

**Absorption capacity:** See mounding analysis.

**Absorption trench:** A ditch or trench with vertical sides and substantially flat bottom with a minimum of twelve inches of clean, coarse filter material into which a single distribution pipe has been laid, the trench then being backfilled with a minimum of six inches of soil.

**Aerobic:** A condition in which molecular oxygen is present in the environment.

**Alteration:** Any change in the physical configuration of an existing disposal system or any of its component parts, including replacement, modification, additional or removal of disposal system components, installation, size, capacity, type or number of one or more components. The term "alter" shall be construed accordingly.

**Alternative System:** Any onsite wastewater disposal system other than the standard septic tank/gravity-fed absorption field described in Chapter 4. Any system installed under a variance shall be considered an alternative system.

**Anaerobic:** A condition in which molecular oxygen is absent from the environment.

**Applicant:** The person who signs and submits an application for permit to construct, install or alter a disposal system.

**Aquifer recharge zone:** Any porous surface area that allows precipitation to infiltrate into an aquifer.

**Bedrock:** A solid and continuous body of rock, with or without fractures, or a weathered or broken body of rock fragments overlying a solid body of rock. It has less than 25% fines and can not be broken by hand pressure.

**Bedroom:** Any room within a dwelling unit, furnished or unfurnished, that may reasonably be expected to serve primarily as sleeping quarters.

**Black wastewater:** Wastewater derived from plumbing fixtures or drains that only receive excreta wastewater.

**Bottomless sand filter:** An unlined intermittent dosing sand filter that allows effluent to travel into the soil below the bed of sand.

**Building drain:** That portion of the lowest piping of a plumbing system that receives the discharge plumbing and other pipes inside the walls of a building and conveys it to the building sewer.

**Capping fill:** Used to modify a site that is lacking in effective soil depth, depth to groundwater, depth to restrictive layers, or excessively permeable soil. The absorption trench must be installed in a minimum of twelve inches into natural soil, but soil may be added to "cap" the system and, thus provide an acceptable effective soil depth.

**Cesspool:** A covered excavation that receives wastewater or other organic wastes from a disposal system, and is designed to retain the organic matter and solids, but allows liquids to seep through the bottom and sidewalls.

**Chroma:** The relative purity or strength of color of soil; a quantity that decreases with increasing grayness. Chroma is one of the three variables of color as defined in the Munsell system of color classification.

**Clay:** See Soil texture

**Clay pan:** A dense, compact clay layer in the subsoil. It has a much higher clay content than the overlying soil horizon from which it is separated by an abrupt boundary. Clay pans are hard when dry and very sticky and very plastic when wet. They impede movement of water and air and growth of plant roots.

**Community system:** An onsite wastewater disposal system designed to serve more than one lot or parcel or more than one condominium unit or more than one unit of a planned unit development.

**Conditions associated with saturation:** A) Reddish brown or brown soil horizons with gray (chromas of two or less) and red or yellowish red mottles; or B) Gray soil horizons, or gray soil horizons with red, yellowish red, or brown mottles; or C) Dark colored highly organic soil horizons; or D) Soil profiles with concentrations of soluble salt at or near the ground surface.

**Contour:** An imaginary line of constant elevation on the ground surface; the corresponding line on a map is called a "contour line".

**Criteria:** Technical requirements upon which a judgement or decision may be based.

**Curtain drain:** A method of artificially lowering the water table by installation of a trench on the up-hill side of the absorption field on sites with slopes greater than four percent. The trench shall be twelve inches wide and approximately five foot deep with a perforated pipe in the bottom that collects and diverts water away from the absorption field area.

**Design flow:** The wastewater flow that may reasonably be expected to be discharged from a residential, commercial, or institutional facility on any day.

**Disposal area:** One or more absorption fields. The perimeter of the disposal area corresponds to the perimeter of the absorption field or a line circumscribing the outermost edges of the outermost absorption fields and includes the area between the absorption fields.

**Disposal system cleaner:** Any solid or liquid material intended or used primarily for the purpose of cleaning, treating, degreasing, unclogging, disinfecting or deodorizing any part of a disposal system but excluding those liquid or solid products intended or used primarily for manual cleaning, scouring, treating, deodorizing or disinfecting the surface of common plumbing fixtures.

**Distribution box:** A watertight structure that receives septic tank effluent and is used to distribute such effluent in equal portions to two or more disposal fields or distribution pipes within a disposal field.

**Distribution pipe:** A perforated pipe or one of several perforated pipes used to carry and distribute septic tank effluent throughout the disposal field.

**Distribution network:** Two or more inter-connected distribution pipes.

**Diverter valve:** A device that permits alternating use of two or more disposal fields or the diversion of septic tank effluent.

**Diversion ditch:** A ditch to intercept and divert surface water runoff.

**Dosing septic tank:** A unitized device performing functions of both a septic tank and a dosing tank.

**Dosing siphon:** A hydraulic device designed to discharge rapidly the contents of a dosing tank between predetermined water or sewage levels.

**Dosing tank:** A watertight receptacle located between the septic tank and disposal field and equipped with a pump or siphon, to store and deliver doses of septic tank effluent to the disposal field.

**Drainrock:** Clean, washed gravel ranging from three-quarter to two and one-half inches in size, or clean crushed rock ranging in size from one and one-half to two and one-half inches.

**Drainage area:** An area from which the surface runoff is carried away by a single water-course.

**Drainage ditch:** A ditch used to receive and divert receiving and diverting surface runoff or subsurface water.

**Drop box:** A component of a serial distribution system. The drop box allows overflow from one absorption trench to the next.

**Dry well:** A system that involves effluent being discharged from a septic tank into a cesspool.

**Dwelling unit:** Any structure or portion of a structure, permanent or temporary in nature, used or proposed to be used as a residence seasonally or throughout the year.

**Effective seepage area:** The sidewall area within an absorption trench or a seepage trench operating anaerobically from the bottom of the absorption trench to a level two inches above the distribution pipes. The bottom area may be added when the absorption trench is designed to operate aerobically.

**Effective size:** The size or diameter of the particle or sand grain, in millimeters, in a sand mixture, below which ten percent by weight of the sand grains are smaller in diameter.

**Effective soil depth:** That portion of the soil above a layer that limits the ability of the soil to provide treatment or disposal of septic tank effluent. Limiting horizons include bedrock, hydraulically restrictive soil horizons and parent material, excessively coarse soil horizons and parent material, and permanent and seasonal groundwater table.

**Effluent lift pump:** A pump used to lift septic tank or other treatment facility effluent to a higher elevation.

**Effluent sewer:** Part of the system of drainage piping that conveys partially treated sewage from a septic tank or other treatment facility into a distribution unit or an absorption facility.

**Emergency repair:** Repair of a failing system where immediate action is necessary to relieve a situation in which sewage is backing up into a dwelling or building, or repair of a broken pressure sewer pipe.

**Engineered fill:** Importation of select soil placed deeper than twelve inches on a site for the express purpose of constructing a drainfield.

**Escarpment:** Any naturally occurring slope greater than fifty percent which extends vertically six inches or more as measured from toe to top, and which is characterized by a long cliff or steep slope which separates two or more comparatively level or gently sloping surfaces, and may intercept one or more layers that limit effective soil depth.

**Existing onsite wastewater disposal system:** Any installed onsite wastewater disposal system constructed in conformance with the rules, laws and local ordinances in effect at the time of construction.

**Experimental systems:** See Innovative Applications, Chapter 7.

**Failing system:** Any system which discharges untreated or incompletely treated wastewater or septic tank effluent directly or indirectly onto the ground surface or into public waters.

**Fill material:** Any soil, rock or other material placed within an excavation or over the surface of the ground. The term "fill or back-fill" is equivalent in meaning.

**Finish grade:** The surface elevation of the ground after completion of final grading.

**Filter fabric:** A woven or spun-bonded sheet material used to impede or prevent the movement of sand, silt and clay into filter material.

**Five-day biochemical oxygen demand (BOD<sub>5</sub>):** The quantity of oxygen used in the biochemical oxidation of organic matter in five days at 20° Centigrade under specified conditions and reported as milligrams per liter (mg/L).

**Gleization:** A process of intense reduction caused by long periods of soil saturation in the presence of organic matter while the soil temperatures are above biologic zero, forty-one degrees Fahrenheit.

**Gleyed:** A soil condition resulting from intense reduction, characterized by the presence of ferrous iron and neutral gray, green or blue colors that commonly change to brown upon exposure to air.

**Gravel:** See Soil texture

**Gray wastewater:** That portion of the wastewater generated within a residential, commercial or institutional facility that does not include discharges from water closets and urinals.

**Grease trap:** A device located inside a building in which the grease in wastewater is intercepted, congealed by cooling, accumulated and stored for pump-out and disposal.

**Grease interceptor tank:** A septic tank with the outlet tee extended to within twelve inches of the floor of the tank used to intercept and retain any grease that may be present in the wastewater.

**Groundwater:**

- a. **Permanent Groundwater table:** The upper surface of a saturated zone that exists year-round. The thickness of the saturated zone, and, as a result, the elevation of the permanent groundwater table may fluctuate as much as twenty feet or more annually; but the saturated zone and associated permanent groundwater table will be present at some depth beneath land surface throughout the year.

- b. **Groundwater aquifer:** A porous formation of ice contact and glacial outwash sand and gravel, or bedrock that contains significant recoverable quantities of water that is likely to provide drinking water supplies.
- c. **Groundwater gradient:** For purpose of this manual, the groundwater gradient is assumed to follow the topographic gradient except for stratified drift and ablation till landscapes where the disposal system is assumed to be down gradient regardless of the topographical gradient.
- d. **Groundwater table:** The upper surface of a zone of saturation.

**Hazardous waste:** Any chemical substance or material, gas, solid or liquid designated as hazardous by the U.S. Environmental Protection Agency pursuant to the United States Resource Recovery and Conservation Act. Public Law 94-580.

**Holding tank:** A closed watertight structure designed and operated in such a manner as to receive and store wastewater or septic tank effluent, but not to discharge wastewater or septic tank effluent to the surface or groundwater or onto the surface of the ground.

**Horizon, soil:** A layer within a soil profile differing from the soil above or below it in one or more soil morphological characteristics including color, texture, rock fragment content, structure and consistence of each soil horizon or parent material.

**Horizontal reference point:** A stationary, easily identifiable point to which horizontal dimensions can be related.

**Hue:** The dominant spectral color, one of the three variables of soil color defined within the Munsell system of color classification.

**Infiltration rate:** The rate water is absorbed by a soil surface whether that surface be the ground surface or interior of a trench lined with drainrock.

**Innovative application:** See Chapter 7.

**Install:** To assemble, put in place or connect components of a disposal system in a manner that permit their use by the occupants of the structure served.

**Intermittent dosing sand filter:** A filter with two feet or more of medium sand designed to filter and biologically treat septic tank or other treatment unit effluent from a pressure distribution system at an application rate not to exceed 1.5 gallons per square foot-day applied at a dose not to exceed twenty percent of the projected daily wastewater flow per cycle.

**Invert:** The floor, bottom or lowest portion of the internal cross-section of a closed conduit, used with reference to pipes or fittings conveying wastewater or septic tank effluent.

**Large system:** See Chapter 6.

**Malfunctioning system:** A non-operational disposal system or an improperly functioning disposal system, as indicated by, though not limited to, any of the following events: (1) Contamination of nearby water wells or surface water bodies by wastewater of septic tank effluent as indicated by the presence of fecal bacteria where the ratio of fecal coliform to fecal streptococci is four or greater; (2) Ponding or outbreak of wastewater or septic tank effluent into portions of buildings below ground; (3) Seepage of wastewater or septic tank effluent into portions of buildings below ground; (4) Emanations of foul odors from any component of the disposal system; or (5) Back-up of wastewater into the building served which is not caused by a physical blockage of the internal plumbing.

**Medium sand:** A mixture of sand with 100 percent passing the No. 3/8 inch sieve, ninety to 100 percent passing the No. 4 sieve, sixty-two to 100 percent passing the No. 10 sieve, forty-five to eight-two percent passing the No. 16 sieve, twenty-five to fifty-five percent passing the No. 30 sieve, five to twenty percent passing the No. 50 sieve, ten percent or less passing the No. 60 sieve, and four percent or less passing the No. 100 sieve.

**Mineral soil:** Any soil consisting primarily of sand, silt and clay rather than organic matter.

**Mottles, drainage:** Soil color patterns caused by alternating saturated (anaerobic) and unsaturated (aerobic) soil conditions. When saturation occurs while soil temperatures are above biological zero forty-one degrees Fahrenheit, iron and manganese will become reduced and exhibit subdued shades such as grays, greens or blues. When unsaturated conditions occur, oxygen combines with iron and manganese to develop brighter soil colors such as yellow and reddish brown. Soils which experience seasonally fluctuating water tables usually exhibit alternating streaks, spots, or blotches of bright colors (oxidized area) with dull or subdued colors (reduced areas). The longer a soil is saturated and in an anaerobic condition, the greater is the percentage of color which will be subdued. Soils which are never or are rarely exposed to free oxygen are considered totally reduced or gleyed. (see Appendix A).

**Mounding analysis:** A hydraulic study of a proposed drainfield to determine the capacity of the site to transmit water through the soils and off the site without surfacing. Words used to describe water flow through soil away from a drainfield include site capacity, assimilation of flows, and absorption capacity.

**Mottling:** A color pattern observed in soil consisting of blotches or spots of contrasting color. The term "mottle" refers to an individual blotch or spot. Drainage Mottling is an indication seasonal or periodic and recurrent soil saturation.

**Munsell system:** A system of classifying soil color consisting of an alpha-numeric designation for hue, value and chroma, such as "7.5YR6/2," together with a descriptive color name, such as "strong brown."

**Nonwater-carried waste disposal facility:** A system designed to uniformly distribute septic tank or other treatment unit effluent under pressure in an absorption facility or sand filter.

**Normal high water line, riverline, stream, lake and pond:** That line on the shore or bank of stream that is apparent from visible markings, changes in the character of soil, rock or vegetation resulting from submersion or the prolonged erosion action of the water.

**Operate:** To use or convey a structure or facility served by disposal system or to own a structure or facility where such use or occupation exists.

**Owner:** Any person who alone, or jointly, or severally with others: (1) Has legal title to any single lot, dwelling, dwelling unit, or commercial facility; or (2) Has care, charge or control of any real property as agent, executor, executrix, administrator, administratrix, trustee, commercial leasee, or guardian of the estate of the holder of legal title; or (3) Is the contract purchaser of real property NOTE: Each such person as described in subsections (2) and (3) thus representing the legal title holder, is bound to comply with the provisions of these rules as if he were the legal title holder.

**Parent material:** The unconsolidated and more or less unweathered mineral or organic matter from which the soil profile is developed.

**Perimeter drain or tile dewatering:** A method of artificially lowering the water table on sites with slopes less than twelve percent by installation of a trench that completely surrounds the entire absorption field. The trench shall be twelve inches wide and approximately five feet deep with perforated pipe in the bottom that collects and diverts water away from the absorption field area.

**Person:** An individual or his/her heirs, executor, administrator, assign or agents, a firm, corporation, association, organization, municipal or quasi-municipal corporation, or governmental agency. Singular includes plural and male includes female.

**Pit privy:** An alternative toilet placed over an excavation where human waste is deposited.

**Portable toilet:** Any self-contained chemical toilet facility that is housed within a portable toilet shelter and includes, but is not limited to construction-type chemical toilets.

**Potable water:** Water that does not contain objectionable pollution, contamination, minerals, or infective agents, is satisfactory for human consumption and is used for human consumption.

**Pre-existing natural ground surface:** The former level of the ground surface in an area of disturbed ground prior to the disturbance.

**Pressure distribution lateral:** Piping and fittings in pressure distribution systems which distribute septic tank or other treatment unit effluent to filter material through small diameter orifices.

**Pressure distribution manifold:** Piping and fittings in a pressure distribution system which supply effluent from pressure transport piping to pressure distribution laterals.

**Pressure distribution system:** Any system designed to uniformly distribute septic tank or other treatment unit effluent under pressure in an absorption facility or sand filter.

**Pressure transport piping:** Piping which conveys septic tank or other treatment unit effluent to a pressure distribution manifold by means of a pump.

**Public sewer:** Municipal or sewerage system.

**Public waters:** Lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marches, inlets, canals, the Pacific Ocean within the territorial limits of the State of California, and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the State or within its jurisdiction.

**Qualified designer:** A registered civil engineer, certified professional soil scientist, registered sanitarian, registered engineering geologist, or registered geologist with experience in designing onsite wastewater disposal systems. A qualified designer may perform soil tests, prepare site evaluation reports, and design onsite wastewater disposal systems. Firms performing satisfactory site evaluations at the time this manual is adopted are also considered to be qualified.

**Realty improvement:** Any new residential, commercial or industrial structure or other premises, including but not limited to condominiums, garden apartments, town houses, mobile homes, stores, office buildings, restaurants, and hotels, not served by an approved public sewer, the useful occupancy of which will require the installer erection of disposal systems. Each dwelling unit in a proposed multiple-family dwelling unit or each commercial unit in a commercial structure shall be construed to be a separate realty improvement.

**Recirculating gravel filter:** A gravel filter which processes liquid waste by mixing filtrate with incoming septic tank effluent and recirculating it several times through the filter material before discharge to a final treatment or absorption area.

**Redundant absorption field system:** A system in which two complete absorption fields are installed, the absorption trenches of each system alternate with each other and only one system operates at a given time.

**Restrictive chemical material:** Any chemical material that contains concentrations in excess of one part per hundred, by weight of any halogenated hydrocarbon chemical, aliphatic or aromatic, including, but not limited to trichloroethane, trichloroethylene, methylene chloride, tetrachloroethylene, halogenated benzenes and carbon tetrachloride, any aromatic hydrocarbon chemical, including but not limited to benzene, toluene and naphthalene; any phenol derivative in which a hydroxyl group and two or more halogen atoms are bonded directly to a six-carbon aromatic ring, including but not limited to trichlorophenol or pentachlorophenol; or acrolein, acrylonitrile or benzidine. Restrictive chemical material does not, however, include any chemical material that is biodegradable and is not a significant source of contamination of the groundwater of the State.

**Restrictive soil layer:** A soil horizon or zone within a soil profile that slows or prevents the downward or lateral movement of water.

**Rock fragment:** A rock fragment contained within the soil that is greater than two millimeter equivalent spherical diameter or that is retained on a two millimeter sieve.

**Sand:** See Soil texture.

**Sand filter surface area:** The area of the level plane section in the medium sand horizon of a conventional sand filter located two feet below the bottom of the filter material containing the pressurized distribution piping.

**Sand filter system:** The combination of septic tank or other treatment unit, dosing system with effluent pump and controls, or dosing siphon, piping and fittings, sand filter, and absorption facility used to treat and dispose of sewage.

**Saprolite:** Weathered material underlying the soil that grades from thoroughly decomposed rock to rock that has been weathered sufficiently so that it can be broken in the hands or cut with a knife. It does not include hard bedrock or hard fractured bedrock. It has rock structure, but behaves like soil. It is considered soil in determining soil depth.

**Seasonal groundwater table:** The upper limit of the shallowest seasonal groundwater table that occurs in the soil. This zone may be determined by identification of soil drainage mottling or by monitoring.

**Seepage bed:** An absorption system having disposal trenches wider than three feet.

**Seepage pit:** A "cesspool" which has a treatment facility such as a septic tank ahead of it

**Seepage trench system:** A system with disposal trenches with more than six inches of filter material below the distribution pipe.

**Septage:** All sludge, scum, liquid and any other material removed from a septic tank or disposal field.

**Septic tank:** A watertight receptacle that receives the discharge of untreated wastewater, and is designed and constructed so as to permit settling of settleable solids from the liquid collection of the scum, partial digestion of the organic matter and discharge of the liquid portion into a disposal field.

**Septic tank effluent:** Primary treated wastewater discharged through the outlet of a septic tank.

**Serial distribution:** A method of distributing septic tank effluent between a series of absorption trenches so that each successive absorption trench receives septic tank effluent only after the preceding absorption trenches have become full to overflowing.

**Setback distance:** The nearest horizontal distance between a component of a disposal system and selected site features or structures.

**Single-family dwelling unit:** A structure or realty improvement intended for single-family use.

**Site evaluation:** The practice of investigating, evaluating and reporting basic soil and site conditions that apply to wastewater treatment and disposal and disposal system design in compliance with this code.

**Site evaluator:** A certified professional soil scientist (CPSS), registered civil engineer, certified engineering geologist, registered geologist or a registered sanitarian with adequate training in small waste disposal systems and soil science or other individuals approved by the onsite management district. See also qualified designer.

**Slope:** The rate of fall or drop in feet per 100 feet of the ground surface, expressed as a percent.

**Sludge:** A relative dense suspension of wastewater solids that settle to the bottom of a septic tank, are relatively resistant to biological decomposition, and that collect in the septic tank over a period of time.

**Small flow wastewater construction service:** (1) The installation of onsite sewage disposal systems (including the placement of portable toilets, or any part thereof; or (2) The pumping out or cleaning of onsite sewage disposal systems (including portable toilets), or any part thereof; or (3) The disposal of material derived from the pumping out or cleaning of onsite sewage disposal systems (including portable toilets); or (4) Grading, excavating, and earth-moving work connected with the operations described in subsection (1) of this section, except streets, highways, dams, airports or other heavy construction projects and except earth-moving work performed under the supervision of a builder or contractor in connection with and at the time of the construction of a building or structure; or (5) The construction of a drain and sewage lines from five feet outside a building or structure to the service lateral at the curb or in the street or alley or other disposal terminal holding human or domestic sewage.

**Soil:** The collection of natural bodies on the earth's surface, in places modified or even created of earthy materials, containing living matter and capable of supporting plants out-of-doors.

**Soil material:** Soil as well as any naturally occurring unconsolidated mineral deposit that is not bedrock.

**Soil permeability rating:** That quality of the soil that enables it to transmit water or air, as outlined in the United States Department of Agriculture Handbook, Number 18, entitled Soil Survey Manual.

**Soil profile:** A vertical cross-section of the undisturbed soil showing the characteristic soil horizontal layers or soil horizons of the soil that have formed as a result of the combined effects of parent material, topography, climate, biological activity, and time.

**Soil saturation:** The state when all the pores in the soil are filled with water. Water will flow from saturated soils into an observation hole.

**Soil structure:** The naturally occurring arrangement, within a soil horizon, of sand, silt and clay particles, rock fragments and organic matter, that are held together in clusters or soil aggregates.

**Soil texture:** The amount of each soil separate in a soil mixture. Field methods for judging the texture of a soil consist of forming a cast of soil, both dry and moist, in the hand and pressing a ball of moist soil between thumb and finger. The major textural classifications are defined as follows:

1. **Sand:** Individual grains can be seen and felt readily. Squeezed in the hand when dry, this soil will fall apart when the pressure is released. Squeezed then moist, it will form a cast that will hold its shape when the pressure is released, but will crumble when touched.
2. **Sandy loam:** Consists largely of sand, but has enough silt and clay present to give it a small amount of stability. Individual sand grains can be readily seen and felt. Squeezed in the hand when dry, this soil will readily fall apart when the pressure is released. Squeezed when moist, it forms a cast that will not only hold its shape when the pressure is released, but will withstand careful handling. The cast formed of moist soil can be handled freely without breaking.
3. **Silt loam:** Consists of a moderate amount of fine grades of sand, a small amount of clay, and a large quantity of silt particles. Lumps in a dry, undisturbed state appear quite cloddy, but they can be pulverized readily, the soil then feels soft and floury. When wet, silt loam runs together in puddles. Either dry or moist, casts can be handled freely without breaking. When a ball of moist soil is pressed between thumb and finger, it will not press out into a smooth, unbroken ribbon, but will have a broken appearance.

4. Clay loam: Consists of an even mixture of sand, silt and clay, which breaks into clods or lumps when dry. When a ball of moist soil is pressed between the thumb and finger, it will form a thin ribbon that will readily break, barely sustaining its own weight. The moist soil is plastic and will form a cast that will withstand considerable handling.
5. Silty clay loam: Consists of a moderate amount of clay, a large amount of silt, and a small amount of sand. It breaks into moderately hard clods or lumps when dry. When moist, a thin ribbon or one-eighth inch sustain its weight and will withstand gentle movement.
6. Silty clay: Consists of even amounts of silt and clay and very small amounts of sand. It breaks into hard clods or lumps when dry. When moist, a thin ribbon or one-eighth inch or less sized wire formed between thumb and finger will withstand considerable movement and deformation.
7. Clay: Consists of large amounts of clay and moderate to small amounts of sand. It breaks into very hard clods or lumps when dry when moist, a thin, long ribbon or one-sixteenth inch wire can be molded with ease. Fingerprints will show on the soil, and a dull to bright polish is made on the soil by a shovel.

These and other soil textural characteristics are also defined as shown in the United States Department of Agriculture Textural Classification Chart (Figure A.1) which is hereby adopted as part of these rules. This textural classification chart is based on the Standard Pipetter Analysis as defined in the United States Department of Agriculture, Soil Conservation Service Soil Survey Investigations Report No. 1.

**Soil with rapid or very rapid permeability:**

- A. Soil which contains thirty-five percent or more of coarse fragments two millimeters in diameter or larger by volume with intersectional soil of sandy loam texture or coarser as defined herein and as classified in Soil Textural Classification Chart (Figure A.1).
- B. Coarse textured soil (loamy sand or sand as defined herein and as classified in Soil Textural Classification Chart).
- C. Stones, cobbles, gravel and rock fragments with too little soil material to fill interstices larger than 1 mm in diameter.

**Strength of wastewater:** The concentration of pollutants in wastewater as measured by BOD<sub>5</sub>, COD, and TSS.

**Subsurface sewage treatment:** The physical, chemical or bacteriological breakdown and aerobic treatment of wastewater in the unsaturated zone of the soil above any temporarily perched groundwater body.

**Temporary or perched groundwater table:** The upper surface of a saturated zone that exists only on a seasonal or periodic basis. Perched water typically occurs immediately above a restrictive soil horizon. Like a permanent groundwater table, the elevation of a temporary groundwater table may fluctuate. However, a temporary groundwater table and associated saturated zone will dissipate (dry up) for a period of time each year.

**Total suspended solids (TSS):** Solids in wastewater that can be removed readily by standard filtering procedures in a laboratory and reported as milligrams per liter (mg/L).

**Variance:** Written authorization issued by the Town of Paradise that permits some act or condition otherwise impermissible in the Onsite Wastewater Management Zone.

**Value:** The relative lightness or intensity of a color, one of the three variables of soil color defined within the Munsell system of classification.

**Vault Privy:** An alternative toilet that retains human waste in a sealed vault.

**Wastewater:** Any liquid waste containing animal or vegetable matter in suspension or solution or the water carried wastes from the discharge of water closets, laundry tubs, washing machines, sinks, dishwashers, or other source of water carried wastes of human origin. This term specifically excludes industrial, hazardous or toxic wastes and materials.

**Wastewater discharge requirements:** Wastewater discharge requirements are issued by the California Regional Water Quality Control Board, Central Valley Region, for discharge of wastewater to the environment.

**Water well:** A bored, drilled or driven shaft or dug hole, that extends below the seasonal groundwater table and is used as a drinking water supply.