7-93)

**04. Contents of Application.** Applications for permits shall be in writing, shall be signed by the applicant or by an officer or authorized agent of a corporation, shall contain the name and address of the applicant, shall indicate whether the permit is to be for installation of standard and basic alternative systems or for installation of standard, basic and complex alternative systems, and shall contain the expiration date of the bond required by Subsection 006.05. (5-7-93)

**05. Bond Required.** At the time of application, all applicants shall deliver to the Director a bond in a form approved by the Director in sum of five thousand dollars (\$5,000) for a standard and basic alternative system installer's registration permit, or in the sum of fifteen thousand dollars (\$15,000) for standard, basic and complex alternative system installer's registration permit. The bond will be executed by a surety company duly authorized to do business in the state of Idaho and must run concurrent with the installer's registration permit to be approved by the Director guaranteeing the faithful performance of all work undertaken under the provisions of the installer's registration permit. Any person who suffers damage as the result of the negligent or wrongful acts of the registrant or by his failure to competently perform any of the work agreed to be done under the terms of the registration permit shall, in addition to other legal remedies, have a right of action in his own name on the bond for all damages not exceeding five thousand dollars (\$5,000) for standard and basic alternative systems or fifteen thousand dollars (\$15,000) for complex alternative systems. The maximum liability of the surety and/or sureties on the bond, regardless of the number of claims filed against the bond, shall not exceed the sum of five thousand dollars (\$5,000) for standard and basic alternative systems or fifteen thousand dollars (\$15,000) for complex alternative systems. (5-7-93)

**06. Exemption.** An installer's permit shall not be required for: (10-1-90)

**a.** Any person, corporation, or firm constructing a central or municipal subsurface sewage disposal system if that person, corporation, or firm is a licensed public works contractor as provided in Title 54, Chapter 19, Idaho Code, is experienced in the type of system to be installed and is under the direction of a professional engineer licensed in the state of Idaho; or (5-7-93)

b. An owner installing his own standard or basic alternative system. (5-7-93)

**07. Application Fee.** All applications shall be accompanied by payment of the fee specified in Idaho Department of Health and Welfare Rules, IDAPA 16.05.05, Section 120, "Rules Governing Fees for Health Operating Permits, Licenses, and Inspection Services". (5-7-93)

**08. Grounds for Revocation.** Failure to comply with these rules shall be grounds for revocation of the permit. (5-7-93)

**007. SEPTIC TANKS DESIGN AND CONSTRUCTION STANDARDS.**

**01. Materials.** New septic tanks will be constructed of concrete, or other materials approved by the Director. Steel tanks are unacceptable. (10-1-90)

**02. Construction Requirements.** All septic tanks will be water tight, constructed of sound, durable materials and not subject to excessive corrosion, decay, frost damage or cracking. (10-1-90)

**03. Concrete Septic Tanks.** New concrete septic tanks will at a minimum meet the following requirements: (10-1-90)

a. The walls and floor must be at least two and one-half (2 1/2) inches thick if adequately reinforced and at least six (6) inches thick if not reinforced. (10-1-90)

b. Concrete lids or covers must be at least three (3) inches thick and adequately reinforced. (10-1-90)

c. The floor and at least a six (6) inch vertical portion of the walls of a poured tank must be poured at the same time (monolithic pour). (10-1-90)

d. Wall sections poured separately must have interlocking joints on joining edge. (10-1-90)

e. All concrete outlet baffles must be finished with an asphalt or other protective coating. (10-1-90)

**04. Horizontal Dimension Limit.** No interior horizontal dimension of a septic tank or compartment may be less than two (2) feet. (10-1-90)

**05. Liquid Depth.** The liquid depth shall be at least two and one-half (2 1/2) feet but not greater than five (5) feet. (10-1-90)

**06. Manufactured Tank Markings.** Septic tanks manufactured in accordance with a specified design approved by the Director, will be legibly and indelibly marked with the manufacturer's name or trademark, total liquid capacity and shall indicate the tank's inlet and outlet. (10-1-90)

**07. Minimum Tank Capacities.** (7-1-93)

a. Tanks serving one (1) or two (2) single dwelling units:

| MINIMUM CAPACITY PER DWELLING UNIT |                                   |
|------------------------------------|-----------------------------------|
| Number of Bedrooms                 | Minimum Liquid Capacity (Gallons) |
| 1 or 2                             | 900                               |
| 3 or 4                             | 1,000                             |

For each bedroom over four (4) add two hundred fifty (250) gallons. (10-1-90)

**b.** Tanks serving all other flows. Septic tank capacity shall be equal to two (2) times the average daily flow as determined from Subsection 007.08. The minimum tank capacity shall be seven hundred and fifty (750) gallons. (12-31-91)

**08. Wastewater Flows from Various Establishments in Gallons per Day.**

| <b>ESTABLISHMENTS</b>  |   |
|--|---|
| Single Family Dwelling and Mobile Homes, 3 bedroom.<br>Add/subtract 50 gallons/bedroom                 | 250/Unit  |
| <b>MULTIPLE RESIDENTIAL</b>  |   |
| Hotel:<br>With Private Baths<br>Without Private Baths  | 60/Bedspace<br>40/Bedspace                                    |
| Motel:<br>With Kitchenette   | 40/Bedspace<br>60/Bedspace                                    |
| Boarding House:<br>Add for each nonresident  | 150/Bedspace<br>25  |
| Rooming House/Bunk House<br>Staff Resident<br>Nonresident  | 40/Resident<br>40/Staff<br>15/Staff                           |
| Apartments   | 250/Unit  |
| <b>INSTITUTIONAL</b>   |   |
| Assembly Hall/Meeting House  | 2/Seat  |
| Church:<br>With Kitchen  | 3/Seat<br>7/Seat  |
| Hospital:<br>Kitchen only<br>Laundry only  | 250/Bedspace<br>25/Bedspace<br>40/Bedspace                    |
| Nursing Home/Rest Home   | 125/Bedspace  |
| Day School:<br>Without Showers<br>With Showers<br>With Cafeteria, add<br>Staff-Resident<br>Nonresident | 20/Student<br>25/Student<br>3/Student<br>40/Staff<br>20/Staff |
| <b>FOOD SERVICE</b>  |   |
| Conventional Service:<br>Toilet & Kitchen Wastes<br>Kitchen Wastes                                     | 13/Meal<br>3.3/Meal   |
| Take Out or Single Service   | 2/Meal  |
| Dining Hall:<br>Toilet & Kitchen Wastes<br>Kitchen Wastes  | 8/Meal<br>3.3/Meal  |

| <b>ESTABLISHMENTS</b>   |  |
|---|--|
| Drinking Establishment  | 2/Person                                 |
| Food Service Employee   | 15/Employee                              |
| <b>COMMERCIAL AND INDUSTRIAL</b>                                      |  |
| Bowling Alley   | 125/Lane                                 |
| Laundry - Self Service  | 50/Wash                                  |
| Public Transportation Terminal  | 5/Fare                                   |
| Service Station   | 10/Vehicle                               |
| Car Wash:<br>1st Bay<br>Additional Bays                               | 50/Vehicle<br>1000<br>500 each           |
| Shopping Center (No food/laundry)                                     | 1/Pkg.Sp.                                |
| Theaters (including Concession Stand):<br>Auditorium<br>Drive-in      | 5/Seat<br>10/Space                       |
| Offices   | 20/Employee                              |
| Factories:<br>No Showers<br>With Showers<br>Add for Cafeteria         | 25/Employee<br>35/Employee<br>5/Employee |
| Stores  | 2/Employee                               |
| Public Restrooms  |  |
| <b>SEASONAL AND RECREATIONAL</b>                                      |  |
| Fairground (Peak Daily Attend)  | 1/Person                                 |
| Stadium   | 2/Seat                                   |
| Swimming Pool:<br>Toilet & Shower Wastes                              | 10/Person                                |
| Parks & Camps (Day Use):<br>Toilet & Shower Wastes                    | 15/Person                                |
| Roadside Rest Area:<br>Toilet & Shower Wastes<br>Toilet Waste         | 10/Person<br>5/Person                    |
| Overnight Accommodation:<br>Central Toilet<br>Central Toilet & Shower | 25/Person<br>35/Person                   |
| Designated Camp Area:<br>Toilet & Shower Wastes<br>Toilet Wastes      | 90/Space<br>65/Space                     |
| Seasonal Camp   | 50/Space                                 |
| Luxury Cabin  | 75/Person                                |

| <b>ESTABLISHMENTS</b>  |                         |
|--|-------------------------|
| Travel Trailer Park with Sewer & Water Hook-up               | 125/Space               |
| Construction Camp  | 50/Person               |
| Resort Camps   | 50/Person               |
| Luxury Camps   | 100/Person              |
| Country Clubs Resident Member<br>Add for Nonresident Member  | 100/Member<br>25/Person |
| Public Restrooms:<br>Toilet Wastes<br>Toilet & Shower Wastes | 5/Person<br>15/Person   |

(10-1-90)

**09. Total Volume.** The total volume of a septic tank will at a minimum be one hundred fifteen percent (115%) of its liquid capacity. (10-1-90)

**10. Inlets.** (7-1-93)

**a.** The inlet into the tank will be at least four (4) inches in diameter and enter the tank three (3) inches above the liquid level. (10-1-90)

**b.** The inlet of the septic tank and each compartment will be submerged by means of a vented tee or baffle. (10-1-90)

**c.** Vented tees or baffles will extend above the liquid level seven (7) inches or more but not closer than one (1) inch to the top of the tank. (10-1-90)

**d.** Tees should not extend horizontally into the tank beyond two (2) times the diameter of the inlet. (10-1-90)

**11. Outlets.** (7-1-93)

**a.** The outlet of the tank will be at least four (4) inches in diameter. (10-1-90)

**b.** The outlet of the septic tank and each compartment will be submerged by means of a vented tee or baffle. (10-1-90)

**c.** Vented tees and baffles will extend above the liquid level seven (7) inches or more above the liquid level but no closer than one (1) inch to the inside top of the tank. (10-1-90)

**d.** Tees and baffles will extend below the liquid level to a depth where forty percent (40%) of the tank's liquid volume is above the bottom of the tee or baffle. For vertical walled rectangular tanks, this point is at forty percent (40%) of the liquid depth. In horizontal cylindrical tanks this point is about thirty-five percent (35%) of the liquid depth. (10-1-90)

**e.** Tees and baffles should not extend horizontally into the tank beyond two (2) times the diameter of the outlet. (10-1-90)

**12. Scum Storage.** A septic tank will provide an air space above the liquid level which will be equal to or greater than fifteen percent (15%) of the tank's liquid capacity. For horizontal cylindrical tanks, this condition is met when the bottom of the outlet port is located at nineteen percent (19%) of the tank's diameter when measured from the inside top of the tank. (10-1-90)

**13. Manholes.** Access to each septic tank or compartment shall be provided by a manhole twenty (20) inches in minimum dimension or a removable cover of equivalent size. Each manhole cover will be provided with a corrosion resistant strap or handle to facilitate removal. (10-1-90)

**14. Inspection Ports.** An inspection port measuring at least eight (8) inches in its minimum dimension will be placed above each inlet and outlet. Manholes may be substituted for inspection ports. (10-1-90)

**15. Split Flows.** The wastewater from a single building sewer or sewer line may not be divided and discharged into more than one (1) septic tank or compartment. (10-1-90)

**16. Multiple Tank or Compartment Capacity.** Multiple septic tanks or compartmented septic tanks connected in series may be used so long as the sum of their liquid capacities is at least equal to the minimum tank capacity computed in Subsection 007.07 and the initial tank or compartment has a liquid capacity of more than one-half (1/2) but no more than two-thirds (2/3) of the total liquid capacity of the septic tank facility. (12-31-91)

**17. Minimum Separation Distances Between Septic Tanks and Features of Concern.**

| Features of Concern                                     | Minimum Distance to Septic Tank in Feet |     |
|---|---|-----|
| Well or Spring or Suction Line                          | Public Water                            | 100 |
|   | Other                                   | 50  |
| Water Distribution Line                                 | Public Water                            | 25  |
|   | Other                                   | 10  |
| Permanent or Intermittent Surface Water                 |   | 50  |
| Temporary Surface Water                                 |   | 25  |
| Downslope Cut or Scarp                                  |   | 25  |
| Dwelling Foundation or Building                         |   | 5   |
| Property Line   |   | 5   |
| Seasonal High Water Level (Vertically from Top of Tank) |   | 2   |

(10-1-90)

**18. Installation of Manufactured Tanks.** If written installation instructions are provided by the manufacturer of a septic tank, those instructions relative to the stability and integrity of the tank are to be followed unless otherwise specified in the installation permit of these rules. (5-7-93)

**19. Manhole Extension.** If the top of the septic tank is to be located more than twenty-four (24) inches below the finished grade, manholes will be extended to within eighteen (18) inches of the finished grade. (10-1-90)

**20. Sectional Tanks.** Sectional tanks will be joined in a manner that will insure that the tank is watertight. (10-1-90)

**21. Inlet and Outlet Piping.** Unless otherwise specified in the installation permit, piping to and from a septic tank or dosing chamber, to points three (3) feet beyond the tank excavation shall be of a material approved by the Director. The following materials are required: (5-7-93)

**a.** ABS schedule forty (40) or material of equal or greater strength piping shall be used to span the excavations for the septic tank and dosing chamber. (5-7-93)

**b.** ASTM-D-3033 or 3034 plastic pipe may be used to span the septic tank and dosing chamber if the

excavation is compacted with fill material. (5-7-93)

- i. The fill material must be granular, clean and compacted to ninety percent (90%) standard proctor density. (5-7-93)
- ii. Placement of ASTM-D-3033 or 3034 on undisturbed earth is suitable, but in no installation shall there be less than twelve (12) inches of cover over the pipe. (5-7-93)

**22. Effluent Pipe Separation Distances.** Effluent pipes shall not be installed closer than fifty (50) feet from a well. (5-7-93)

**23. Septic Tank Abandonment.** Responsibility of properly abandoning a septic tank shall remain with the property owner. Septic tanks shall be abandoned in accordance with the following: (5-7-93)

- a. Disconnection of the inlet and outlet piping; (5-7-93)
- b. Pumping of the scum and septage with approved disposal; (5-7-93)
- c. Filling the septic tank with earthen materials; or (5-7-93)
- d. Physically destroying the septic tank or removing the septic tank from the ground. (5-7-93)

**008. STANDARD SUBSURFACE DISPOSAL FACILITY DESIGN AND CONSTRUCTION.**

**01. Standard Drainfield.** A drainfield consisting of an effluent sewer, one (1) or more aggregate filled trenches and a gravity flow wastewater distribution system. These standards will be the basis of acceptable design and configuration. Overall dimensions of a specific facility will depend upon site characteristics and the volume of wastewater. (10-1-90)

**02. Site Suitability.** The area in which a standard drainfield is to be constructed must meet the conditions stated in this subsection: (10-1-90)

- a. Slope. The natural slope of the site will not exceed twenty percent (20%). (10-1-90)
- b. Soil types. Suitable soil types must be present at depths corresponding with the sidewalls of the proposed drainfield and at depths which will be between the bottom of the proposed drainfield and any limiting soil layer (effective soil depth).

| Design Soil Group | Soil Textural Classification | USDA Field Test Textural Classification |            |
|-------------------|------------------------------|---|------------|
| <b>Unsuitable</b> | Gravel                       | 10 Mesh                                 |            |
|                   | Coarse Sand                  | 10-35 Mesh                              | Sand       |
| <b>A</b>          | Medium Sand                  | 35-60 Mesh                              | Sand       |
|                   | Fine Sand                    | 65-140 Mesh                             | Sand       |
|                   | Loamy Sand                   |   | Sand       |
| <b>B</b>          | Very Fine Sand               | 140-270 Mesh                            | Sand       |
|                   | Sandy Loam                   |   | Sandy Loam |
|                   | Very Fine Loamy Sand         |   | Sandy Loam |
|                   | Loam                         |   |            |
|                   | Silt Loam                    |   | Silt Loam  |

| Design Soil Group | Soil Textural Classification                | USDA Field Test Textural Classification |
|-------------------|---|---|
| <b>C</b>          | Silt  | Silt Loam                               |
|                   | Clay Loam                                   | Clay Loam                               |
|                   | Sandy Clay Loam                             | Clay Loam                               |
|                   | Silty Clay Loam                             | Clay Loam                               |
| <b>Unsuitable</b> | Sandy Clay                                  | Clay                                    |
|                   | Silty Clay                                  | Clay                                    |
|                   | Clay  | Clay                                    |
|                   | Clay soils with high shrink/swell potential | Clay                                    |
|                   | Organic mucks                               |   |
|                   | Claypan, Duripan,                           |   |
|                   | Hardpan                                     |   |

(10-1-90)

**c.** Effective Soil Depths. Effective soil depths, in feet, below the bottom of the drainfield must be equal to or greater than those values listed in the following table.

| <b>EFFECTIVE SOIL DEPTHS TABLE</b>                                  |        |      |       |
|---|--------|------|-------|
| Site Conditions   | Design | Soil | Group |
| Limiting Layer  | A      | B    | C     |
| Impermeable Layer   | 4      | 4    | 4     |
| Fractured Bedrock, Fissured Bedrock or Extremely Permeable Material | 6      | 4    | 3     |
| Normal High Groundwater Level                                       | 6      | 4    | 3     |
| Seasonal High Groundwater Level                                     | 1      | 1    | 1     |

(5-7-93)

**d.** Separation Distances. The drainfield must be located so that the separation distances given be maintained or exceeded according to the following Table:

| Feature of Interest   | Soil Types All | A | B | C |
|---|----------------|---|---|---|
| Public Water Supply   | 100            |   |   |   |
| All Other Domestic Water Supplies including Springs and Suction Lines | 100            |   |   |   |



| Feature of Interest   | Soil Types<br>All | A        | B        | C        |
|---|-------------------|----------|----------|----------|
| Water Distribution Lines:<br>Pressure<br>Suction  | 25<br>100         |          |          |          |
| Permanent or Intermittent Surface Water other than<br>Irrigation Canals & Ditches       |                   | 300      | 200      | 100      |
| Temporary Surface Water and Irrigation Canals and<br>Ditches                            | 50                |          |          |          |
| Downslope Cut or Scarp:<br>Impermeable Layer Above Base<br>Impermeable Layer Below Base |                   | 75<br>50 | 50<br>25 | 50<br>25 |
| Building Foundations:<br>Crawl Space or Slab<br>Basement                                | 10<br>20          |          |          |          |
| Property Line   | 5                 |          |          |          |

(5-7-93)

**03. Subsurface Disposal Facility Sizing.** The size of a subsurface disposal system will be determined by the following procedures: (10-1-90)

**a.** Daily flow estimates should be determined in the same manner as are flow estimates for septic tank sizing in Subsection 007.08. (5-7-93)

**b.** The total required absorption area is obtained by dividing the estimated daily flow by a value below.

| Design Soil Group                         | A   | B   | C   |
|---|-----|-----|-----|
| Absorption Area - Gallons/Square Foot/Day | 1.0 | 0.5 | 0.2 |

(10-1-90)

**c.** Required Area. The size of an acceptable site must be large enough to construct two (2) complete drainfields in which each are sized to receive one hundred percent (100%) of the design wastewater flow. (10-1-90)

**04. Standard Subsurface Disposal Facility Specifications.** The following table presents additional design specifications for new subsurface sewage disposal facilities.

| SUBSURFACE DISPOSAL FACILITY TABLE                |                                  |
|---|----------------------------------|
| Item  | All Soil Groups                  |
| Length of Individual Distribution Laterals        | 100 Feet Maximum                 |
| Grade of Distribution Laterals and Trench Bottoms | Level                            |
| Width of Trenches                                 | 1 Foot Minimum<br>6 Feet Maximum |

| SUBSURFACE DISPOSAL FACILITY TABLE                 |                                  |
|--|----------------------------------|
| Item   | All Soil Groups                  |
| Depth of Trenches                                  | 2 Feet Minimum<br>4 Feet Maximum |
| Total Square Feet of Trench                        | 1500 Sq.ft. Max.                 |
| Undisturbed Earth Between Trenches                 | 6 Feet Minimum                   |
| Undisturbed Earth Between Septic Tank and Trenches | 6 Feet Minimum                   |
| Depth of Aggregate:                                |                                  |
| Total  | 12 In. Minimum                   |
| Over Distribution Laterals                         | 2 In. Minimum                    |
| Under Distribution Laterals                        | 6 In. Minimum                    |
| Depth of Soil Over Top of Aggregate                | 12 In. Minimum                   |

(10-1-90)

**05. Wastewater Distribution.** Systems shall be installed to maintain equal or serial effluent distribution. (10-1-90)

**06. Excavation.** Trenches will not be excavated during the period of high soil moisture content when that moisture promotes smearing and compaction of the soil. (10-1-90)

**07. Soil Barrier.** The aggregate will be covered throughout with untreated building paper, a synthetic filter fabric (geotextile), a three (3) inch layer of straw or other acceptable permeable material. (10-1-90)

**08. Aggregate.** The trench aggregate shall be crushed rock, gravel, or other acceptable, durable and inert material which is, free of fines, and has an effective diameter from one-half (1/2) to two and one-half (2 1/2) inches. (10-1-90)

**09. Impermeable Surface Barrier.** No treatment area trench or replacement area shall be covered by an impermeable surface barrier, such as tar paper, asphalt or tarmac or be used for parking or driving on or in any way compacted and shall be adequately protected from such activities. (5-7-93)

**10. Standard Absorption Bed.** Absorption bed disposal facilities may be considered when a site is suitable for a standard subsurface disposal facility except that it is not large enough. (10-1-90)

**a. General Requirements.** Except as specified in this section, rules and regulations applicable to a standard subsurface disposal system are applicable to an absorption bed facility. (10-1-90)

**b. Slope Limitation.** Sites with slopes in excess of eight percent (8%) are not suitable for absorption bed facilities. (10-1-90)

**c. Vehicular Traffic.** Rubber tired vehicles must not be driven on the bottom surface of any bed excavation. (10-1-90)

**d. Distribution Lateral Spacing.** Distribution laterals within a bed must be spaced on not greater than six (6) feet centers nor may any sidewall be more than three (3) feet from a distribution lateral. (10-1-90)

**11. Seepage Pit.** Seepage pit disposal facilities may be used on a case by case basis within the boundaries of District Health Department Seven when an applicant can demonstrate to the district director's satisfaction that the soils and depth to ground water are sufficient to prevent ground water contamination. The district director shall document all such cases. (4-2-91)L

**a.** General Requirements. Except as specified in Subsection 008.11.b., rules and regulations applicable to a standard subsurface disposal system are applicable to a seepage pit. (12-31-91)

**b.** Other conditions for approval, sizing and construction will be as provided for in the seepage pit section of the Technical Guidance Manual for Individual and Subsurface Sewage Disposal, except that the site size restriction in condition two (2) of the Conditions for Approval will not apply. (10-1-90)

**12. Failing Subsurface Sewage Disposal System.** If the Director determines that the public's health is at risk from a failed septic system and that the replacement of a failing subsurface sewage disposal system cannot meet the current rules and regulations, then the replacement system must meet the intent of the rules and regulations by utilizing a standard subsurface sewage disposal design or alternative system design as specified by the Director. (5-7-93)

**009. OTHER COMPONENTS.**

**01. Design Approval Required.** Commercially manufactured blackwaste and wastewater treatment and storage components may not be used in the construction of a system unless their design is approved by the Director. (10-1-90)

**02. Plan and Specification Submittal.** Plans and specifications for all commercially manufactured individual and subsurface treatment and storage components will be submitted to the Director for approval. Plans and specifications will show or include as requested by the Director, detailed construction drawings, capacities, structural calculations, list of materials, evidence of stability and durability, manufacturers installation, operation and maintenance instructions, and other relevant information. (10-1-90)

**03. Effect of Design Approval.** The Director may condition a design approval by specifying circumstances under which the component must be installed, used, operated or maintained. (10-1-90)

**04. Notice of Design Disapproval.** If the Director is satisfied that the component described in the submittal may not be in compliance with or may not consistently function in compliance with these rules the Director will disapprove the design as submitted. The manufacturer or distributor submitting the design for approval will be notified in writing of the disapproval and the reason for that action. (5-7-93)

**010. VARIANCES.**

**01. Technical Allowance.** The Director may make a minor technical allowance to the dimensional or construction requirements of these rules for a standard system if: (5-7-93)

**a.** The allowance will not affect adjacent property owners or the public at large; (10-1-90)

**b.** The allowance will not violate the conditions of Subsection 004.01; and (12-31-91)

**c.** The allowance will not be in conflict with any other rule, regulation, standard, or ordinance. (10-1-90)

**d.** The allowance to a dimensional requirement is not more than ten percent (10%) of the requirements of these rules unless otherwise provided for in the Technical Guidance Manual. (5-7-93)

**02. Petition for Variance.** If a petition of variance to these rules is desired, a request for a variance may be filed with the Director. The petition shall contain the following: (10-1-90)

**a.** A concise statement of the facts upon which the variance is requested including a description of the intended use of the property, the estimates of the quantity of blackwaste or wastewater to be discharged, and a description of the existing site conditions; (10-1-90)

**b.** A concise statement of why the petitioner believes that compliance with the provision from which

variance is sought would impose an arbitrary or unreasonable hardship, and of the injury that the grant of the variance would impose on the public; and (10-1-90)

**c.** A clear statement of the precise extent of the relief sought. (10-1-90)

**03. Public Notice.** At the time of filing a petition evidence shall also be submitted that: (10-1-90)

**a.** A notice has appeared in the local newspaper advising the public of the request for variance; (10-1-90)

**b.** All property owners within three hundred (300) feet of the affected site have been notified; and (10-1-90)

**c.** Such notices to the public have been made fifteen (15) days prior to the filing of the petition. (10-1-90)

**04. Objections to Petition.** Any person may file with the Department, within twenty-one (21) days after the filing of the petition, a written objection to the grant of the variance. A copy of such objection shall be provided by the Department to the petitioner. (10-1-90)

**05. Investigation and Decision.** After investigating the variance petition and considering the views of persons who might be adversely affected by the grant of the variance, the Director shall, within sixty (60) days after the filing of the petition, make a decision as to the disposition of the petition. The decision, a copy of which shall be served on the petitioner, shall include: (10-1-90)

**a.** A description of the efforts made by the Director to investigate the facts as alleged and to ascertain the views of persons who might be affected, and a summary of the views so ascertained; (10-1-90)

**b.** A statement of the degree to which, if at all, the Director disagrees with the facts as alleged in the petition; (10-1-90)

**c.** Allegations of any other facts believed relevant to the disposition of the petition; and (10-1-90)

**d.** The Director's decision. (10-1-90)

**06. Limitations on Decision.** No technical allowance or variance shall be granted unless: (10-1-90)

**a.** Adequate proof is shown by the petitioner that compliance would impose an arbitrary or unreasonable hardship; (10-1-90)

**b.** The technical allowance or variance rendered is consistent with the recommendations of the Technical Guidance Committee or the Technical Guidance Manual in use at the time of the petition; and (10-1-90)

**c.** The Director has determined that the approval of the technical allowance or variance will not have an adverse impact on the public health or the environment. (10-1-90)

**011. INSPECTIONS.**

**01. One or More Inspections Required.** Such inspection as are necessary to determine compliance with any requirement or provision of these rules shall be required by the Director. (5-7-93)

**02. Duty to Uncover.** The permittee shall, at the request of the Director, uncover or make available for inspection any portion or component of an individual or subsurface sewage disposal system which was covered or concealed in violation of these rules. (5-7-93)

**03. Advance Notice by Permittee.** If an inspection requires some type of preparation, such as test hole excavation or partial construction of the system, the applicant or permittee will notify the Director at least forty-eight

(48) hours in advance, excluding weekends and holidays, before the time preparation will be completed. (10-1-90)

**04. Substantiating Receipts and Delivery Slips.** The permittee shall upon request by the Director provide copies of receipts, delivery slips or other similar documents to substantiate the origin, quality, or quantity of materials used in the construction of any individual or subsurface system. (10-1-90)

**012. VIOLATIONS AND PENALTIES.**

**01. Failure to Comply.** All individual and subsurface sewage disposal systems shall be constructed and installed according to these rules. Failure by any person to comply with the permitting, licensing, approval, installation, or variance provisions of these rules shall be deemed a violation of these rules. (5-7-93)

**02. System Operation.** No person shall discharge pollutants into the underground water of the state of Idaho through an individual or subsurface sewage disposal system unless in accordance with the provisions of these rules. (5-7-93)

**03. Violation a Misdemeanor.** Pursuant to Section 39-117, Idaho Code, any person who willfully or negligently violates any of the provisions of these rules shall be guilty of a misdemeanor. (5-7-93)

**013. LARGE SOIL ABSORPTION SYSTEM DESIGN AND CONSTRUCTION.**

**01. Site Investigation.** A site investigation for a large soil absorption system by a soil scientist and/or hydrogeologist may be required by the Director for review and approval and shall be coordinated with the Director. Soil and site investigations shall conclude that the effluent will not adversely impact or harm the waters of the State. (5-7-93)

**02. Installation Permit Plans.** Installation permit application plans, as outlined in Subsection 005.04, for a large soil absorption system submitted for approval shall include provisions for inspections of the work during construction by the design engineer or his designee and/or by the Director. (5-7-93)

**03. Module Size.** The maximum size of any subsurface sewage disposal module shall be ten thousand (10,000) gallons per day. Developments with greater than ten thousand (10,000) gallons per day flow shall divide the system into absorption modules designed for ten thousand (10,000) gallons per day or less. (5-7-93)

**04. Standard Large Soil Absorption System Design Specifications.** (5-7-93)

**a.** All design elements and applications rates shall be arrived at by sound engineering practice and shall be provided by a professional engineer licensed by the state of Idaho and specializing in environmental or sanitary engineering. (5-7-93)

**b.** Within thirty (30) days of system installation completion the design engineer shall provide either as-built plans or a certificate that the system has been installed in substantial compliance with the installation permit application plans. (5-7-93)

**c.** Effective Soil Depths. Effective soil depths, in feet, below the bottom of the absorption module to the site conditions must be equal to or greater than the following table:

| TABLE -- EFFECTIVE SOIL DEPTHS                                      |          |          |          |
|---|----------|----------|----------|
| Site Conditions   | Design   | Soil     | Group    |
| <b>Limiting Layer</b>   | <b>A</b> | <b>B</b> | <b>C</b> |
| Impermeable Layer   | 8        | 8        | 8        |
| Fractured Bedrock, Fissured Bedrock or Extremely Permeable Material | 12       | 8        | 6        |

| <b>TABLE -- EFFECTIVE SOIL DEPTHS</b> |               |             |              |
|---------------------------------------|---------------|-------------|--------------|
| <b>Site Conditions</b>                | <b>Design</b> | <b>Soil</b> | <b>Group</b> |
| Normal High Groundwater Level         | 12            | 8           | 6            |
| Seasonal High Groundwater Level       | 2             | 2           | 2            |

(5-7-93)

**d.** Separation Distances. The disposal area absorption module must be located so that the following separation distances given, in feet, are maintained or exceeded as outlined in the following table:

| <b>TABLE -- SEPARATION DISTANCES</b>    |               |             |              |
|---|---------------|-------------|--------------|
| <b>Feature of Interest</b>              | <b>Design</b> | <b>Soil</b> | <b>Group</b> |
|   | <b>A</b>      | <b>B</b>    | <b>C</b>     |
| <b>All Domestic Water Supplies</b>      |               |             |              |
| Sewage Volume - 2,500-5,000 GPD         | 250           | 200         | 150          |
| Sewage Volume - 5,000-10,000 GPD        | 300           | 250         | 200          |
| <b>Property Lines</b>                   |               |             |              |
| Sewage Volume - 2,500-5,000 GPD         | 50            | 50          | 50           |
| Sewage Volume - 5,000-10,000 GPD        | 75            | 75          | 75           |
| <b>Building Foundations - Basements</b> |               |             |              |
| Sewage Volume - 2,500-5,000 GPD         | 50            | 50          | 50           |
| Sewage Volume - 5,000-10,000 GPD        | 75            | 75          | 75           |
| <b>Downslope Cut or Scarp</b>           |               |             |              |
| Impermeable Layer - Below Base          | 100           | 50          | 50           |
| Separation Distance - Between Modules   | 12            | 12          | 12           |

(5-7-93)

**e.** No large soil absorption system shall be installed above a downslope scarp or cut unless it can be demonstrated that the installation will not result in effluent surfacing at the cut or scarp. (5-7-93)

**f.** A minimum of two (2) disposal systems will be installed, each sized to accept the daily design flow, and a replacement area equal to the size of one (1) disposal system will be reserved. (5-7-93)

**g.** The vertical and horizontal hydraulic limits of the receiving soils shall be established and flows shall not exceed such limits so as to avoid hydraulically overloading any absorption module and replacement area. (5-7-93)

**h.** The distribution system must be pressurized with a duplex dosing system. (5-7-93)

**i.** A geotextile filter fabric shall cover the aggregate. (5-7-93)

**j.** An in-line effluent filter between an extended treatment system or lagoon system and the large soil absorption area shall be installed. (5-7-93)

- k.** Observation pipes shall be installed to the bottom of the drainrock throughout the drainfield. (5-7-93)
- l.** Pneumatic tired machinery travel over the excavated infiltrative surface is prohibited. (5-7-93)
- m.** The drainfield disposal area shall be constructed to allow for surface drainage and to prevent ponding of surface water. Before the system is put into operation the absorption module disposal area shall be seeded with typical lawn grasses and/or other appropriate shallow rooted vegetation. (5-7-93)
- 05. Large Septic Tanks.** Large Septic Tanks shall be constructed according to Section 007, except as outlined in this Subsection: (5-7-93)

  - a.** Length to width ratios shall be maintained at least at a three to one (3:1) ratio. (5-7-93)
  - b.** Tank inlet shall allow for even distribution of the influent across the width of the tank. (5-7-93)
  - c.** The width to liquid depth ratio shall be between one to one (1:1) and two and one-quarter to one (2.25:1). (5-7-93)
- 06. Monitoring and Reporting.** Before an installation permit is issued, a monitoring and reporting plan shall be approved by the Director and shall contain the following minimum criteria: (5-7-93)

  - a.** Monthly recording and inspection for ponding in all observation pipes. (5-7-93)
  - b.** Monthly recording of influent flows based on lapse time meter and/or event meter of the dosing system. (5-7-93)
  - c.** Monthly recording of groundwater elevation measurements at all monitoring wells if high seasonal groundwater is within fifteen (15) feet of the ground surface. (5-7-93)
  - d.** Semi-annual groundwater monitoring at all monitoring wells. (5-7-93)
  - e.** Monitoring shall conform to the requirements of all federal, state, and local rules and regulations. (5-7-93)
  - f.** An annual "Large Soil Absorption System Report" shall be filed with the Director no later than January 31 of each year for the last twelve (12) month period and shall include section on operation, maintenance and monthly and annual monitoring data. (5-7-93)
- 07. Operation and Maintenance.** Before an installation permit is issued, an operation and maintenance plan shall be approved by the Director and shall contain the following minimum criteria: (5-7-93)

  - a.** Annual or more frequent rotation of the disposal systems, and whenever ponding is noted. (5-7-93)
  - b.** A detailed operation and maintenance manual, fully describing and locating all elements of the system and outlining maintenance procedures needed for operation of the system and who will be responsible for system maintenance, shall be submitted to the Director prior to system use. (5-7-93)
  - c.** A maintenance entity shall be specified to provide continued operation and maintenance. Approval of the entity shall be made by the Director prior to issuance of an installation permit. (5-7-93)
- 014. -- 995. (RESERVED).**
- 996. ADMINISTRATIVE PROVISIONS.**  
Persons may be entitled to appeal agency actions authorized under these rules pursuant to IDAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality". (3-15-02)

**997. CONFIDENTIALITY OF RECORDS.**

Information obtained by the Department under these rules is subject to public disclosure pursuant to the provisions of Title 9, Chapter 3, Idaho Code, and IDAPA 58.01.21, "Rules Governing the Protection and Disclosure of Records in the Possession of the Department of Environmental Quality." (3-15-02)

**998. INCLUSIVE GENDER AND NUMBER.**

For the purposes of these rules, words used in the masculine gender include the feminine, or vice versa, where appropriate. (12-31-91)

**999. SEVERABILITY.**

The rules of this manual are severable. If any rule, or part thereof, or the application of such rule to any person or circumstance, is declared invalid, that invalidity does not affect the validity of any remaining portion of the manual. (5-7-93)



# Subject Index

## A

Abandoned System 2  
Abandonment May be Required, Permit & Permit Application 8  
Advance Notice by Permittee, Inspections 20  
Aggregate, Subsurface Treatment & Distribution Design & Construction 18  
Alternative System 3, 6  
Application & Permit Valid for One Year, Permit & Permit Application 8  
Application Fee, Installer's Registration Permit 10  
As-Built Plans & Specifications, Permit & Permit Application 8  
Authorized or Approved 3

## B

Basis for Permit Application Denial, Permit & Permit Application 8  
Blackwaste 3  
Blackwater 3  
Board 3  
Bond Required, Installer's Registration Permit 9  
Building Sewer 3

## C

Central System 3  
Compliance With Intent Required 5  
Concrete Septic Tanks, Septic Tanks Design & Construction Standards 10  
Conflict of Rules, Standards, & Ordinances 2  
Construct 3  
Construction Requirements, Septic Tanks Design & Construction Standards 10  
Contents of Application, Installer's Registration Permits 9  
Contents of Application, Permit & Permit Application 6  
Cottage Site Facility Certification, Permit & Permit Application 8

## D

Definitions, IDAPA 58.01.03, Individual/Subsurface Sewage Disposal Rules 2  
Design Approval Required 19  
Director 3  
Duties of the Technical Guidance Committee 6  
Duty to Uncover, Inspections 20

## E

Effect of Design Approval 19  
Effluent Pipe Separation Distances, Septic Tanks Design & Construction Standards 15  
Examination, Installer's Registration Permit 9  
Excavation, Subsurface Treatment & Distribution Design & Construction 18  
Exceptions to Permit Requirement, Permit & Permit Application 6  
Expand 3

## F

Failing Subsurface Disposal System 19  
Failing System 3, 5

## G

General Requirements 5  
Ground Water 3  
Grounds for Revocation, Installer's Registration Permit 10

## H

High Groundwater Level - Normal Seasonal 3  
High Water Mark 3  
Horizontal Dimension Limit, Septic Tanks Design & Construction Standards 10

## I

Immediate Effect of the Permit, Permit & Permit Application 8  
Impermeable Surface Barrier, Subsurface Treatment & Distribution Design & Construction 18  
Increased Flows 5  
Individual System 4  
Inlet & Outlet Piping, Septic Tanks Design & Construction Standards 14  
Inlets, Septic Tanks Design & Construction Standards 13  
Inspection Ports, Septic Tanks Design & Construction Standards 14  
Inspections 20  
Install 4  
Installation Permit Plans, Large Soil Absorption System Design & Construction 21  
Installation of Manufactured Tanks, Septic Tanks Design & Construction Standards 14  
Installer 4  
Installer's Registration Permit 9

Intent of Rules 5  
Investigation & Decision, Variances 20  
Issuance of Permit, Permit & Permit Application 8

## L

Large Septic Tanks, Large Soil Absorption System Design & Construction 23  
Large Soil Absorption System 4  
Large Soil Absorption System Design & Construction 21  
Limitations on Decision, Variances 20  
Limiting Layer 4  
Liquid Depth, Septic Tanks Design & Construction Standards 10

## M

Manhole Extension, Septic Tanks Design & Construction Standards 14  
Manholes, Septic Tanks Design & Construction Standards 14  
Manufactured Tank Markings, Septic Tanks Design & Construction Standards 10  
Materials, Septic Tanks Design & Construction Standards 10  
Minimum Separation Distances Between Septic Tanks & Features of Concern, Septic Tanks Design & Construction Standards 14  
Minimum Septic Tank Capacities, Septic Tanks Design & Construction Standards 10  
Module Size, Large Soil Absorption System Design & Construction 21  
Monitoring & Reporting, Large Soil Absorption System Design & Construction 23  
Mottling 4  
Multiple Tank or Compartment Capacity, Septic Tanks Design & Construction Standards 14

## N

New System 4  
Nondischarging System 4  
Notice of Denial, Permit & Permit Application 8  
Notice of Design Disapproval 19

## O

Objections to Petition, Variances 20  
One or More Inspections Required 20  
Operation & Maintenance, Large Soil Absorption System Design &

Construction 23  
Operation, Maintenance & Monitoring,  
Permit & Permit Application 8  
Other Components 19  
Outlets, Septic Tanks Design &  
Construction Standards 13

**P**

Permit 4  
Permit & Permit Application 6  
Permit Application 6  
Permit Fee, Permit & Permit  
Application 9  
Permit Renewal, Permit & Permit  
Application 8  
Permit Required, Installer's  
Registration Permit 9  
Permit Required, Permit & Permit  
Application 6  
Permits Required Annually, Installer's  
Registration Permit 9  
Petition for Variance 19  
Plan & Specification Submittal 19  
Pollutants 4  
Public Notice, Variances 20  
Public System 4

**R**

Repair 4

**S**

Scarp 4  
Scum Storage, Septic Tanks Design &  
Construction Standards 13  
Sectional Tanks, Septic Tanks Design &  
Construction Standards 14  
Seepage Pit, Subsurface Treatment &  
Distribution Design &  
Construction 18  
Septic Tank Abandonment, Septic  
Tanks Design & Construction  
Standards 15  
Septic Tanks Design & Construction  
Standards 10  
Sewage 4  
Site Investigation, Large Soil  
Absorption System Design &  
Construction 21  
Site Suitability, Subsurface Treatment  
& Distribution Design &  
Construction 15  
Soil Barrier, Subsurface Treatment &  
Distribution Design &  
Construction 18  
Soil Texture 4  
Split Flows, Septic Tanks Design &  
Construction Standards 14  
Standard Absorption Bed, Subsurface

Treatment & Distribution Design &  
Construction 18  
Standard Drainfield, Subsurface  
Treatment & Distribution Design &  
Construction 15  
Standard Large Soil Absorption System  
Design Specifications 21  
Standard Subsurface Treatment &  
Distribution Facility Design &  
Construction 15  
Standard Subsurface Treatment &  
Distribution Facility  
Specifications 17  
Standard System 4  
Substantiating Receipts & Delivery  
Slips, Inspections 21  
Subsurface System 4  
Subsurface System Replacement  
Area 6  
Subsurface Treatment & Distribution  
Facility Sizing 17  
Surface Water - Intermittent,  
Permanent, Temporary 4  
System 5  
System Limitations 5

**T**

Technical Allowance, Variances 19  
Technical Guidance Committee 6  
Technical Guidance Manual for  
Individual & Subsurface Alternative  
Sewage Disposal 6  
Total Volume, Septic Tanks Design &  
Construction Standards 13

**V**

Variances 19  
Violations & Penalties 21

**W**

Wastewater 5  
Wastewater Distribution, Subsurface  
Treatment & Distribution Design &  
Construction 18  
Wastewater Flows From Various  
Establishments in Gallons Per Day,  
Septic Tanks Design & Construction  
Standards 11  
Water Table 5  
Waters of the State 5