

EXHIBIT _____

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 19.20 OF TITLE 19 OF
THE SAN LUIS OBISPO COUNTY CODE
IN ORDER TO IMPLEMENT NEW PROCEDURES FOR
SEWAGE DISPOSAL SYSTEMS

The Board of Supervisors of the County of San Luis Obispo ordains as follows:

SECTION 1: Section 19.20.200 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended to read as follows:

19.20.200 - Plumbing Code. The San Luis Obispo County Plumbing Code consists of plumbing equipment and facility regulations consistent with the requirements of California State Law, and is organized into the following sections:

- 19.20.210 Uniform Plumbing Code Adopted
- 19.20.212 On-Site Wastewater Treatment Systems
- 19.20.214 Definitions
- 19.20.216 Liquified Petroleum Gas Systems
- ~~19.20.220 Sewage Disposal Systems~~
- ~~19.20.222 Private Sewage Disposal Systems~~ Permits and Inspections
- 19.20.223 Types of On-Site Wastewater Treatment Systems
- ~~19.20.224 Community Sewage Disposal Systems~~ System Standards
- 19.20.225 Site Evaluation and System Construction Plans
- 19.20.226 Repair of Failing Systems; Abandonment of Systems
- 19.20.227 Monitoring and Inspection of Existing Systems; Mandatory Repairs
- 19.20.228 Modifications to Existing Buildings that Require Upgrading of On-site Treatment Systems
- 19.20.229 Toilet Facilities for Workers Required

- 19.20.230 Water Supply
- 19.20.232 Uniform Plumbing Code Amended
- 19.20.234 Cross-Connections Control
- 19.20.236 Minimum Water Supply - Single-Family Dwellings
- 19.20.237 Water Quality Monitoring
- 19.20.238 Verification of Water Supply Required

SECTION 2: Section 19.20.210 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended to read as follows:

19.20.210 - Uniform Plumbing Code Adopted. The plumbing code published by the International Association of Plumbing and Mechanical Officials, which is entitled the "Uniform Plumbing Code", the

most recently adopted as adopted by the state of California, together with its Appendix A, "Recommended Rules for Sizing the Water Supply System"; Appendix B, "Explanatory Notes on Combination Waste and Vent System"; Appendix D, "Rainwater Systems"; Sizing Storm Water Drainage Systems; Appendix G, "Swimming Pools"; Appendix H, "Recommended Procedures for Sizing Commercial Kitchen Grease Interceptors"; and Appendix I Appendix K, "Private Sewage Disposal Systems"; is hereby adopted and incorporated into this title by reference as though it were fully set forth here, except as otherwise noted in this title.

SECTION 3: Chapter 19.20 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended by adding new Section 19.20.212 to read as follows:

19.20.212 - On-site Wastewater Treatment Systems

The use of an on-site wastewater treatment system shall be allowed only within the rural areas of the county and within urban and village areas where no community sewage collection, treatment and dispersal system is available. On-site wastewater treatment systems shall be designed and constructed to comply with this section and with the most current legally adopted editions of the California Plumbing Code and the Water Quality Control Plan, Central Coastal Basin (published by the California Regional Water Quality Control Board (RWQCB)). In the event of a conflict, the most restrictive provision shall prevail.

a. Purpose and Scope

- (1) Purpose. The purpose of this section is to ensure that waste shall be discharged into on-site wastewater treatment systems in a manner that protects the health of individuals, families and the community as a whole, protects the quality of surface and ground waters, and prevents the occurrence of nuisances.
- (2) Scope. The following regulations apply to domestic and commercial on-site wastewater treatment systems with a capacity of 2500 gallons per day or less located in the unincorporated areas of San Luis Obispo County. Systems exceeding 2500 gallons per day and industrial wastewater treatment systems are under the jurisdiction of the California Regional Water Quality Control Board, Central Coast Division, unless granted a waiver by that agency.

b. Work by Owner. This section requires the design, construction, maintenance and periodic inspection of OWTS to be performed by professionals with appropriate qualifications. However, pursuant to Section 19.01.050 of this title, and with approval of the building official, owners may perform certain aspects of the work on conventional systems, including system design and installation but not including testing or analysis of soils (e.g. percolation testing), periodic inspection or pumping.

SECTION 4: Section 19.20.214 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended to read as follows:

19.20.214 - Definitions:

~~a. **Community sewage disposal system.** A single sewage disposal system serving more than 5 parcels; or single or multiple sewage disposal systems serving more than 5 dwelling units on a single parcel.~~

- ~~b. **Gravels:** Soils with over 95% by weight coarser than a No. 200 sieve.~~
- ~~c. **Gravels with few fines:** Soils with over 90% by weight coarser than a No. 200 sieve, over half of the coarse fraction is larger than a No. 4 sieve, and 6-10% is finer than a No. 200 sieve.~~
- ~~d. **Reservoir:** A pond, lake, tank, basin, or other space either natural or created in whole or in part by the building of engineering structures other than sealed storage tanks constructed of impervious metal or synthetic materials, which is used for storage, regulation, and control of water, for recreation, power, flood control or drinking. For the purposes of this chapter, the term reservoir does not include small and shallow structures or basins for the temporary detention of storm water runoff from on-site roof drains and paved areas, provided there is no flow at any time between the structure or basin and any sewage disposal system.~~
- ~~e. **Surface water:** A concentration of freshwater or seawater, the surface of which is in direct contact with the atmosphere, including reservoirs and watercourses as defined in this section, as well as wetlands and ocean bays.~~
- ~~f. **Watercourse:** A natural stream or artificial channel for passage of water, fed from permanent or natural sources, including rivers, creeks, runs, and rivulets. There must be a stream, usually flowing in a particular direction more frequently than during storms (though it need not flow continuously) in a definite channel, having a bed or banks and usually discharging into some other stream or body of water. Excludes lined channels and other artificial channels for the conveyance of storm water.~~
- a. **Accessible:** Readily reached and located and opened for purpose of servicing, inspection, repair, upgrade or modification as defined in this Section
- b. **Accessory Structure:** Any structure that is subordinate to the main structure. Examples include but are not limited to secondary dwelling units, guesthouses, cabanas, pools, tennis courts and greenhouses.
- c. **Building Official:** The Director of the Planning and Building Department of the County of San Luis Obispo, or his/her duly authorized representative.
- d. **Alternate Treatment System:** An on-site wastewater treatment system that consists of a conventional septic tank and a dispersal system other than one consisting of leaching trenches. Examples include mounds, evapotranspiration, at-grade, drywell, drip and leaching-bed systems.
- e. **Bedroom:** Any room in a dwelling designed for or capable of functioning as a sleeping quarter. Bedrooms are typically designed with a clothes closet and a door.
- f. **Bedrock:** Any consolidated rock, either weathered or not, which usually underlies unconsolidated alluvium. Bedrock includes sedimentary rocks excluding alluvium, metamorphic rock and igneous rocks. Examples include but are not limited to Pismo Formation, Monterey Formation, Toro Formation, or the Paso Robles Formation.
- g. **Cesspool:** An excavation with permeable sides and /or bottom that receives sewage, wastewater, or drainage and is designed to retain organic matter or solids but permits liquids to seep through the bottom or sides.
- h. **Community System:** A residential wastewater treatment system for more than five units or more than five parcels; or commercial, industrial or institutional system that treats 2,500 gallons or more

of domestic/sanitary wastewater per day (peak daily flow.)

- i. Conventional Treatment System:** An on-site wastewater treatment system composed of a septic tank and a dispersal field that uses leaching trenches or plastic leaching chambers; does not include alternate systems or systems with supplemental treatment.
- j. Dispersal Area:** The location of the dispersal system including a one hundred percent (100%) expansion area.
- k. Drainage Swale:** A depression between slopes that provides for the removal of subsurface runoff
- l. Drywell:** A vertical excavation filled with rock, cylindrical in shape, with a centrally located vertical perforated pipe, constructed for the purpose of disposing of sewage effluent from a septic tank.
- m. Dual Dispersal Field:** Two dispersal systems, connected by a diverter valve, each of which is designed to accommodate 100% of the effluent received from an on-site wastewater treatment system.
- n. Expansion Area:** An area designed as a location for a replacement dispersal system, capable of accommodating 100% of the effluent from an on-site wastewater treatment system. Once this area is designated as such, it shall not be used for any other purpose.
- o. Failing System:** An on-site wastewater treatment system that no longer safely treats sewage and thus presents a health risk to humans or adversely impacts the environment, as determined by the building official. Evidence of a failing system includes but is not limited to:

 - 1. A backup of sewage into a structure which is caused by a septic tank or dispersal area problem other than a plumbing blockage.
 - 2. A discharge of sewage or effluent to the surface of the ground.
 - 3. A discharge of sewage or effluent that causes pollution, creates a nuisance, or contaminates the waters of the state.
 - 4. A septic tank that requires pumping more frequently than once a year in order to provide adequate dispersal of sewage.
 - 5. Inability to use the system as intended.
- p. Graywater System:** An on-site treatment system for wastewater derived from shower, bathtub, hand wash, and laundry sources. Excluded sources are kitchen and toilet wastes.
- q. Groundwater:** Water located below the land surface in the saturated zone of the soil or rock. Groundwater includes perched water tables, shallow water tables, and zones that are seasonally or permanently saturated.
- r. Imminent Danger:** A hazardous condition that presents an immediate and unreasonable risk of death or severe personal injury as determined by the building official.
- s. Impervious Layer:** Soil that has a percolation rate slower than one hundred twenty minutes to the inch, or having a clay content of sixty percent or greater.
- t. Industrial Wastewater:** Wastewater from industry, having an average concentration of biochemical oxygen demand (BOD) greater than 300 mg/L or total suspended solids (TSS) greater than 300 mg/L.

- u.** **Inspection:** Checking, observing, testing, and/or evaluating an on-site sewage treatment system to determine the condition of the system and its components.
- v.** **Inspection Port:** A pipe installed directly into a leaching trench, mound system, and/or other dispersal system to monitor the performance of the system through visual inspection and collection of samples.
- w.** **Leaching Trench:** A subsurface soil absorption sewage dispersal system installed in a trench, consisting of a perforated distribution pipe placed over gravel or plastic leaching chambers and backfilled with native material.
- x.** **Limiting Conditions:** Geological or hydrological conditions and/or soil that restrict the ability of a dispersal system to safely discharge effluent. Examples of limiting conditions include but are not limited to impervious material, bedrock, high groundwater, fractured rock, consolidated rock, and very fast percolation rates (less than five minutes per inch.)
- y.** **Low Pressure Distribution:** A wastewater dispersal system of small diameter pipes equally distributing effluent throughout a trench or bed at greater than atmospheric pressure.
- z.** **Maintenance:** The work related to the upkeep of the on-site wastewater treatment system. Examples include but are not limited to installation, servicing, repair or replacement of septic tank risers, ells, lids, access ports, pumps or blowers.
- aa.** **Modification:** Replacement or enlargement of any component of an on-site wastewater treatment system not defined as a maintenance or repair in this section that results in a change of design of the system.
- bb.** **On-site Wastewater Treatment System (OWTS):** A system composed of a septic tank and dispersal field and related equipment and appurtenances. Also referred to as private sewage disposal system, on-site sewage disposal system or septic system, and may include alternative and supplemental treatment systems.
- cc.** **Operating Permit:** A written authorization to operate an on-site wastewater treatment system, issued by the building official.
- dd.** **Particularly Favorable Conditions:** Site conditions that meet or exceed those set by the Regional Water Quality Control Board. These conditions shall include all of the following: a percolation rate between 5-20 minutes an inch, site slope of less than 15%, no signs of soil mottling, and no impermeable strata or groundwater within 20 feet of grade. The requirements for finding of "Particularly Favorable Conditions" may be amended occasionally in consultation with the Regional Water Quality Control Board.
- ee.** **Percolation Test:** A subsurface test conducted to measure the absorption rate of water in soil strata. The test is conducted after initial pre-saturation and is usually expressed as minutes per inch.
- ff.** **Performance Test:** A test conducted to determine the absorptive capacity of a drywell dispersal system by measuring the maximum rate of water that can be disposed of after initial pre-saturation, in a specific time.
- gg.** **Person:** Any individual, firm, partnership, association, corporation, estate, trust, joint venture, receiver, county or other political subdivision, or any other group or combination acting as a unit.

- hh.** **Qualified Contractor:** Any contractor holding a license in good standing from the California Contractors State License Board for Plumbing (C-36), Sanitation System (C-42), or General Engineering Contractor (A). A contractor holding a license as General Building Contractor (B) shall be considered a qualified contractor when constructing, modifying, or abandoning an on-site wastewater treatment system as part of a larger construction project involving a new structure or major addition to an existing structure.
- i.** **Qualified Inspector:** Any Registered Environmental Health Specialist, Registered Civil Engineer, Contractor holding a license classification from the California Contractors State License Board for Plumbing (C-36), Sanitation Systems (C-42), or General Engineering Contractor (A), or an individual who has satisfactorily completed training in an on-site sewage system inspection and certification program approved by the building official.
- jj.** **Qualified Professional:** Any individual who possesses a registered environmental health specialist certificate or is currently licensed as a professional engineer or professional geologist, and who has been approved by the building official.
- kk.** **Qualified Service Provider:** Any person capable of operating, monitoring and maintaining an OWT'S consistent with the requirements of this section and the O & M manual or capable of inspecting an OWT'S in accordance with this section, and who has been approved by the building official.
- ll.** **Registered Pumper:** Is any person or firm that pumps and or hauls septage and has been issued a registration by the Health Department.
- mm.** **Repair:** Any restoration, replacement, or alteration of any malfunctioning or damaged component of an on-site wastewater treatment system except those defined in this section as maintenance.
- nn.** **Retention / Detention Basin:** A man-made depression in the earth, designed to either retain or detain subsurface runoff that may otherwise cause flooding.
- oo.** **Reservoir:** A pond lake, basin, or other space either natural or created in whole or in part by the building of engineering structures other than sealed storage tanks constructed of impervious metal or synthetic materials , which is used for storage, regulation, and control of water, for recreation, power, flood control or drinking. For the purposes of this chapter, the term reservoir does not include small and shallow structures or basins for the temporary detention of storm water runoff from on-site roof drains and paved areas, provided there is no flow at any time between the structure or basin and any sewage dispersal system.
- pp.** **Seepage Pit:** see drywell.
- qq.** **Septic Tank:** a water tight, compartmentalized, covered receptacle designed and constructed to: receive the discharge of sewage, separate the solids from the liquid, digest organic matter, store digested solids for a period of retention, and allow the liquid to discharge from the tank.
- rr.** **Sewage, Domestic:** Any and all waste substance, liquid or solid, associated with human habitation, or which contains or may contain human excreta or excrement, offal or any feculent matter. Industrial wastewater shall not be considered as domestic sewage. The regenerating saline backwash from water softeners shall not be considered domestic waste and shall not be discharged into an

OWTS.

- ss. **Shallow Drip System:** A treated wastewater dispersal system using filters, flexible tubing, drip emitters, and a flushing mechanism to disperse directly to the soil without stone aggregate or chambers.
- tt. **Sub-drain:** An underground passage for the re-direction of water, typically made by filling a trench with loose stones and or perforated pipe and covering with the earth. Sub-drains are also called curtain drains, rubble drains, or French drains.
- uu. **Supplemental Treatment:** Any treatment system or component of a treatment system, other than a septic tank or dosing tank, that performs additional wastewater treatment prior to discharge of effluent into a dispersal field. Examples include, but are not limited to, sand filters, textile filters, and aerobic treatment units.
- vv. **Surface Waters:** A concentration of freshwater or seawater, the surface of which is in direct contact with the atmosphere, including reservoirs and watercourses as defined in this section, as well as wetlands and ocean bays.
- ww. **Treatment Tank:** A tank other than a septic tank in which wastewater is acted on either by chemical or biological means to reduce the concentrations of constituents of concern.
- xx. **Watercourse:** A natural stream or artificial channel for passage of water, fed from permanent or natural sources, including rivers, creeks, runs, and rivulets. There must be a stream usually flowing in a particular direction more frequently than during storms (though it need not flow continuously) in a definite channel, having a bed or banks and usually discharging into some other stream or body of water. Excludes lined channels, drainage swales and other artificial channels for the conveyance of stormwater.

SECTION 5: Section 19.20.220 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended by deletion as follows:

19.20.220 - Sewage Disposal Systems:

~~The design and installation of sewage disposal systems within the unincorporated areas of San Luis Obispo County are subject to the provisions of the following sections:~~

- ~~_____ 19.20.222 _____ Private Sewage Disposal Systems~~
- ~~_____ 19.20.224 _____ Community Sewage Disposal Systems~~

SECTION 6: Section 19.20.222 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended to read as follows:

~~**19.20.222 - Private Sewage Disposal Systems.** The use of a private, on-site sewage disposal system is allowed only within the rural areas of the county and within urban and village areas where no community sewage collection, treatment and disposal system exists. Private sewage disposal systems shall be designed and constructed as provided by this section, in addition to satisfying all applicable requirements of the Uniform Plumbing Code. In the event of any conflict between the provisions of this section and the Uniform Plumbing Code, the most restrictive shall prevail.~~

a. ~~Legislative findings. These regulations are enacted in part to implement the requirements of the "Water Quality Control Plan, Central Coastal Basin", adopted by the California Regional Water Quality Control Board. To the extent that these regulations change applicable provisions of the California Health and Safety Code and California Code of Regulations as they would otherwise apply to local construction, the Board of Supervisors finds that the changes herein are necessary because of local geological and topographic conditions which change applicable provisions of the California Health and Safety Code and California Code of Regulations as they would otherwise apply to local construction, the Board of Supervisors finds that the changes herein are necessary because of local geological and topographic conditions which involve limitations on the capability of soils in the unincorporated areas of San Luis Obispo County to effectively handle sewage effluent disposal from private sewage disposal systems. Such limitations include high groundwater, soils with poor percolation capability and steep slopes.~~

b. ~~**General requirements:**~~

~~(1) Percolation tests. Percolation tests may be required by the building official pursuant to Section 14 of the Uniform Plumbing Code.~~

~~(2) Minimum site area with well. As required by the Land Use Ordinance, Title 22 of this code, or the Coastal Zone Land Use Ordinance, Title 23 of this code. An existing parcel that contains a water well may be approved for a private sewage disposal system only if the parcel is one acre or larger. A parcel smaller than one acre may use a private sewage disposal system only where the well serving the parcel is a public water supply or is located on another parcel that is one acre or larger. The minimum site area for a new parcel where a well and septic system are both proposed is determined by the Land Use Ordinance, Title 22 of this code, and the Coastal Zone Land Use Ordinance, Title 23 of **this code**.~~

~~(3) Minimum site area in reservoir watershed. Within any domestic reservoir watershed shown on Figure 19.20A or within any other reservoir watershed, all private sewage disposal systems shall be located on individual parcels of at least 2-1/2 acres or within subdivisions with a maximum density of 2-1/2 acres or more per dwelling unit. No land within a horizontal distance of 200 feet from a reservoir, as determined by the spillway elevation, shall qualify for computing parcel size or density, or for septic system **siting**.~~

c. ~~**Septic tank and leach area systems.** On-site sewage disposal systems that utilize a buried tank for the processing of solids, and areas, trenches or seepage pits for the disposal of liquid waste through soil infiltration shall be located, designed and constructed in accordance with all of the following standards:~~

~~(1) Minimum site characteristics. Septic tank and leach area systems shall be used only where the proposed site can maintain subsurface disposal, and satisfy the following standards on a continuous basis, unless an exception is approved as set forth in subsection d of this section:~~

~~(i) Subsurface geology. The proposed site for a soil absorption disposal area shall be free from soils or formations containing continuous channels, cracks or fractures, unless a setback distance of at least 250 feet to any domestic water supply well or surface water is assured.~~

~~(ii) Site flooding. No sewage disposal system shall be allowed within an area subject to inundation by a 10-year flood.~~

~~(iii) Minimum percolation required. A percolation rate from 0 to 30 minutes per inch of fall is sufficient to permit the use of leaching systems. Such systems shall not be used where~~

percolation rates are slower than 120 minutes/inch unless the parcel is at least 2 acres. Such systems shall not be used where soil percolation rates are slower than 60 minutes/inch unless the effluent application rate is 0.1 gallon per day/square foot or less; using a minimum flow rate of 375 gpd/dwelling unit, or as provided by Uniform Plumbing Code Table I3 for commercial uses. Percolation rates of more than 30 minutes per inch of fall may be approved only where the system is designed and certified to have been installed as designed by a the design engineer.

(iv) Site slope. Septic tanks or leaching systems installed on slopes of 20 percent or more shall be designed and installation certified by a registered engineer. Design shall minimize grading disruption associated with access for installation and maintenance. No soil absorption sewage disposal area shall be located where the natural slope is 30 percent or greater.

(v) Separation from impermeable strata. A minimum distance of 10 feet shall be maintained from the bottom of leaching systems to impermeable strata. This distance shall be verified by test borings pursuant to the Uniform Plumbing Code where required by the Building Official.

(vi) Groundwater separation. Depth from the bottom of the leach area to usable groundwater (including usable perched groundwater) shall be as follows, based upon the percolation rate found at the site:

Percolation rate, minutes per inch	Minimum distance to groundwater in feet
less than 1 min./in.	50 feet*
1-4	20 feet*
5-29	8 feet
30+	5 feet

* Unless a minimum horizontal separation of 250 feet between the disposal area and any domestic water supply well or surface water is assured, in which case minimum groundwater separation shall be 20 feet when the percolation rate is less than one minute/inch, and eight feet when the percolation rate is one to four minutes/inch.

The Building Official may require a piezometer test or other appropriate documentation to verify the groundwater separation required by this section.

(2) System location. A private sewage disposal system shall be located on the parcel it serves. Soil absorption disposal systems, including but not limited to leach areas and seepage pits, shall be located in accordance with the setbacks in the following table, except that where disposal system location is proposed with less groundwater separation than required by subsections b(1)(vi) or b(3)(ii) of this section, the increased setbacks required by those subsections shall be provided:

Setback from	Distance in Feet
. Domestic water supply wells in unconfined aquifer	100
. Watercourse where geologic conditions permit water migration	100
. Springs, natural or any part	

of man-made spring	100
. Reservoir, spillway elevation	200
. Public water supply wells	200

(3) ~~Seepage pit standards. The following standards apply only to seepage pit disposal facilities, in addition to all other applicable standards of this section:~~

(i) ~~Soil particle size. Seepage pits shall be used only where soils or formations at the pit location contain less than 60% clay (a soil particle less than 2 microns in size) in the percolation zone used for seepage calculation, unless the parcel is at least two acres.~~

(ii) ~~Groundwater separation. Seepage pits shall be used only where distances between pit bottom and useable groundwater (including perched groundwater) is equal to or greater than the following minimum separations, based upon the soil type found at the site:~~

Soil Type	Minimum distance to groundwater in feet
Gravels	50 feet*
Gravels with few fines	20 feet*
Other	10 feet

~~* Unless a minimum horizontal separation of 250 feet between the disposal area and any domestic water supply well or surface water is assured, in which case minimum groundwater separation shall be 20 feet when the soil type is gravels and 10 feet when the soil type is gravels with few fines.~~

~~The Building Official may require a piezometer test or other appropriate documentation to verify the groundwater separation required by this section.~~

(4) ~~System design and sizing.~~

(i) ~~Replacement area required. Individual systems on new land divisions, and commercial, institutional, and sanitary industrial systems shall be designed and constructed to either reserve sufficient site area for dual leach fields (100% replacement area), or construct the dual leach fields with a diverter valve at the time of initial septic system installation. Installation of dual leachfields will be required if site access for installation of the expansion area could be limited after initial site development.~~

(ii) ~~Non-residential systems. Commercial, institutional, or sanitary industrial systems shall be designed based upon the daily peak flow estimate for the proposed use.~~

(iii) ~~Residential systems. A minimum leaching area of 125 square feet per bedroom shall be provided for sewage disposal systems serving residential uses.~~

(5) ~~Replacement of failed private sewage disposal systems. Where an existing private sewage disposal system has failed and a replaced system cannot be installed to meet the criteria of this section, the building official may approve a replacement system that meets all of the following minimum standards and is designed to satisfy as many of the other requirements of this section as possible:~~

(i) ~~The system is designed by a registered engineer.~~

(ii) ~~The proposed system is approved by the County Health Department.~~

- ~~(iii) The installation of the approved system is inspected and certified to be installed as designed by the design engineer.~~
- ~~d. Use of non-standard engineered systems. Systems proposed under Section 19.01.140, Appendix I of the Uniform Plumbing Code, including mound and evapotranspiration systems shall be designed as provided by the "Water Quality Control Plan, Central Coastal Basin", adopted and as amended by the California Regional Water Quality Control Board, by an engineer or sanitarian registered by the State of California competent in sanitary engineering, and shall be approved by the Building Official and the Director of Environmental Health.~~
- ~~e. Relief from standards. Any applicant for a permit to install, repair or replace a private sewage disposal system who is aggrieved by the administration of the requirements of this section by the chief building official may appeal the matter to the Board of Construction Appeals as provided in Section 19.01.140. In cases where an exception is requested to any provision of this section that prohibits use of a private sewage disposal system under specified conditions, no exception granted by the Board of Construction Appeals shall be effective unless the California Regional Water Quality Control Board has also approved an "Exemption to Basin Plan Prohibitions" for the proposed exception.~~

19.20.222 - Permits and Inspections

- a. Construction Permit Required.** No person shall construct, reconstruct, repair, destroy, modify, or abandon any on-site wastewater treatment system or graywater system, or any portion thereof, without having first obtained a construction permit. Nor shall any person put into use any new or modified on-site wastewater treatment system or graywater system, or any portion thereof, without having first obtained final inspection approval from the building official. Maintenance as defined in this section may be performed by a Qualified Contractor or Qualified Service Provider without a permit.
- b. Construction Permit Application.** In order to obtain a permit to construct, modify or repair an on-site wastewater treatment system, a permit application, a site evaluation report and two or more sets of plans shall be submitted to the building official. Plans shall be prepared by a Qualified Professional and shall be of sufficient detail to demonstrate that the proposed treatment system will meet all applicable regulations, including but not limited to performance standards and required setbacks.
- c. Inspections.** Inspections shall be requested at least one working day in advance. No system component shall be covered without inspection by and approval of the building official. In addition to inspections by the building official, the responsible Qualified Professional shall conduct an observation of the dispersal area excavation prior to placement of any rock, filter material or leaching chambers. Prior to final inspection approval of the system, a report signed by the Qualified Professional shall be submitted to the building official stating that the soil conditions are consistent with percolation or performance tests and that the excavation was conducted in accordance with the approved design.
- d. Operating Permit Required for Alternate and Supplemental Treatment Systems.** Alternate systems, systems providing supplemental treatment, and systems in specific areas of concern as identified by the Board of Supervisors or the Regional Water Quality Control Board (RWQCB), shall require an operating permit, which shall be issued by the building official subsequent to the final inspection approval of the system. All on-site wastewater treatment systems requiring operating permits shall be operated, maintained, and monitored pursuant to the requirements of this section and conditions of the operating permit. The operating permit shall be renewed every five years. A report containing all information specified in the operating permit shall be submitted to the building official annually. The building official may suspend or revoke an operating permit for failure to comply with any requirement of the permit. If a permit is suspended or revoked, operation of the system shall cease until the suspension or revocation

is lifted or a new permit issued. Upon change of ownership, the operating permit shall be terminated, and the new owner shall obtain an operating permit within sixty days.

e. Recorded Notice Required for Alternate and Supplemental Treatment Systems. Prior to final inspection approval of an on-site system with supplemental treatment, a Notice of Installation of an Alternate or Supplemental On-Site Wastewater Treatment System shall be recorded with the San Luis Obispo County Clerk-Recorder's office, and shall be placed with the deed of record. This notice shall inform future owners, heirs, executors, administrators or successors that the subject property is served by an alternate or supplemental treatment system and shall bind current and future owners to maintain an operating permit and comply with all established monitoring, reporting, inspection, and maintenance requirements of that operating permit.

f. Operation and Maintenance Manual Required. The owner of a site on which a new OWTS is installed or an existing OWTS is replaced or significantly repaired shall have an operation and maintenance (O&M) manual prepared by a Qualified Professional. The O&M manual shall include, at a minimum:

- (1) the name, address, telephone number, business and professional license of the OWTS designer;
- (2) the name, address, telephone number, business and professional license, where applicable, of the OWTS installer;
- (3) the name, address, and telephone number of the Qualified Service Provider, where applicable;
- (4) instructions for the proper operation and maintenance and a protocol for assessing the performance of the OWTS;
- (5) a copy of the as-built (accurate) plans for the OWTS and the inspection report by the Qualified Professional that the system complies with all applicable regulations;
- (6) the design flow and performance requirements for the OWTS;
- (7) a list of types of substances that could inhibit performance if discharged into the OWTS, including any biocide and;
- (8) a list of substances that could cause a condition of pollution or nuisance if discharged to the OWTS, including but not limited to pharmaceutical drugs and water softener regeneration brines.

g. Community Sewage Disposal Systems. Community sewage disposal systems may be reviewed and approved by the county Health and Public Works departments only when a proposed system is designed and constructed as follows, and is approved by the California Regional Water Quality Control Board:

- (1) Public Agency Operation Required.** Sewerage facilities shall be operated by a public agency unless the Director of Public Works or the Regional Water Quality Control Board finds that an existing public agency is unavailable and formation of a new agency is unreasonable. If such finding is made, a private entity shall be established with adequate financial, legal and institutional resources to assume responsibility for waste discharges.
- (2) Minimum Number of Users Served.** A community sewage disposal system may be approved only where at least fifty dwelling units will be served by the proposed system, unless fewer

hookups are authorized by the Director of Public Works.

- (3) Disposal System Design and Performance.** Community sewage disposal systems shall be designed and shall discharge effluent of a quality pursuant to the provisions of the "Water Quality Control Plan, Central Coastal Basin," adopted by the California Regional Water Quality Control Board. (Ord. 2275 § 2 (part) , 1986)

SECTION 7: Chapter 19.20 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended by adding new Section 19.20.223 to read as follows:

19.20.223 - Types of On-site Wastewater Treatment Systems

- a. Conventional Systems.** A conventional system consists of a septic tank and leaching trenches. It may be used if the system meets all of the technical requirements of this section unless the site is in an area where the Board of Supervisors or the Regional Water Quality Control Board have made a finding that surface or groundwater degradation has been caused by on-site dispersal systems.
- b. Alternate Systems.** An alternate system consists of a septic tank and a dispersal system other than leaching trenches. It may be used only in an area where leaching trenches would be allowed but are not feasible because of site constraints.
- c. Supplemental Treatment System.** A supplemental treatment system is one that provides additional waste reduction treatment of effluent prior to its discharge into the dispersal field. It may be used where neither a conventional system nor an alternate system is feasible because of site constraints, provided that it meets the requirements of this section for supplemental treatment. A supplemental treatment system shall be required in each of the following locations:
- (1) On a site having fractured geologic formations.
 - (2) In any area determined by the Regional Water Quality Control Board or Board of Supervisors to be experiencing surface or groundwater degradation caused at least in part by on-site wastewater treatment systems.
 - (3) When the drywell method of wastewater disposal is used and groundwater separation is between three and five feet.
- d. Domestic and Industrial Systems on Same Parcel.** Any industrial operation that generates liquid waste, shall have separate on-site wastewater treatment systems for the domestic and the commercial/industrial waste unless a single system is approved by the Regional Water Quality Control Board. Separate applications, plans and specifications must be submitted for each system.

SECTION 8: Section 19.20.224 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended to read as follows:

~~19.20.224 - Community Sewage Disposal Systems. Community sewage disposal systems may be reviewed and approved by the county Health and Engineering Departments only when a proposed system is designed and constructed as follows, and is approved by the California Regional Water Quality Control Board:~~

- ~~a. Public agency operation required. Sewerage facilities shall be operated by a public agency unless the~~

~~county engineer or the Regional Water Quality Control Board finds that an existing public agency is unavailable and formation of a new agency is unreasonable. If such finding is made, a private entity shall be established with adequate financial, legal and institutional resources to assume responsibility for waste discharges.~~

- ~~b. **Minimum number of users served.** A community sewage disposal systems may be approved only where at least 50 dwelling units will be served by the proposed system, unless fewer hookups are authorized by the county engineer.~~
- ~~c. Disposal system design and performance. Community sewage disposal systems shall be designed and shall discharge effluent of a quality pursuant to the provisions of the "Water Quality Control Plan, Central Coastal Basin", adopted by the California Regional Water Quality Control Board.~~

19.20.224 - System Standards

An on-site wastewater treatment system shall consist of a septic tank and a dispersal system and may include supplemental treatment. The system and all of its components shall comply with the requirements of this section, the California Plumbing Code and the prohibitions of the most recent edition of the Water Quality Control Plan, Central Coast Basin, given in Appendix A.

a. Septic Tank and Leach Area Systems. On-site sewage disposal systems that utilize a buried tank for the processing of solids, and leaching areas, trenches or seepage pits for the disposal of liquid waste through soil infiltration shall be located, designed and constructed in accordance with all applicable technical standards in this subsection.

b. Minimum Site Characteristics. Septic tank and leach area systems shall be used only where the proposed site can maintain subsurface disposal, and satisfy the standards below on a continuous basis, unless an exception is approved as set forth in subsection (d) of this section.

c. Parcel Sizes:

(1) Single Family Dwelling. A parcel that contains a water well may be approved for a on-site wastewater treatment system only if the parcel is one acre or larger. If the parcel is provided water from either an adjoining lot or from an approved public water supply, the lot may be no smaller than one ½ of an acre. Exception: Existing legal lots of record that meet all the technical requirements of this section.

(2) Single Family Dwelling within Reservoir Watershed. For all lots which lie within any domestic reservoir watershed, or any other reservoir watershed, all on-site wastewater treatment systems shall be located on individual parcels of at least 2½ acres or within subdivisions with a maximum density of 2½ acres or more per dwelling unit. No private sewage system shall be allowed within 200 horizontal feet of any reservoir spillway.

(3) Single Family Dwelling and Secondary Dwelling. On-site treatment systems serving secondary dwelling units shall meet all requirements of this section. Dwelling units shall not share on-site treatment systems. A finding of 'Particularly Favorable Conditions' as described in Appendix A shall be required for secondary dwelling units on parcels between one acre and two acres. Secondary dwelling units served by an on-site sewage treatment system shall be prohibited on parcels of less than one acre.

d. Site Standards

- (1) **Percolation Rate.** Leaching systems may be used only where the percolation rate is between 1 and 120 minutes per inch. Where percolation rates exceed 120 minutes per inch, dispersal systems shall not be used without approval of the building official. Where percolation rates are less than 1 minute/inch, on-site systems may be used only where the soil is modified in accordance with the California Plumbing Code and where such soil modification receives prior approval of the building official.
- (2) **Site Slope.** Septic tanks or leaching systems installed on slopes of 20 percent or more shall be designed by and the installation approved by a registered civil engineer. Design shall minimize grading needed for installation and maintenance. No dispersal system shall be located where the natural slope is 30 percent or greater.
- (3) **Separation from Impermeable Strata.** A minimum distance of 10 feet shall be maintained from the bottom of leaching systems to impermeable strata. The building official may require verification of this separation by test borings.
- (4) **Separation from Groundwater.** The required depth from the bottom of the leaching area to usable groundwater, including perched groundwater, shall be as specified in the table below. The location of seasonal high groundwater shall be determined as described in Section 19.20.225 d 3

<u>Percolation Rate</u> (minutes per inch)	<u>Minimum Distance to Groundwater</u> (feet)	
	<u>Conventional/Alternate Systems</u>	<u>Supplemental Treatment Systems</u>
<u>1-4</u>	<u>20</u>	<u>8</u>
<u>5-29</u>	<u>8</u>	<u>5</u>
<u>30 and above</u>	<u>5</u>	<u>3</u>

e. System Location

- (1) **Setbacks.** On-site treatment system components shall comply with the setbacks given in the following table.

<u>Min. Distance Required From:</u>	<u>Building Sewer</u>	<u>Septic Tank</u>	<u>Dispersal System</u> (Other than drywell)	<u>Drywell</u>
<u>Buildings or Structures</u>	<u>2 feet</u>	<u>5 feet</u>	<u>8 feet</u>	<u>8 feet</u>
<u>Property Line- Private Property</u>	<u>Clear</u>	<u>5 feet</u>	<u>5 feet</u>	<u>5 feet</u>

<u>Domestic Water Well</u>	<u>50 feet</u>	<u>50 feet</u>	<u>100 feet</u>	<u>150 feet</u>
<u>Watercourse (at edge of 10 year flood zone, or spillway of primary bank)</u>	<u>50 feet</u>	<u>50 feet</u>	<u>100 feet</u>	<u>100 feet</u>
<u>Drainage Swales</u>	<u>10 feet</u>	<u>15 feet</u>	<u>50 feet</u>	<u>50 feet</u>
<u>Trees</u>	=	<u>10 feet</u>		
<u>Reservoir, at Spillway Elevation</u>	=	<u>200 feet</u>	<u>200 feet</u>	<u>200 feet</u>
<u>Dispersal system</u>	-	<u>5 feet</u>	<u>4 feet</u>	<u>5 feet</u>
<u>Domestic Water Line</u>	<u>1 foot</u>	<u>5 feet</u>	<u>5 feet</u>	<u>5 feet</u>
<u>Distribution Box</u>	-	-	<u>5 feet</u>	<u>5 feet</u>
<u>Retention/Detention Basins – Individual lot</u>	—	<u>15 feet</u>	<u>25 feet</u>	<u>25 feet</u>
<u>Retention/Detention Basins – Community</u>	—	<u>50 feet</u>	<u>50 feet</u>	<u>50 feet</u>
<u>Swimming Pools</u>	<u>1 foot</u>	<u>5 feet</u>	<u>10 feet</u>	<u>10 feet</u>

- (2) Access. On-site treatment system components shall be located so as to be accessible for servicing, inspection, pumping, modification and repair.
- (3) Separation from Flood Plain. No on-site treatment system shall be located in an area subject to inundation by a 10-year flood.
- (4) Proximity to Sub-Drains. If nearby sub-drains discharge diverted water to the subsurface soils, the minimum up-slope separation from any dispersal system shall be 20 feet and the minimum down slope separation shall be 50 feet. If the sub-drain is provided for the sole purpose of protecting the integrity of a structure, such as a retaining wall, the building official may modify the separation requirements provided above.

f. Septic Tanks

- (1) Required Size of Tank. Septic tank sizes shall comply with the following table. For an expanded list of tank sizes, refer to the California Plumbing Code.

<u>CAPACITY OF SEPTIC TANKS</u>
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<u>Single Family Dwellings Number of Bedrooms</u>	<u>Multiple Dwelling Units/Apts One Bedroom Each</u>	<u>Other uses: Max Fixture Units Served*</u>	<u>Minimum Septic Tank Capacity in Gallons</u>
<u>1 or 2</u>	<u>==</u>	<u>15</u>	<u>750</u>
<u>3</u>	<u>==</u>	<u>20</u>	<u>1000</u>
<u>4</u>	<u>2 units</u>	<u>25</u>	<u>1200</u>
<u>5 or 6</u>	<u>3 units</u>	<u>33</u>	<u>1500</u>

* See California Plumbing Code Table 7-3

- (2) **Septic Tank Construction & Installation Requirements.** Septic tanks shall be constructed and installed as specified in the California Plumbing Code, Appendix K. In addition, the following standards shall be met. A septic tank shall be installed, repaired or replaced only by a Qualified Contractor, except as allowed by section 19.01.050.
- (3) **Water-tightness Test.** Water tightness shall be ensured prior to backfilling the excavation around the tank. The water tightness test shall be conducted in conformity with the American Society for Testing and Materials (ASTM) Standard C 1227 or equivalent. The installer shall provide a written report of the results of the test to the building official.
- (4) **Effluent Filter Required.** All septic tanks for new systems and replacement tanks for existing systems shall be equipped with an effluent filter that complies with the American National Standards Institute (ANSI) Standard 46. The filter shall be accessible for cleaning, replacement and maintenance. Filters shall be maintained as required by their listing; the owner shall maintain records of filter maintenance but need not submit these records to the County.
- (5) **Tanks Subject to Additional Loads.** Septic tanks and other system components installed with more than three feet of earth cover or beneath surfaces subject to vehicular traffic (such as driveways and vehicle turnarounds) shall be traffic rated or engineered to support the additional load.
- (6) **Depth of Tank.** Wherever possible, septic tanks shall be installed with the top of the tank no deeper than twenty-four inches below finish grade.
- (7) **Risers Required.** Each compartment of the septic tank shall be provided with a watertight riser, capable of withstanding anticipated structural loads and extending to grade level for ease of maintenance. Risers shall be constructed of concrete, PVC, fiberglass or other approved material, with a minimum inside horizontal measurement of twenty inches. Risers shall be covered with tight fitting lids that are gas tight, securely fastened with stainless steel or other non corrosive fasteners, resistant to vandals, tampering, and access by children. Surface water shall be diverted away from the riser cover or septic tank lid providing a sloping surface away from the riser, or extending the riser at least six-inches above grade. If the lid is in a driveway or other traffic area, the lids and risers shall be structurally designed to support vehicle weight.
- (8) **Prohibited Tanks.** Wooden and metal septic tanks are prohibited, as are cesspools.

(9) **Systems with Pumps.** All OWTS systems in which pumps are used to move effluent from the septic tank to the dispersal system shall be equipped with one of the following: a visual, audible or telemetric alarm that alerts the owner or service provider in the event of pump failure. All pump systems shall, at a minimum, provide for storage in the pump chamber during a 24-hour power outage or pump failure and shall not allow an emergency overflow discharge. All pumped systems shall be designed by a qualified professional.

g. **Dispersal System Design**

(1) **General Design Requirements.** Every dispersal system shall be designed by a Qualified Professional and shall meet the requirements of this section. Every feasible design option shall be used to assure that the base of the dispersal system lies at the shallowest practicable depth at or below the original elevation of the soil surface to maximize elements critical to effective treatment of effluent (such as oxygen transfer, biological treatment and vegetative uptake of nutrients). Except as allowed under section 19.01.050

(2) **Size of Dispersal systems.** The size of a dispersal system shall be determined by using the daily design flow and the application rate of the soil as determined by the table following.

(3) **100% Expansion Area.** All systems shall be designed and constructed to reserve sufficient site area for a 100% replacement dispersal system/area.

(i) Installation of dual fields shall be required for all sites when access for installation of the replacement field/area would not be feasible after initial site development.

(ii) Commercial septic systems shall require dual leachfields with each leaching system seperated by a diverter valve to be installed with initial installation. Owners of commercial systems shall be responsible for changing from one leachfield to the other as part of the system's maintenance program

(4) **Daily Design Flow Rates.** For single family dwellings, the daily design flow shall be 375 gallons per day for up to four bedrooms, with 150 gallons per day for each additional bedroom in excess of four. For other occupancies, refer to the California Plumbing Code, Appendix K.

(5) **Application Rates.** The following figure gives the maximum application rate that may be used in determining dispersal system size based on percolation test results.

<u>Design Soil Application Rates for Dispersal Systems Based on Percolation Rates</u>	
<u>Soil Percolation Rate</u> <u>(minutes/inch)</u>	<u>Maximum Soil Application Rate</u> <u>(gallons/day/square foot)</u>
<u>≤1</u>	<u>Prohibited*</u>
<u>1 to 9.9</u>	<u>0.95</u>

<u>10 to 14.9</u>	<u>0.75</u>
<u>15 to 19.9</u>	<u>0.75</u>
<u>20 to 29.9</u>	<u>0.60</u>
<u>30 to 39.9</u>	<u>0.48</u>
<u>40 to 49.9</u>	<u>0.44</u>
<u>50 to 59.9</u>	<u>0.40</u>
<u>60 to 119.9</u>	<u>0.20</u>
<u>>120</u>	<u>Prohibited**</u>

*Except where soil is amended per the California Plumbing Code with prior approval of the building official.

** The building official shall review each percolation test on a case by case basis, and may allow septic systems with high percolation rates on properties two acres or larger.

- (6) **Required Area of Disposal Trenches.** When leaching trenches are provided, the required leaching area shall be provided exclusive of any hard pan, rock, clay or other impervious formations. Only the trench bottom shall be used in computing absorption area.
- (7) **Required Length of Plastic Leaching Chambers.** The required length of plastic leaching chambers shall be calculated using four square feet of dispersal system per linear foot of chamber for "standard" units and five square feet per linear foot for "high capacity" units.
- (8) **Dispersal System Sizing Examples - Single Family Dwellings up to Four Bedrooms.** The following table gives examples of the required absorption areas and trench lengths for "typical" rock and drain pipe leaching trench installation and for plastic leaching chambers.

Required Size of Dispersal system for Residential Sewage Dispersal systems¹

<u>Percolation Rate (min/inch)</u>	<u>Application Rate (gal/sq ft/day)</u>	<u>Required Absorption Area (sq ft)</u>	<u>Required Length of Trench (feet)</u>		
			<u>“Standard” Trench with pipe and rock²</u>	<u>Standard Chambers</u>	<u>High Capacity Chambers</u>
<u>1 - 9.9</u>	<u>0.95</u>	<u>395</u>	<u>132</u>	<u>99</u>	<u>79</u>
<u>10 - 14.9</u>	<u>0.75</u>	<u>500</u>	<u>167</u>	<u>125</u>	<u>100</u>
<u>15 - 19.9</u>	<u>0.60</u>	<u>625</u>	<u>208</u>	<u>156</u>	<u>125</u>
<u>20 - 29.9</u>	<u>0.52</u>	<u>721</u>	<u>240</u>	<u>180</u>	<u>144</u>
<u>30 - 39.9</u>	<u>0.48</u>	<u>782</u>	<u>261</u>	<u>196</u>	<u>156</u>
<u>40 - 49.9</u>	<u>0.44</u>	<u>852</u>	<u>284</u>	<u>213</u>	<u>170</u>
<u>50 - 59.9</u>	<u>0.40</u>	<u>938</u>	<u>313</u>	<u>234</u>	<u>188</u>
<u>60 - 119.9</u>	<u>0.20</u>	<u>Design by engineer</u>	<u>Design by engineer</u>	<u>Design by engineer</u>	<u>Design by engineer</u>

1. These sizes are valid for up to four bedrooms.

2. 3 foot wide trench with rock extending at least 1 foot below drain pipe.

3. Leaching chambers are not allowed in soils that contain greater than 10% fines

h. Dispersal System Construction.

Dispersal systems shall comply with the California Plumbing Code, Appendix K, and with the requirements of this section. All dispersal systems shall be installed, repaired or replaced only by a Qualified Contractor.

(1) Conventional System. Leaching trenches shall comply with the following table.

<u>Disposal Field</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Comments</u>
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<u>Number of drain lines per field</u>	<u>1</u>	<u>-</u>	<u>Two or more lines must be fed from a distribution box; lines should be approximately equal in length</u>
<u>Length of each line</u>	<u>-</u>	<u>100 feet</u>	<u>Perforated pipe must be capped</u>
<u>Width of trench</u>	<u>18 inches</u>	<u>36 inches</u>	<u>See UPC for leaching beds</u>
<u>Spacing of lines</u>	<u>6 feet center to center 4; feet edge to edge</u>	<u>-</u>	<u>Use most restrictive. Increase edge spacing 2' for every added 1' of trench depth in excess of 1'</u>
<u>Filter material (rock)</u>	<u>3/4 inch</u>	<u>2 1/2 inch</u>	<u>Must be clean rock</u>
<u>Filter material above lines</u>	<u>2 inches</u>	<u>-</u>	<u>Cover with material such as filter fabric to limit earth intrusion</u>
<u>Earth cover over lines</u>	<u>12 inches</u>	<u>4 feet</u>	<u>18 inches preferred</u>
<u>Disposal Field</u>	<u>Minimum</u>	<u>maximum</u>	<u>Comments</u>
<u>Grade of leaching trenches</u>	<u>level</u>	<u>3 in/100 ft</u>	

(2) **Inspection Ports.** Inspection ports shall be installed at the end of each trench. The building official may require additional ports in other locations. Inspection ports shall extend to the bottom of the trench or bed and shall be anchored to prevent disturbance or removal. The portion of the inspection port within the rock filter material shall be perforated to permit the free flow of liquid. The inspection ports shall have removable caps and may either extend above grade or set to grade if enclosed in a service box with removable lid. The boxes shall be made of non-degradable material such as PVC, fiberglass or concrete.

(3) **Prohibited Dispersal systems.** Hollow seepage pits and cesspools are prohibited. Hollow leaching chambers are not allowed in soils having greater than 10% fines

i. **Alternate Systems.** Alternate systems that may be approved for installation where conventional systems are not feasible include at-grade, mound, drywell, pressure distribution, and leaching bed systems. The building official may approve other types of systems. The following general requirements apply to all alternate systems. Specific requirements for drywells and pressure distribution systems are given in subsequent subsections.

(1) Alternate systems shall be installed on existing lots of record.

(2) The building official and RWQCB shall adopt and periodically update design standards for alternate systems.

(3) The owner shall monitor and maintain the system under the direction of a Qualified Professional for at least three years. The owner shall provide access to the Qualified Professional during this three-year period for the purpose of evaluating and monitoring the system. After this period, the owner shall monitor and maintain the system through a contract with a Qualified Service Provider.

- (4) Observation wells shall be placed adjacent to dispersal systems in locations approved by the building official and shall be monitored as follows:
- i. Water levels in each well shall be observed and recorded 24 hours following each storm that drops more than one inch of rain.
 - ii. Water levels in each well shall be observed and recorded quarterly for the first three years of system operation.
 - iii. Three years after the system is installed, the owner shall submit to the County a report by the Qualified Professional responsible for system monitoring and maintenance. The Qualified Professional shall state whether the system is functioning properly, whether it will continue to function properly, and whether while operating at maximum design capacity it will continuously function so as not to create a public health concern. The evaluation shall also include a detailed description of all corrections or alterations made to the system during the initial three-year period.
- (5) Proposed operation, maintenance and monitoring specifications shall be submitted along with proposed plans and permit application for any alternative system.
- (6) The property owner shall ensure that, after the initial three-year monitoring period, a Qualified Service Provider conducts a visual and operational inspection of the system at least once every year to determine if the system is functioning properly.
- (7) The property owner shall submit a report a minimum of once a year, prepared by the Qualified Professional for the first three years and by the Qualified Service Provider in subsequent years, in a form prescribed by the building official. The report shall include: The results of the annual inspection, a check of the alarm system, and any other requirements specified by the building official. Reports shall be submitted within 30 days of the completion of the inspection.
- (8) Alternate systems shall be designed in conformance with currently adopted state guidelines, or other guidelines jointly approved by the Regional Water Quality Control Board and the building official, and shall be inspected by the County as described in Section 19.20.224 i. In addition, the Qualified Professional who designed the system shall submit to the building official a letter indicating that the alternative system has been constructed per the approved plans.

j. Drywell Installation. Drywells shall be installed as follows:

- (1) Unless specifically required by the building official, a statement of infeasibility of leaching trenches is not required for a drywell that conforms to the standards of this section and is constructed to replace an existing seepage pit or drywell.
- (2) Drywells shall be cylindrical in shape with a diameter of not less than four feet, or more than six feet. Construction of a drywell with a diameter less than four feet or greater than six feet may be permitted with written approval of the building official.
- (3) Drywells shall have a centrally located four inch diameter perforated pipe which extends from the inlet to the bottom of the pit and the space around the pipe shall be filled with washed gravel which may vary in size from $\frac{3}{4}$ inch to 2 $\frac{1}{2}$ inches. A smaller gravel size may be used if

the design engineer can provide justification for its use and written approval is obtained from the building official. When necessary to meet minimum slope setback requirements, the upper portion of the central pipe shall be un-perforated.

- (4) Rock fill in drywells shall be covered with building paper or equivalent, and backfilled with a minimum of twelve inches of clean earth cover, free of debris and rock.
- (5) Drywells shall have an effective disposal depth of at least ten feet. Effective disposal depth is defined as total depth subtracted by the distance below the grade to the uppermost disposal pipe perforation.
- (6) The maximum depth of a drywell shall be fifty feet, unless the building official provides written approval for a greater depth.
- (7) Multiple drywell installations shall receive septic tank effluent via an approved distribution method. The percentage distribution of effluent entering each drywell shall be determined by the performance test of the drywell and shall be approved by the building official.
- (8) The minimum acceptable test rate for a drywell is 0.30 gallons/square foot/day. Drywells shall conform to the requirements of Appendix A, which may be modified to include additional geologic formations of concern or requirements from the Regional Water Quality Control Board..
- (9) Drywells shall be no closer than 20' to other drywells measured from edge-to-edge. Minimum horizontal distance to daylight is 25 feet.

k. Supplemental Treatment Systems. Supplemental treatment systems shall comply with the following:

- (1) The Building official shall review and approve the method of supplemental treatment proposed prior to construction. Treatment systems shall be listed by an independent testing agency, such as IAPMO, ANSI, or NSF or similar, and shall conform to the standards adopted by the County.
- (2) A supplemental treatment system shall be capable of removing a minimum of 85% of Total Suspended Solids (TSS), Biochemical Oxygen Demand (BOD), and Total Nitrogen (TN). In addition, the residual concentration of TSS and BOD, shall not exceed 30 mg/L, and TN shall not exceed 10 mg/L. The listing agency shall certify that the system can continually meet these performance standards over a thirty day period.
- (3) Operation, maintenance and monitoring specifications shall be provided for review and approval for any supplemental treatment system. The manufacturer's maintenance requirements shall be incorporated into the mandatory conditions of the operating permit.
- (4) The property owner shall comply with all maintenance requirements of the manufacturer and shall ensure that a Qualified Service Provider, Qualified Professional or manufacturer's representative conducts a visual and operational inspection of the system a minimum of once every year, or more frequently if required by the manufacturer, to determine if the system is functioning properly.
- (5) The property owner shall submit a report a minimum of once a year, within thirty days of inspection, prepared by a Qualified Service Provider., Qualified Professional or Manufacturer's

Representative in a form prescribed by the Building official. The report shall include: verification that all manufacturer's maintenance requirements have been completed, the results of all inspections, analysis of the wastewater from the inspection ports for total suspended solids, biochemical oxygen demand and nitrogen series, a concluding statement that the system is functioning properly (or not), and any other requirements specified by the building official.

SECTION 9: Chapter 19.20 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended by adding new Sections 19.20.225, 19.20.226, 19.20.227, 19.20.228, and 19.20.229 to read as follows:

19.20.225 - Site Evaluation and System Construction Plans

- a. Site Evaluation Required.** A site evaluation complying with this subsection shall be performed by a Qualified Professional whenever a new on-site system or a major repair of a system is proposed. The site evaluation shall consist of percolation tests and borings as described below and all additional observations, measurements and tests necessary to ensure that the proposed system meets all requirements of this section. The site evaluation shall serve as the basis upon which the system is designed and construction plans are prepared. The site evaluation, a site evaluation report and the construction plans shall be prepared by a Qualified Professional.
- b. Percolation Tests and Borings Required.** Percolation tests, soil analysis, and borings shall be performed to determine the design application rate, soil composition, depth of groundwater and of impermeable strata. The number of percolation tests and borings required for a parcel are given in the table below. The procedures for percolation tests and borings shall comply with Appendix B or shall be approved by the building official. The locations of the percolation tests and borings shall be selected by the Qualified Professional to be representative of the site(s).

<u>Project Type</u>	<u>Dispersal System</u>	<u>Number of Percolation Tests</u>	<u>Number of Borings and Groundwater Monitoring Wells</u>
<u>Single Family Dwelling</u>	<u>All except drywell</u>	<u>4</u>	<u>1</u>
<u>Single Family Dwelling</u>	<u>Drywell</u>	<u>1</u>	<u>1</u>
<u>Commercial</u>	<u>All except drywell</u>	<u>4 for each 2000-gallon tank</u>	<u>1 for each septic tank</u>
<u>Commercial</u>	<u>Drywell</u>	<u>2 for each 2000-gallon tank</u>	<u>1 for each septic tank</u>
<u>Subdivision/Tract</u>	<u>----</u>	<u>3 for each lot</u>	<u>1 for each lot</u>

- c. Geologic Report.** The building official may require a geologic report prepared by a certified engineering geologist when soil conditions, site slope or other information suggests that there is a potential for slope instability.
- d. Site Evaluation Report.** The results of the site evaluation shall be summarized in a site evaluation report and on the construction plans for the proposed on-site wastewater system. At a minimum, the

site evaluation report shall contain the following:

- (1) The results of the percolation tests and the resultant application rate to be used in system design. Test locations shall be shown on the proposed plans.
- (2) A general soil description and discussion of any features that may affect subsurface effluent disposal.
- (3) The depth to groundwater as determined by the deep borings. If there is evidence of fluctuations in the groundwater level, the highest recorded depth shall be used.
- (4) The depth to impermeable strata or a statement that impermeable strata exceed the depth of the boring(s).
- (5) A concluding statement that the site is of sufficient size and free of constraints to the extent that it will support an on-site wastewater treatment system and the required 100% expansion area.
- (6) The type of system proposed. If an alternate system is proposed, there shall be a statement that a conventional dispersal system is infeasible and the limiting site constraint (e.g. high groundwater, insufficient area, etc) shall be specified.

e. Construction Plans. The construction plans shall consist of a site plan with all of the following information:

- (1) Contours with maximum intervals as follows:

<u>Slope</u>	<u>Interval</u>
<u>0-2%</u>	<u>2'</u>
<u>3-9%</u>	<u>4'</u>
<u>10% plus</u>	<u>5'</u>

Copies of United States Geological survey maps are not acceptable.

- (2) Vegetation, trees, and protected plant species.
- (3) Existing structures, easements, and defined building envelopes.
- (4) Existing and proposed water wells, or known remnants of wells, on the subject parcel or within 200' of the proposed system location, including the dispersal field expansion area.
- (5) Rock outcroppings, drainage basins, drainage swales, and blue line streams.
- (6) All test and boring locations.
- (7) Proposed dwellings, swimming pools, patios, barns, and other impervious surface areas.
- (8) The size and location of the proposed septic tank, dispersal system (leach field or alternate) and the 100% expansion area, including dimensions necessary to show that the system complies with all setback requirements.

- (9) A cross-section of the dispersal system showing the system constituents and their dimensions.
- (10) Details of pumping chambers, mechanical and electrical components, etc. sufficient to demonstrate that all requirements of the plumbing code and this section will be met.

19.20.226 - Repair of Failing Systems; Abandonment of Systems

- a. **Repair of Failing Systems.** Upon failure of an on-site wastewater treatment system, the system shall be repaired to meet the standards of this section by a Qualified Contractor following the procedures set forth below. The building official may require that, prior to the repair, the system shall be evaluated by a Qualified Professional and a site evaluation be performed.
 - (1) If the on-site wastewater treatment system with a failing dispersal system was previously permitted, and if the previously identified expansion area permits, a replacement dispersal system complying with current standards shall be installed. The permittee shall verify the size, type and location of the existing field.
 - (2) For replacement dispersal systems that had been permitted but for which there is no previously approved expansion area, a report prepared by a Qualified Professional shall be submitted and shall state that the proposed replacement dispersal system meets all current standards. A soil evaluation or a minimum of one percolation test and one deep boring shall be completed adjacent to the proposed replacement dispersal system. The Qualified Professional may perform additional testing if deemed necessary to determine if the replacement system provides adequate wastewater disposal and meets applicable setbacks.
 - (3) If the replacement dispersal system cannot meet current standards because of site constraints, a notice shall be recorded that the property contains a non-standard on-site wastewater treatment system. The building official may require supplemental treatment if it is determined that a conventional or alternate system will significantly threaten surface or subsurface water quality.
 - (4) For an on-site wastewater treatment system that has failed and was not previously permitted, a permit for a new system that meets all the requirements of this section shall be required.
 - (5) If a building has a failing on-site wastewater treatment system, and there is a public sewer available within 200 feet of the property, and the sewer agency is willing to allow the owner of the building to connect to the public sewer, no permit shall be issued to reconstruct or repair the failing on-site sewage dispersal system. Rather, it shall be the owner's responsibility to obtain a county permit for connection to the existing public sewer and properly abandon the existing on-site wastewater treatment system.
- b. **Abandonment of Systems: When Required.** An existing on-site wastewater treatment system, or portion thereof, shall be properly abandoned under permit and with inspection by the building official within thirty days of the occurrence of either of the following:
 - (1) Connection of the structure to the public sewer.
 - (2) Removal or demolition of the structure served by the system, unless the owner states his/her intent to use the system to serve a proposed structure on the site, demonstrates to the

satisfaction of the building official that the system will meet all current standards in serving the proposed structure, and can be maintained in a safe and secure manner until completion of the proposed structure.

c. Procedure for Abandonment of On-Site Systems. Abandonment of an on-site wastewater treatment system shall comply with all of the following requirements that apply to the system in question:

- (1) Prior to abandonment of any on-site wastewater treatment system or portion thereof, the property owner shall identify the replacement method of sewage treatment and dispersal or specifically identify the structures to be demolished.
- (2) During abandonment of a sewage dispersal system, the property owner shall provide evidence of the type of sewage dispersal field present on the property.
- (3) All sewage plumbing lines leading to the system shall be capped in place or removed.
- (4) Prior to abandonment, a Registered Pumper shall pump the septic tank, treatment tank, cesspool, or seepage pit to remove any standing wastewater. The Registered Pumper shall provide written verification to the owner of the pumping operation and a copy shall be submitted to the building official.
- (5) The tank, cesspool, or seepage pit shall be filled with clean earth, sand, concrete or other material approved by the building official.
- (6) The building official shall be consulted regarding the abandonment of a septic tank, treatment tank, or seepage pit located within the setback distance of a structure.
- (7) Drywells shall be excavated to a minimum depth of two feet below grade and the inspection/vent pipe cut a minimum of eighteen inches below grade. The perforated pipe and the excavation shall be backfilled with clean earth or other fill material approved by the Building official.
- (8) Gravel filled leaching trenches may be abandoned in place. Leaching trenches utilizing hollow chambers shall have the chambers removed and backfilled with clean earth. If in the opinion of a registered Civil or Geotechnical Engineer, the chambers pose no threat for caving or collapsing, or will not create any future nuisance, the engineer may request permission from the building official to abandon the chambers in place.

19.20.227 - Monitoring and Inspection of Existing Systems; Mandatory Repairs

a. Inventory of Existing Systems. The building official shall develop and maintain a data base of all properties with on-site wastewater treatment systems in the unincorporated areas of the county.

b. Groundwater Monitoring. OWTS owners with onsite domestic wells on their property shall monitor groundwater by sampling and analyzing water from:

- (1) a monitoring well down-gradient and within 100 feet of the OWTS dispersal system within 30 days after use of a new or replacement OWTS has commenced and no less than every five years thereafter; or

- (2) an existing onsite domestic well on the property within 30 days after use of a new or replacement OWTS has commenced and no less than every five years thereafter.

Groundwater samples shall be analyzed by a laboratory certified by the California Department of Health Services. Samples shall be analyzed for the following: calcium, magnesium, sodium, potassium, iron, manganese, zinc, sulfate, chloride, nitrate, nitrite, fluoride, TDS, total alkalinity (as CaCO₃), bicarbonate, MBAS, pH and total coliforms. If a sample tests positive for total coliforms, the sample shall be analyzed for fecal coliform bacteria. The name of the site owner, the site address and the laboratory results shall be transmitted to the County Health Department.

- c. **Inspection of Existing Systems.** All existing septic systems shall have their tanks inspected every five years by a Qualified Inspector to evaluate their condition and to determine if they require pumping. The building official shall notify owners at least 60 days in advance of each required inspection.

- (1) The inspection of an on-site wastewater treatment system shall consist of the following procedures, as well as any additional procedures required by the building official:
- (i) The septic tank shall be inspected for signs of deterioration, corrosion, elevated liquid level, or damage. The dispersal system shall be examined for signs of failure.
 - (ii) The existence of a seepage pit, cesspool, or prohibited type of septic tank (wood or metal) shall be determined.
 - (iii) The level of the scum and sludge levels shall be measured in each chamber. Septic tanks shall be pumped if, at any point, the sum of the depth of the scum layer and depth of the sludge layer exceeds 25% of the depth of the liquid level, as measured from the tank bottom to the water line.
 - (iv) The system shall be inspected for all items that would require mandatory repairs as described in “Mandatory Repairs” below.
- (2) If pumping is required, the contents of all compartments of the septic tank and any holding tanks shall be pumped. Care shall be taken to ensure that all sludge is removed.
- (3) A written report on forms provided by the building official shall be submitted by the Qualified Inspector to the building official and the property owner no later than thirty days following inspection, maintenance and, where applicable, pumping of an on-site wastewater treatment system. If an on-site wastewater treatment system was in failure, as defined in this section, the written report shall be submitted within twenty-four hours of pumping and inspection. The report shall include:
- (i) The name and telephone number of the property owner, the Assessor parcel number and street address of the property on which the on-site sewage dispersal system is located, and the date of inspection.
 - (ii) The name of the Registered Pumper, the name of the Qualified Inspector (if different from Pumper), size of the septic tank or treatment tank, gallons pumped, the name and location of the disposal site and a description of servicing activities.

- (iii) A description of the system, including type of septic tank, dispersal field, and all other system components.
- (iv) A description of any on-site sewage dispersal system maintenance, repairs, modifications or upgrades performed.
- (v) A description of any uncorrected deficiencies in the on-site sewage dispersal system. Reported deficiencies shall include, but not be limited to: damage, corroded, deteriorated on-site wastewater treatment system components, dispersal field in a state of failure, backflow of effluent from the dispersal field back into the septic tank, treatment tank, lack of access risers or other upgrades required by this section, or other condition requiring mandatory repair or not in compliance with the provisions of this section.

d **Mandatory Repairs.** Upon identification of any of the system deficiencies described below or any other conditions that the building official determines would require correction, the building official shall notify the property owner in writing of the corrective work required. The owner shall be directed to obtain a construction permit and complete the repairs within 30 days of the date the notification was sent unless an alternative schedule is approved by the building official.

- (1) All cesspools and bottomless septic tanks or otherwise non-watertight tanks shall be properly abandoned and replaced with a septic tank and dispersal system that comply with the provisions of this section. Wooden and metal septic tanks, when discovered, shall be replaced.
- (2) Septic tanks and treatment tanks and any other components lacking adequate access for inspection and/or pumping shall be provided with proper access.
- (3) In the event that the wall, top, or lid thickness has decreased to 2 ½ inches or less at its narrowest point, the affected component shall be replaced or septic tank and treatment tank replaced or repaired. Risers shall be removed and reinstalled after the tank top is repaired.
- (4) Septic tanks shall be replaced or repaired when the height of the baffle between compartments is equal to the fluid depth within the tank or when the baffle between compartments deteriorates to the point where it no longer provides compartment separation as designed.
- (5) Any septic tank or treatment tank that has more than two feet of cover and is uncovered for the purpose of pumping, inspection or other service/maintenance operation shall be retrofitted with risers that have a minimum diameter of twenty inches and manhole covers as previously specified in "System Standards;" if the tank is greater than five feet beneath ground surface, the riser shall be a minimum of thirty inches in diameter.
- (6) All septic tanks, risers and manholes that are located in areas subject to vehicular traffic shall be rated for traffic loading. Fiberglass and plastic tanks are not allowed in traffic areas unless traffic rated or engineered to a traffic rating. A Registered Civil Engineer shall certify that the plastic or fiberglass tanks were modified to meet traffic rating standards. In addition, a registered civil engineer shall supervise the modification and provide written certification that the installation and / or modification has been completed in accordance with the approved design.
- (7) Septic tanks or treatment tanks that are found to be within the required setback distance from a structure shall be evaluated for access. If the septic tank or treatment tank is found to be

inaccessible, either the tank or structure shall be moved.

- (8) Missing, deteriorated or damaged components such as but not limited to tees, ells, risers, and lids shall be repaired or replaced.
- (9) A fiberglass or plastic tank with a warped, collapsed, or damaged exterior shell or baffle shall be replaced.
- (10) Single compartment septic tanks shall be replaced.

19.20.228 - Modifications to Existing Buildings That Require Upgrading of On-site Treatment Systems

When a proposal is made to change the use or occupancy of a building, or to add to or remodel that building, and the building is served by an on-site wastewater treatment system, that system shall be evaluated to determine whether it will meet all current on-site wastewater treatment system standards in accommodating the total waste discharge expected from the building with the proposed changes in use, additions and/or alterations. To accomplish this, the building official shall require that a full or partial system verification be performed. If the existing on-site wastewater treatment system is found to be inadequate, a proposal shall be submitted for modification of the existing system so that the modified system will comply with all current standards.

- a. **Full Verification.** The full verification shall consist of either an inspection by a Qualified Inspector on a form provided by the building official or a full site evaluation and design by a Qualified Professional as described in Section 19.20.225 of this title; the building official shall determine which process is appropriate at the time of construction permit application. A full verification shall be required when the proposed changes include any of the following:
 - (1) Adds a bedroom as defined in this chapter to a residential structure.
 - (2) Increases peak daily design flow or number of plumbing units to a non-residential structure.
 - (3) includes a new structure or improvements (ie. decks, swimming pools, fences or garages) that will impact the existing on-site treatment system or expansion area.

- b. **Partial Verification.** A partial verification, which consists of a review of existing County records, may be used when the proposed changes do not include those listed above and when such a review can determine that the existing system will comply with all current standards once the proposed improvements or change in use have been made.

19.20.229 Toilet Facilities for Workers Required

- a. Suitable toilet facilities shall be provided and maintained in a sanitary condition for the use of workers during construction. Portable toilet facilities shall conform to ANSI Z4.3

- b. The number of toilet facilities to be provided shall be in accordance with Table 1. It shall be the responsibility of each employer to provide toilet facilities sufficient for the number of his own employees.

Table 1

<u>Number of employees</u>	<u>Minimum number of toilet facilities</u>
<u>1-10</u>	<u>1</u>
<u>11-20</u>	<u>2</u>
<u>21-30</u>	<u>3</u>
<u>31-40</u>	<u>4</u>
<u>Over 40</u>	<u>1 additional facility for each 10 additional employees</u>

- c. It shall be the responsibility of the employer to ensure that all toilet facilities are maintained in a clean and sanitary condition. If toilet facilities are of the type that require a periodic servicing, it shall be the responsibility of the employer to provide sufficient toilet facilities and servicing to prevent the stated capacity of those facilities from being exceeded; the employer shall also assure ready access to the toilet facilities by the required servicing equipment.
- d. Toilet facilities shall be located so as to be readily accessible to the employees for whom they are furnished.

SECTION 10: Section 19.20.200 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended by adding new Appendix A and B to read as follows:

Compliance with the following Appendices. All applications shall be in conformity with the following appendices, and any amendment thereto, in addition to any requirements as set forth in Title 19 of the County Code. The following appendices are hereby incorporated by reference herein as through set forth in full.

APPENDIX A. ON-SITE WASTEWATER TREATMENT SYSTEM REQUIREMENTS FOR SECONDARY DWELLING UNITS ON PARCELS LESS THAN TWO ACRES IN SIZE

The Regional Water Quality Control Board criteria for a new septic system specifies a maximum density of one residence per acre unless soil and other constraints for sewage disposal are found to be "particularly favorable". Septic system density may then be increased to one residence per half acre.

- a. Separate treatment systems shall be used for each dwelling. An application, plans and a site evaluation report meeting the requirements of this title shall be submitted for each system.
- b. When percolation results are faster than 5 or slower than 60 minutes/inch, a supplemental treatment system may be used.
- c. All other technical requirements of this title, and Title 22 and 23 shall be met.

APPENDIX B. PERCOLATION TEST AND BORING PROCEDURES

Percolation and boring tests shall be performed by or under the supervision of a Qualified Professional. The number and location of tests shall comply with Section 19.20.225.

a. Percolation Test Procedure

- (1) Test hole openings shall have an 8-12 inch diameter, or be 7-11 inches on the side if square. The walls should be vertical.
- (2) The bottom of the test hole should correspond with the bottom of the proposed trench and shall be covered with 2 inches of gravel.
- (3) Presoak the test hole overnight, prior to testing. For sandy soils, presoak until water level stabilizes, see B-1 below.
- (4) The height of the water shall be re-filled to initial height of between 8 and 10 inches over the gravel after each reading.
- (5) The surface of the hole shall be un-compacted: any cobbles protruding from the surface shall be left in place.

b. Measurements

- (1) In sandy soils in which two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every ten minutes, making sure to re-fill the hole after each measurement. The drop that occurs during the final ten minutes shall be used to calculate the percolation rate. Field data shall show the two 25 minute readings, along with the six-10 minute readings.
- (2) In all other than sandy soils, pre soak (fill) and wait overnight. If necessary, Re-fill the hole the next day. Obtain at least 12 measurements per hole over at least six hours with a precision of at least 0.25 inch. Intervals between readings shall be approximately thirty minutes. The drop that occurs during the last 30 minutes is used to calculate the percolation rate. Field data shall show the twelve 30 minute readings

c. Testing Procedure for Dry Wells (Seepage Pits) Performance Test

- (1) The hole diameter shall be between 6" and 8". The test depth shall be equal to the depth of the proposed dry well, plus sufficient depth to prove proper setback to groundwater and impervious material as required by sections 19.20.224.d 3 and 4.
- (2) Carefully fill the hole with clear water to a maximum depth of 4' below the surface of the ground, or if cuts are anticipated, to the depth of the assumed inlet.
- (3) All holes shall be pre-soaked for 24 hours unless the site consists of sandy soils containing little or no clay. In sandy soils where the water on two consecutive readings seeps away faster than half the wetted depth in 25 minutes or less, re-fill the hole with water, and pre-soak for an additional two hours. After the two hour pre-soak, the test may then be run. The time interval between measurements shall be taken at ten minutes and the test run for one hour. Re-fill to original depth after each reading.
- (4) For all other soils, the percolation rate measurement shall be made on the day following

pre-soak as described above. After 24 hours have elapsed, re-fill the hole to the proposed inlet depth. The fall of water should be measured every half hour over a five hour period. Re-fill the hole after each half hour reading. During the last or the sixth hour, do not re-fill the hole after the half hour reading. Be sure to check the total hole depth every half hour as well to see if any caving has occurred.

(5) Readings will be in min/inch just like they are for leachlines. Rates are set by the RWQCB. Utilize 0.3 gallons per square foot per day for disposal rate, and 375 gallons per day average daily flow per household, up to four bedrooms.

(6) Seepage pits will not be allowed when percolation rates are slower than 55 minutes per inch.

d. Exploratory Borings. An exploratory boring is a hole excavated or drilled in the area where the disposal field is proposed in order to determine the type of soil, moisture content, depth of water table or impervious material.

(2) All borings must extend to a minimum depth of ten feet below the bottom of the proposed disposal system so as to determine the depth of the water table, bedrock, and or impervious material. Minimum depth of any boring is 15 feet or stated refusal.

(2) When percolation results are faster than 1 minute an inch, the exploratory boring shall be drilled to a depth of 50 feet below the depth of the proposed disposal system. For percolation results between 1 and 4 minutes an inch, the boring shall be drilled to a depth of 20 feet below the proposed disposal system

(3) A log of the soil spectrum shall be conducted and included as part of the written percolation test. If any combination of silt mixed with sand or loam is encountered, a sieve analysis shall be conducted to determine the percentage of total silt. Leaching chambers are not allowed in soils with a silt content of more than 10%.

(4) All borings used to check for groundwater shall stay open a minimum of 24 hours prior to the final reading and groundwater check. Water levels are to be recorded at the highest discovered level following the 24 hour period. If any groundwater is encountered within those limits that may affect the subsurface sewage disposal, an evaluation by the engineer shall be given in the conclusion section of the Percolation report.

(1) In areas of known high groundwater, a groundwater level monitoring well shall be installed to a minimum depth of ten feet in the vicinity of a proposed wastewater dispersal system. Groundwater monitoring wells shall be placed by the company doing the percolation tests. All monitoring wells shall be a minimum of 3 inch PVC pipe and shall have a removable cap. The top 18 inches around the pipe shall be sealed with Bentonite or other suitable sealer, to prevent surface pollutants from intruding into the well. Below 18 inches, the pipe will be perforated. Monitoring wells shall not be deeper than 15 feet, unless required by the building official. If an impermeable layer is present at a depth of less than ten feet below the ground surface, the depth of the groundwater level-monitoring well shall be decreased to the depth of the impermeable layer.

(6) For all OWTS, see section 19.20.225 (b) to determine the number of groundwater level monitoring wells required.

- (7) Measurements of depth to seasonal high groundwater shall be conducted from November 1, to April 1 unless otherwise specified by the building official. Groundwater levels shall be measured continuously using a piezometer to record the seasonal high groundwater level. The piezometer may be a float device that mechanically or electrically records the highest water level.
- (8) For areas that are subject to special circumstances such as seasonal high groundwater caused by irrigation, measurements to determine the annual high groundwater level shall be conducted during a period specified by the building official. Groundwater levels shall be measured continuously using a piezometer to record the seasonal high groundwater level. The piezometer may be a float device that mechanically or electrically records the highest water level.

SECTION 11: Section 19.20.230 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended to read as follows:

19.20.230 - Water Supply. The requirements of this title regulating the provision of potable water to serve buildings and structures for human habitation are organized into the following sections:

<u>19.20.232</u>	<u>Uniform Plumbing Code Amended</u>
<u>19.20.234</u>	<u>Cross-Connections Control</u>
<u>19.20.236</u>	<u>Minimum Water Supply - Single-Family Dwellings</u>
<u>19.20.237</u>	<u>Water Quality Monitoring</u>
<u>19.20.238</u>	<u>Verification of Water Supply Required</u>

SECTION 12: Section 19.20.232 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended to read as follows:

19.20.232 - Uniform Plumbing Code Amended. ~~Section 1001~~ Section 601.1 of the Uniform Plumbing Code is hereby amended by adding the following sentence:

"Water transported to a building site shall be deemed adequate only if approved as to source, transportation method and on-site storage by the County Health Department."

19.20.234 - Cross-Connections Control. Connections to public water systems are subject to the provisions of Chapter 8.30 of this code (Cross-Connections Control and Inspections), in addition to all applicable provisions of the Uniform Plumbing Code and this title.

SECTION 13: Section 19.20.236 of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended to read as follows:

19.20.236 - Minimum Water Supply - Single-Family Dwellings: All dwellings shall be provided a potable water supply system as required by this section. Such system shall also satisfy all applicable requirements of the Uniform Plumbing Code and the San Luis Obispo County Health Department.

- a. Community system or on-site well.** Subject to the approval of the building official, a dwelling may be supplied potable water from either:

- (1) A public water supply or domestic water system approved by the Health Department or operated by a state-licensed water purveyor; or
 - (2) An on-site well, water storage and delivery system in accordance with this section.
- b. On-site wells.** When an on-site well is the proposed potable water supply, a building permit may be issued only where the building site is located outside the service boundary of a community water system, and where the well, together with any on-site water storage, satisfies all the following requirements:
- (1) **Health Department approval.** All water wells shall be designed, constructed and shall obtain Health Department approval as required by Chapter 8.40 of this code.
 - (2) **Minimum capacity.** A domestic well shall provide a minimum capacity of 5 gallons-per-minute (GPM) in order to be approved for use as a source of potable water for a single-family dwelling. Use of a well with a minimum capacity of 2.5 gallons-per-minute may be approved by the building official where 1000 gallons of approved on-site water storage is also provided. (Note: on-site water storage for fire protection may also be required by the Land Use Ordinance or, where applicable, the Coastal Zone Land Use Ordinance regardless of the requirements of this section.) A building permit may be issued where use of a well with less capacity than 2.5 gpm is proposed only where authorized by the director of environmental health.
 - (3) **Testing of capacity.** The capacity required by subsection b(2) of this section for a domestic well shall be verified by a minimum four-hour pump test with drawdown and recovery data by a licensed and bonded well driller or pump testing company. **The pump test shall not be more than five years old.** Bail and air blow tests may be accepted for wells of 25 gpm or greater.
 - (4) **Potability.** All domestic water wells intended to provide potable water to habitable buildings shall meet the requirements of the Health Department for potability.
 - (5) **Testing for Potability.** All new domestic water wells shall be tested for potability as required by the Health Department. A report of the potability test shall be submitted and approved by the Health Department prior to granting temporary or permanent occupancy or final inspection approval of a project

SECTION 14: Section 19.20. of Title 19 of the San Luis Obispo County Code, Building and Construction, is hereby amended by adding new Section 19.20.237 to read as follows:

19.20.237 - Water Quality Monitoring: Property owners with both on-site septic systems and on-site domestic water wells shall monitor their groundwater every five years, and within the first 30 days of initial use of a new OWTS. The building official shall notify the property owner 60 days before the testing is due. The property owner, or authorized agent shall have groundwater samples collected by a laboratory certified by the Department of Health Services. The laboratory shall be capable of producing laboratory results in EDF format. The groundwater samples shall be analyzed for all of the following: calcium, magnesium, sodium, potassium, iron, manganese, zinc, sulfate, chloride, Nitrate, nitrite, fluoride, TDS, hardness, total alkalinity, carbonate, hydroxide, MBAS, pH, and total coliforms. If a sample tests positive for total coliforms, the sample shall be analyzed for fecal coliforms. A copy of the test results shall be sent to the building official.

SECTION 15: Section 19.20.238 of Title 19 of the San Luis Obispo County Code, Building and

Construction, is hereby amended to read as follows:

19.20.238 - Verification of Water Supply Required. No grading, building or plumbing permit application or plans for a project which will require new service with potable water shall be issued unless:

- a. The building official is provided a written statement from the operator of a community or domestic water system that the purveyor will provide potable water service to the dwelling and that the water purveyor has sufficient water resource and system capacity to provide such service; or
- b. The building official is provided evidence that a permit or other authorization has been granted by the water purveyor for the proposed project to connect to and use the community or domestic water system; or
- c. An on-site well is installed, tested, and is certified to satisfy the requirements of Section 19.20.236b, or the building official is provided evidence showing that potable water adequate to satisfy the standards of Section 19.20.236b is available on-site. Evidence provided to prove availability of potable water shall include:
 - (1) Existing county data; or
 - (2) A report submitted by a registered hydrologist, geologist; or ~~county- and state-licensed well driller; or~~
 - (3) Satisfactory evidence from a test well drilled on the parcel.

No final building inspection for a dwelling shall be approved until the dwelling is connected to an operating water supply approved pursuant to this section.

SECTION 16. That the Board of Supervisors has considered the initial study prepared and conducted with respect to the matter described above. The Board of Supervisors has, as a result of its consideration, and the evidence presented at the hearings on said matter, determined that the proposed negative declaration as heretofore prepared and filed as a result of the said initial study, is appropriate, and has been prepared and is hereby approved in accordance with the California Environmental Quality Act and the County's regulations implementing said Act. The Board of Supervisors, in adopting this ordinance, has taken into account and reviewed and considered the information contained in the negative declaration approved for this project and all comments that were received during the public hearing process. On the basis of the Initial Study and any comments received, there is no substantial evidence that the adoption of this ordinance will have a significant effect on the environment.

SECTION 17: If any section, subsection, clause, phrase or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of a court of competent jurisdiction, such decision shall not affect the validity or constitutionality of the remaining portion of this ordinance. The Board of Supervisors hereby declares that it would have passed this ordinance and each section, subsection, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases or portions be declared invalid or unconstitutional.

SECTION 18: This ordinance shall take effect and be in full force on and after 30 days from the date of its passage hereof. Before the expiration of 15 days after the adoption of this ordinance, it shall be

published once in a newspaper of general circulation published in the County of San Luis Obispo, State of California, together with the names of the members of the Board of Supervisors voting for and against the ordinance.

INTRODUCED at a regular meeting of the Board of Supervisors held on the _____ day of _____, 20____, and PASSED AND ADOPTED by the Board of Supervisors of the County of San Luis Obispo, State of California, on the _____ day of _____, 20____, by the following roll call vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAINING:

Chairman of the Board of Supervisors,
County of San Luis Obispo,
State of California

ATTEST:

County Clerk and Ex-Officio Clerk
of the Board of Supervisors
County of San Luis Obispo, State of California

[SEAL]

ORDINANCE CODE PROVISIONS APPROVED
AS TO FORM AND CODIFICATION:

JAMES B. LINDHOLM, JR.
County Counsel

By: _____
Deputy County Counsel

Dated: _____

Draft 7/26/07