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TEXT OF PROPOSED REGULATIONS

(Add to California Code of Regulations, Title 27, Division 2, Subdivision 1, Chapter 7)

CHAPTER 7. ONSITE WASTEWATER TREATMENT SYSTEMS

ARTICLE 1. DEFINITIONS

§22900. SWRCB – General Definitions.

Except as otherwise indicated in this Article, definitions of terms used in the SWRCB-promulgated portions of this Subchapter shall be those set forth in Division 7 (commencing with Section 13000) of the Water Code and Chapter 6.5 of Division 20 of the Health and Safety Code (commencing with Section 25100).

“**Basin plan**” is the same as “water quality control plan” as defined in Division 7 (commencing with Section 13000) of the Water Code. The listed beneficial uses of the State’s surface water and groundwater are designated by each Regional Water Quality Control Board (RWQCB) in basin plans.

“**Bedrock**” is the rock, usually solid, that underlies soil or other unconsolidated surficial material.

“**Certification**” is an expression of professional opinion through certificate, stamp, or signature that the OWTS, or its components, meets industry standards that are the subject of the certification, but does not constitute a warranty or guarantee, either express or implied. For proprietary supplemental treatment systems, certification is a statement that indicates the subject system has demonstrated performance through an independent, third-party evaluation of performance data, but still does not constitute a warranty or guarantee, either express or implied.

“**Community water supply**” is a public water system regulated by the California Department of Health Services or a local health department.

“**Conventional system**” is an OWTS consisting of a septic tank and a gravity subsurface dispersal system or equivalent. A gravity subsurface dispersal system may be a leachfield, seepage pit, or an evapotranspiration and infiltration system. A conventional system may include septic tank effluent pumping where the dispersal area is located at a higher elevation than the associated septic tank, or a pressure distribution system, a mound system or an at-grade system. Properly sited, designed, installed and operated conventional systems are capable of nearly complete removal of suspended solids, biodegradable organic compounds and fecal coliforms. However, other pollutants may not be removed to acceptable levels. For example, conventional systems are expected to remove no greater than 10 to 40% of the TN in domestic wastewater.

“**Dispersal system**” is a leachfield, seepage pit, mound, at-grade, subsurface drip system, evapotranspiration and infiltration system, or other types of systems for final wastewater treatment and subsurface discharge.

“**Domestic wastewater**” means the type of wastewater normally discharged from or similar to that discharged from plumbing fixtures, appliances and other household devices including, but not limited to toilets, bathtubs, showers, laundry facilities, dishwashing facilities, and garbage disposals. Domestic wastewater does not include industrial-process wastewater.

“**Domestic well**” means a groundwater well providing water for human consumption that is not regulated by the California Department of Health Services.

“**Effluent**” is the wastewater discharged from an OWTS treatment component or any portion thereof.

“**Electronic deliverable format**” (EDF) is the data standard adopted by the SWRCB for submittal of groundwater quality monitoring data to the SWRCB’s internet-accessible database system.

“**Evapotranspiration and infiltration (ETI) bed**” means a subsurface dispersal system that relies on soil capillarity and root uptake to disperse the effluent from a septic tank or supplemental treatment system through surface evaporation soil absorption and plant transpiration.

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“**Existing OWTS**” is an OWTS that was permitted by the applicable local authority before the effective date of this Subchapter.

“**Failure**” is a condition of an OWTS that causes or threatens to cause impairment of beneficial uses of surface water or groundwater or threatens public health by creating a potential for direct or indirect contact between domestic wastewater or partially-treated domestic wastewater and the public. Failure includes, but is not limited to:

1. Domestic wastewater backing up into a structure caused by slow soil absorption of septic tank effluent or a mechanical malfunction;
2. Domestic wastewater leaking from an OWTS to ground surface or groundwater and causing pollution or nuisance or posing an immediate health hazard;
3. Violation of water quality objectives for surface water or groundwater as established in basin plans.

“**Fecal coliforms**” are indicator bacteria common to the digestive systems of warm-blooded animals that are cultured in standard tests to indicate either contamination from sewage or the level of disinfection, generally measured as colonies/100 milliliters.

“**Fines**” are soil particles with a diameter less than 0.05 millimeters.

“**Groundwater**” is any subsurface body of water, including perched water. The listed beneficial uses of the State’s groundwater is designated by each RWQCB and listed in the appropriate basin plan.

“**Gravel-less chamber**” system means a buried structure used to create a stone aggregate-free absorption area for infiltration and treatment of wastewater.

“**High-strength waste**” is wastewater from an establishment, home, or business having an average concentration of biochemical oxygen demand (BOD) greater than 300 mg/L or total suspended solids (TSS) greater than 300 mg/L.

“**Memorandum of understanding**” (MOU) is a formal agreement between the RWQCB and a local agency authorizing the local agency to administer this Chapter, or a portion thereof.

“**Mottling**” is a soil condition characterized by spots or blotches or different color or shades of color interspersed with the dominant color as described by the United States Department of Agriculture soil classification system. Mottling can be indicative of historic seasonal high groundwater level.

“**New OWTS**” is an OWTS installed after the effective date of this Chapter.

“**Onsite wastewater treatment system(s)**” (OWTS) has the same meaning as found in §13290 of the California Water Code. The short form of the term is singular or plural, as appropriate.

“**Percolation test**” is a method of testing the water absorption qualities of the soil.

“**Performance Requirements**” means the expected concentrations of BOD, TSS, total nitrogen (TN) and total coliform resulting from the treatment of domestic wastewater from an OWTS designed by a qualified professional using appropriate application of sound OWTS design principals with the intent of achieving a specific and measurable level.

“**Permit**” is a written document issued to the OWTS owner that allows the installation and use of an OWTS. “Permit” means any one of the following:

1. A conditional waiver issued by the RWQCB; or
2. Waste discharge requirements; or
3. A permit issued by a local agency.

“**Person**” is any individual, firm, association, organization, partnership, business trust, corporation, company, or unit of local government.

“**Pretreatment**” is preliminary wastewater treatment occurring prior to discharge into any component of an OWTS. Pretreatment may include, but is not limited to, oil and grease removal, BOD and TSS reduction, screening, and/or detoxification. When pretreatment is used in the OWTS process, it is considered as part of the overall OWTS.

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“Public health hazard” is a condition whereby sufficient types and amounts of biological, chemical, or physical (including radiological) agents are present and likely to cause human illness, disorders, or disability. These agents include, but are not limited to, pathogenic viruses, bacteria, parasites, toxic chemicals, and radioactive isotopes.

“Qualified professional” is an individual who possesses a registered environmental health specialist certificate or is licensed as a professional engineer or professional geologist. A qualified professional must meet the following additional requirements:

- (1) qualified to perform soil and/or site evaluations and/or ;
- (2) capable of designing an appropriate OWTS for the site conditions.

“Qualified service provider” is a qualified professional or an individual with knowledge and competency in OWTS operation, maintenance, and monitoring through experience and/or education.

“Record Plan” is the document prepared by a qualified service provider that details the “as-built” installation details of the OWTS, including but not limited to final placement of system components, sizes and specification of components.

“Rock” is any naturally formed aggregate of one or more minerals (e.g., granite, shale, marble); or a body of undifferentiated mineral matter (e.g. obsidian), or of solid organic matter (e.g., coal).

“Sand” is a soil separate and a type of soil texture. As a soil separate, sand is the individual rock or mineral fragments in soils having diameters ranging from 0.05 to 2.0 millimeters in diameter. As a soil texture, sand is the soil material that is comprised as 85 percent or more sand particles and not more than 10 percent silt and clay particles.

“Scum” is the layer of floating solids on the wastewater surface in a septic tank.

“Seepage pit” is a drilled or dug hole installed to allow disposal of effluent from a septic tank or other OWTS treatment unit.

“Septic tank” is a watertight, covered receptacle designed for primary treatment of sewage and constructed to:

1. Receive wastewater discharged from a building;
2. Separate settleable and floating solids from the liquid;
3. Digest organic matter by anaerobic bacterial action;
4. Store digested solids; and
5. Clarify wastewater for further treatment with final subsurface discharge.

“Septic tank effluent” is wastewater discharged from a septic tank.

“Shallow dispersal system” is a dispersal system designed to apply wastewater effluent meeting supplemental treatment requirements at the upper layer of the soil column using pressure distribution (e.g. subsurface drip dispersal).

“Site” is the location of the OWTS and its reserve area capable of disposing 100% of the design flow from all sources it is intended to serve.

“Site Evaluation” is an assessment of the characteristics of the site sufficient to determine its suitability for an OWTS to meet the requirements of this Chapter.

“Soil” is the naturally occurring body of porous mineral and organic materials on the land surface, and is composed of unconsolidated materials above bedrock. Soil is composed of sand-sized, silt-sized, and clay-sized particles mixed with varying amounts of larger fragments and organic material. The various combinations of particles differentiate specific soil textures identified in the USDA Soil Classification Chart. For the purposes of this Chapter, soil shall contain earthen material having more than 50 % of its volume composed of particles smaller than 0.08 inches (2 mm) in size.

“Soil permeability” is the capacity of the soil to transmit liquids.

“Soil texture” is determined by the relative amounts of fine earth fraction (sand, silt, and clay) as defined by the classes of the soil textural triangle developed by the United States Department of Agriculture and listed in Table 1a.

“Supplemental treatment” is any OWTS or component of an OWTS, except a septic tank or dosing tank, that performs additional wastewater treatment prior to discharge of effluent into the dispersal field. Supplemental treatment may

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be required where the site is not suitable for a conventional system. Supplemental treatment systems must meet the performance requirements of §22913.

“**Total coliforms**” is a group of bacteria consisting of several genera belonging to the family Enterobacteriaceae. The historical definition of this group has been based on the method used for detection (lactose fermentation) rather than on the tenets of systematic bacteriology.

“**Weathered bedrock**” is rock that has been exposed to the atmosphere at or near the earth’s surface and changed in color, texture, composition, firmness, and/or form as a result of the exposure with little or no transport of loosened or altered material. For purposes of this Chapter, weathered bedrock is not soil.

Authority Cited: CA Water Code § 13291, § 1058.

Reference: CA Water Code § 13291(b).

ARTICLE 2. GENERAL PROVISIONS

§22901. SWRCB -- Applicability and General Requirements.

(a) This Chapter establishes minimum requirements for the permitting, monitoring, and operation of OWTS for prevention of pollution. RWQCBs and local agencies may establish requirements for OWTS that are more protective of water quality than the requirements contained in this Chapter.

(b) This Chapter applies to all new and existing OWTS.

(c) No person shall install, relocate, expand, repair or replace any OWTS with the capacity to treat over 5,000 gallons-per-day or increase the pollutant concentration or type of the waste stream entering an OWTS without first notifying the RWQCB

(d) All new OWTS and OWTS subject to repair shall be operated and maintained to perform as designed, at a minimum.

Authority Cited: CA Water Code § 1058, 13291.

Reference: CA Water Code § 13260(c), 13264(a), 13267(a), 13267(b)(1), 13267(c), §13291(a), 13291(b)(1)

§22905. SWRCB -- Responsible Agencies.

The RWQCBs shall administer this Chapter through WDRs or conditional waivers of WDRs. A local agency may administer this Chapter, or a portion thereof, as authorized by the SWRCB, or by a RWQCB through agreement or Memorandum of Understanding (MOU). Any MOU or similar agreement must require adherence to these regulations and the applicable RWQCB basin plan.

Authority Cited: CA Water Code §1058, 13291.

Reference: CA Water Code §13291(e), §13240, §13225.

§22906. SWRCB -- SWRCB Functions and Duties.

The SWRCB shall update the regulations and oversee statewide implementation of this Chapter.

Authority Cited: CA Water Code §1058, 13291. Reference: CA Water Code §13291.

§22907. SWRCB -- RWQCB Functions and Duties.

Each RWQCB shall incorporate the requirements of this Chapter by reference into the appropriate basin plan. A RWQCB may impose more protective requirements, as needed to protect water quality or human health.

Authority Cited: CA Water Code §1058, 13291

Reference: CA Water Code §13291(d), 13291(e)

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ARTICLE 3 GENERAL REQUIREMENTS

§22910. SWRCB -- General Requirements.

(a) New OWTS and OWTS subject to repair shall be operated to accept and treat flows of domestic wastewater excluding any material not generally associated with toilet flushing, food preparation, laundry and personal hygiene. Additionally, OWTS may be designed and operated to accept other wastewater from facilities that:

- (1) exclude hazardous waste, as defined in Title 22 of the California Code of Regulations;
- (2) reduce wastewater strength below high strength waste levels after use of pretreatment systems; and/or
- (3) use waste segregation practices and systems to reduce pollutants entering the OWTS.

(b) New OWTS and OWTS subject to repair shall be designed to disperse effluent to subsurface soils in a manner that provides unsaturated zone treatment and aerobic decomposition of the effluent

(c) New and existing OWTS shall be designed, operated and maintained so as to not result in a condition of failure.

(d) The design of all new OWTS or OWTS subject to repair shall be based on the expected influent wastewater quality and quantity and characteristics of the site and soils.

(e) A qualified professional shall perform the soil and/or site evaluation for all new OWTS, or for all OWTS where the treatment or dispersal system will be replaced or expanded.

(f) A qualified professional shall perform the design of all new OWTS, and existing OWTS where the treatment or dispersal will be replaced or expanded.

(g) A Licensed General Engineering Contractor (Class A) or Sanitation System Contractor (Specialty Class C-42) shall install all new OWTS in accordance with California Business and Professions Code Section 7056 and Section 83242, Article 3, Division 8, Title 16 of the California Code of Regulations. A property owner may install his/her own conventional system.

(h) Materials in concentrations that are deleterious and inhibiting to OWTS operations shall not be discharged to an OWTS. Deleterious and inhibition materials include the following:

- (1) any biocide, or
- (2) all products and matters defined in Chapter 41, Division 4.5, Title 22 in the California Code of Regulations.

(i) All new OWTS or replaced OWTS shall have an operation and maintenance (O&M) manual prepared by a qualified professional. O&M manuals shall include, but is not limited to:

- (1) name, address, telephone number, business and professional license of the OWTS designer;
- (2) name, address, telephone number, business and professional license of the OWTS installer;
- (3) name, address, and telephone number of the qualified service provider that maintains any supplemental treatment system;
- (4) instructions for the proper operation and maintenance and a protocol for an assessment of performance of the OWTS;
- (5) Record Plan with a certification that the dispersal system meets all applicable requirements contained in §22914(a);
- (6) design flow and performance requirements for the OWTS;
- (7) a list of substances that could impair performance if discharged to the OWTS, including those applicable to ¶h; and
- (8) a copy of the SWRCB or RWQCB waiver or waste discharge requirements.

Authority Cited: CA Water Code §1058, 13291

Reference: CA Water Code §13291(d), 13291(e)

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ARTICLE 4 PERFORMANCE REQUIREMENTS AND SPECIFICATIONS

§22912. SWRCB -- Septic Tank Specifications

(a) All septic tanks and grease interceptor tanks shall meet the standards contained in Sections K5(b), K5(c), K5(e), K5(k), K5(m)(1), K5(m)(2), and K5(m)(3)(ii) of Appendix K, of Part 5, Title 24 in the California Code of Regulations.

(b) All new OWTS septic tanks shall meet the following requirements:

- (1.) access openings shall have watertight risers and shall be set at or near finished grade; and
- (2.) access openings shall be secured (locked or equivalent) to prevent unauthorized access.

(c) prefabricated septic tanks shall be approved by the International Association of Plumbing and Mechanical Officials (IAPMO) and installed according to the manufacturer's instructions. If IAPMO certified tanks are not available locally, other prefabricated tanks may be allowed and shall comply with subsection (d) below;

(d) non- prefabricated tanks or prefabricated tanks not certified by IAPMO shall be installed only after the design is stamped and certified by a California registered civil engineer as meeting the general industry standards necessary to comply with these requirements;

(e) New and replaced OWTS septic tanks shall be designed to prevent solids in excess of one-eighth (1/8) inch in diameter from passing to the dispersal system while under two feet of hydrostatic head. Septic tanks that use a National Sanitation Foundation/American National Standard Institute (NSF/ANSI) Standard 46 certified septic tank filter at the final point of effluent discharge from the OWTS and prior to the dispersal system shall be deemed to meet this requirement.

Authority Cited: CA Water Code § 1058, 13291

Reference: CA Water Code § 13291(b)(1)

§22913. SWRCB -- Performance Requirements for Supplemental Treatment Components

(a) Supplemental treatment components shall be designed to meet the following BOD and TSS concentrations and, where nitrogen is identified in the RWQCB basin plan as a water quality concern, the following nitrogen effluent concentration:

- (1) The 30-day average BOD concentration shall not exceed 30 milligrams per liter (mg/L), or alternately, a carbonaceous BOD (CBOD) in excess of 25 mg/L;
- (2) The 30-day average TSS concentration shall not exceed 30 mg/L;
- (3) the 30-day average TN concentration shall not exceed 10 mg/L as nitrogen.

(b) Supplemental treatment components performing disinfection shall be designed to achieve an effluent total coliform bacteria concentration, at the 95 percentile, of not greater-than the following;

- (1) 10 MPN per 100 milliliters prior to discharge into the dispersal field where the soils exhibit percolation rates between 1 and 10 minutes per inch (MPI) or where the soil texture is sand; or
- (2) 1000 MPN per 100 milliliters prior to discharge into the dispersal field where the soils exhibit percolation rates greater than 10 MPI or consist of a soil texture other than sand.

(c) Before installation, all non-proprietary supplemental treatment components of an OWTS shall be certified by a qualified professional.

(d) Before the installation of any proprietary supplemental treatment OWTS, all such treatment components shall be certified by an independent third party testing laboratory as being capable of reliably meeting the performance requirements in ¶(a) or ¶(b), as applicable. The parameters required for certification shall include the following operational testing and evaluation of the supplemental treatment component:

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- (1) a testing duration of not less than 6 continuous months.
- (2) the wastewater used for testing shall consist primarily of municipal or domestic wastewater and shall have concentrations in the following ranges:
 - (A) BOD: 125 to 300 milligrams per liter;
 - (B) TSS: 125 to 300 milligrams per liter;
 - (C) TN (as N): 20 to 75 milligrams per liter; and
 - (D) total coliforms: 1×10^6 to 1×10^8 MPN/100 ml.
- (3) Hydraulic and organic design loading shall be varied during the test to simulate OWTS operational stress at different levels of use, including:
 - (A) regular daily use;
 - (B) work week use;
 - (C) weekend use; and
 - (D) vacation (e.g., one week rest).
- (4) testing of supplemental treatment components to comply with the performance requirements of ¶(a) shall be conducted based on effluent analyses of BOD, TSS and TN with the following minimum detection limits:

Parameter	Detection Limit
BOD	2 mg/L
TSS	5 mg/L
Total Nitrogen	1 mg/L

(5) testing of supplemental treatment components to comply with the performance requirements of ¶(b) shall be conducted based on effluent analyses of total coliforms with minimum detection limit of 2.2 MPN.

- (e) The effluent from a supplemental treatment component shall be evaluated quarterly, or more frequently as required by the RWQCB, based on an analysis of a representative sample that has been treated by the supplemental treatment component. Effluent samples shall be analyzed by a California Department of Health Services certified laboratory using the reporting limits specified in ¶(d)(4).
- (f) OWTS with supplemental treatment components shall be equipped with visual or audible alarm and shall be equipped with a telemetric alarm that notifies the owner in the event of system malfunction. OWTS using supplemental treatment shall, at a minimum, provide for wastewater storage as a means to minimize pollution from overflow discharge due to system malfunction or a 24-hour power outage.
- (g) OWTS with supplemental treatment components designed to meet the performance requirements outlined in §22913(b) shall be inspected for proper operation weekly by a qualified service provider unless a telemetric monitoring system has been installed and is capable of continuously assessing the operation and performance of the disinfection system. Testing of supplemental treatment components that perform disinfection shall be evaluated quarterly based on analysis of total coliform with a minimum detection limit of 2.2 MPN. Such systems shall be maintained to comply with the performance requirements at all times.
- (h) Owners of OWTS with supplemental treatment components shall maintain a contract with a qualified service provider to ensure that the OWTS are operated, maintained and monitored as designed.

Authority Cited: CWC 1058, 13291.

Reference: CA Water Code §13260, 13264, 13267, 13269, and 13291

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§22914. SWRCB -- Dispersal Systems

Any dispersal system that is part of a new OWTS shall meet the following requirements:

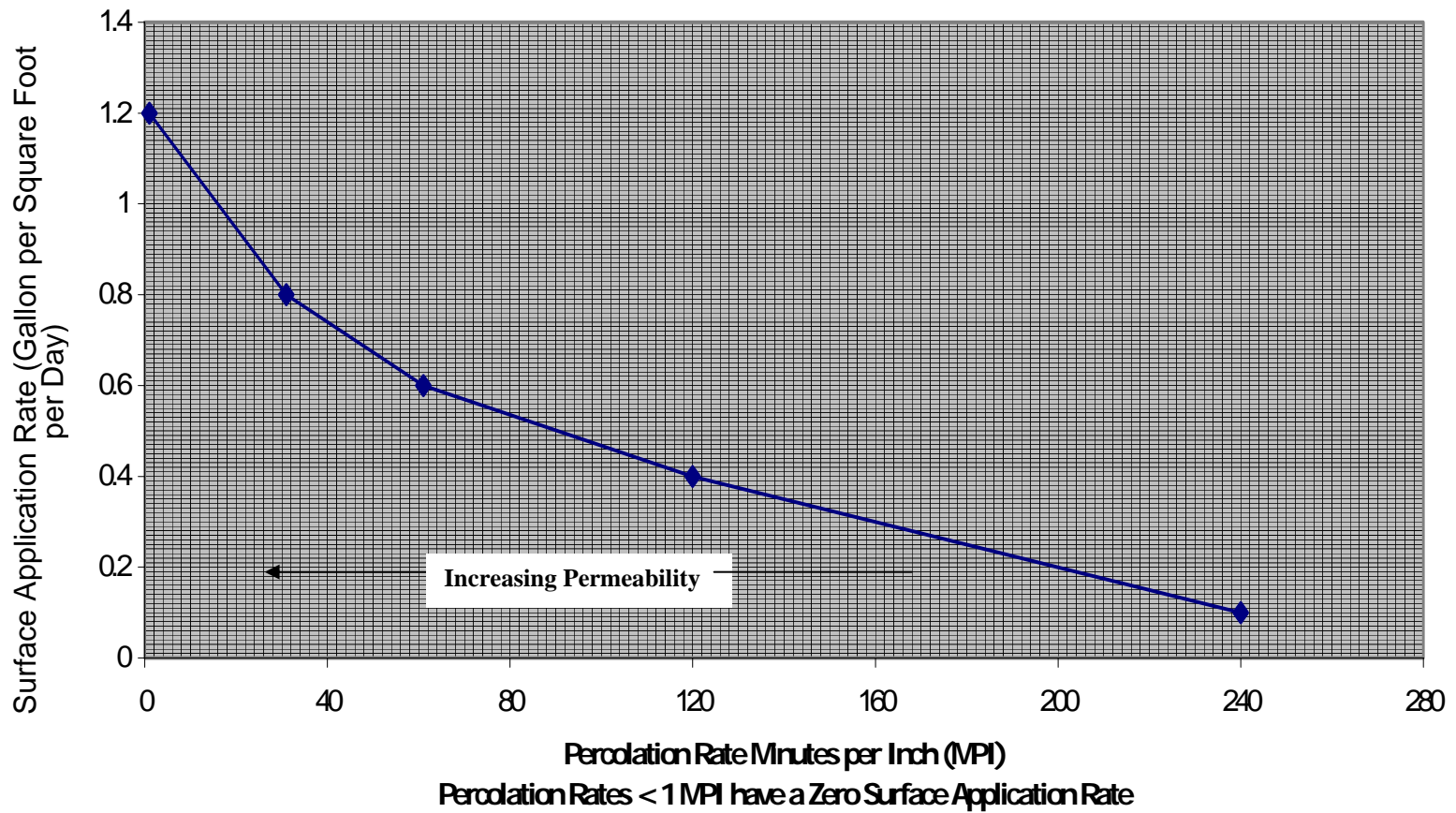
- (a) The base of the dispersal system shall be designed and installed at the shallowest practicable depth at or below the original elevation of the soil surface to maximize elements critical to effective treatment of effluent in the soil. Elements critical to effective treatment include oxygen transfer, biological treatment, and vegetative uptake of nutrients). The qualified professional shall assure that the dispersal system meets all applicable requirements for this section in the design.
- (b) All new OWTS dispersal systems, except as provided in §22914(h) and §22914(j), shall be designed using bottom area of the dispersal system only as the infiltrative surface. The infiltrative surface shall be sized using the design application rates contained in either Table 1 or Figure 1.
- (c) A maximum of one foot of engineered fill meeting the specifications contained in Table 2 may be used to meet the soil depth requirements between the bottom of the dispersal system and seasonal high groundwater or fractured/weathered bedrock, as identified in ¶(d) or ¶(e).
- (d) New conventional OWTS dispersal systems shall have at least three feet of continuous soil below the bottom of the dispersal system and above the seasonal high groundwater level or fractured/weathered bedrock at all times.
- (e) The dispersal systems of all new OWTS with supplemental treatment components shall be designed to ensure that at least two feet of continuous unsaturated soil exists between the bottom of the dispersal system and above either the seasonal high groundwater level, impermeable strata or fractured/weathered bedrock at all times during OWTS operation.
- (f) Where the percolation test result is less than five minutes per inch and there is less than five feet separation to seasonal high groundwater, the effluent from new OWTS shall use supplemental treatment systems that treat and disinfect OWTS wastewater to level prescribed in §22913(a)(1), 22913(a)(2) and §22913(b)(1) prior to discharge to the dispersal field. At a minimum, one foot of the soil column shall exhibit a percolation rate of greater than five minutes per inch.
- (g) New conventional OWTS dispersal systems with pumps used to move effluent from the septic tank to the dispersal system shall be equipped with visual or audible alarms or telemetric alarms that notify the owner 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.
- (h) Gravel-less chambers shall meet the requirement for conventional dispersal systems contained in ¶d. The infiltrative surface shall be sized using the bottom surface area of the disposal field and the design application rates contained in either Table 1 or Figure 1. The infiltrative surface may be adjusted with a multiplier of no less than 0.7.

Table 1: Design Infiltrative Surface Application Rates	
USDA Soil Texture Classification	Maximum Wastewater Application Rate (gallons per day per square foot)
Coarse Sand with percolation rate less than 1 MPI	Prohibited
Coarse sand, medium sand	1.2
Fine sand, loamy sand	1.1 to 0.8
Sandy loam, loam, sandy clay loam	0.7 to 0.6
Silt loam ¹	0.5 to 0.4
clay loam ¹ , silty clay loam ¹ , sandy clay ¹	0.2

¹This soil type shall be subject to a percolation test in addition to using soil texture determination methodology. Clays shall be non-expandable.

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Figure 1: Design Infiltrative Surface Application Rates



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Table 2: Imported Fill Specifications		
1. Maximum Percent soils smaller than 0.53 mm in diameter.		
5%		
2. Maximum Percent fragments over 2.0 mm. In diameter.		
20%		
3.	Sieve Size	Dry Weight % Passing
	3/8	100
	4	90-100
	10	65-100
	16	50-85
	30	25-60
	50	10-30
	100	2-16
	200	0-7

(i) Shallow dispersal systems employing supplemental treatment in order to meet the performance requirements contained in §22913(a) shall meet the following requirements:

- (1) all systems shall have a minimum of two continuous feet of soil beneath the dispersal system and above seasonal high groundwater, impervious layer, or fractured/weathered bedrock at all times
- (2) all systems shall have a minimum of 6 inches of soil cover over the dispersal system; and
- (3) all systems shall be maintained to reduce emitter biological growth plugging and root intrusion.

(j) Seepage Pits shall be designed on sidewall area as the infiltrative surface and are allowed only where all of the following three conditions apply:

- (1) the site is unsuitable for shallow dispersal systems due to soil or spatial conditions;
- (2) The seepage pit design allows a minimum of ten feet of soil below the bottom of the seepage pit and above the seasonal high groundwater level, impervious layer, or fractured/weathered bedrock. The discharger shall demonstrate that all strata to a depth of 10 feet below the pit bottom are free of groundwater in accordance with §22955. Less than 10 feet of soil below the bottom of the seepage pit is allowed, but no less than two feet of soil, provided that the effluent meets the performance requirements for supplemental treatment in §22913(a) and §22913(b). Less than two feet of soil beneath the bottom of the seepage pit is allowed where the OWTS is designed to meet performance requirements specified in §22913(a) and §22913(b)(1); and

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(3) where one of the following conditions exists:

(A.) the site is served by a community water supply and has no domestic wells within 600 feet of the OWTS; or

(B.) the site is served by a community water supply and the site is within 600 feet of a domestic well and the new OWTS provides treatment that meets the performance requirements in §22913(a) prior to discharge into the seepage pit; or

(C.) all of the following apply:

1. the site is an existing parcel approved by the effect date of these regulations and was approved for OWTS at the time of lot creation;
2. the site has an onsite domestic well that is sealed at 20 feet below the depth of the bottom of the seepage pit; and
3. the new OWTS provides treatment that meets the performance requirements in §22913(a) prior to discharge into the seepage pit.

(k) Evapotranspiration and infiltration (ETI) systems shall be designed such that evaporation and infiltration exceed the design waste flow combined with a 25-yr return rate precipitation event on an annual and seasonal basis. ETI systems shall be operated in a manner that prevents human exposure to wastewater.

Authority Cited: CA Water Code §1058, 13291

Reference: CA Water Code §13260, 13264, 13267, 13269, and 13291

ARTICLE 5: PROTECTING IMPAIRED SURFACE WATER

§22940. SWRCB -- Applicability and Requirements.

(a) No OWTS shall be constructed or operated twenty-four months after the effective date of this Subchapter if it is located within 600 feet of a water body or upstream reaches of a water body that has been designated through an EPA-approved listing as impaired pursuant to Section 303(d) of the Clean Water Act if the RWQCB has identified OWTS as contributing to the impairment of the water body except as provided in ¶1 through ¶5 below:

- (1) Where a water body is listed as impaired due to nitrogen, all new and existing OWTS installations shall incorporate the performance requirements for supplemental treatment contained in §22913(a).
- (2) Where a water body is listed as impaired due to pathogens, all new and existing OWTS installations shall incorporate performance requirements for supplemental treatment contained in §22913(a)(1), §22913(a)(2) and §22913(b).
- (3) Where an EPA-approved listing that designates that a water body is impaired occurs after the effective date of this Subchapter and OWTS have been identified by the RWQCB as contributing to the impairment of the water body, the requirements of ¶1 and ¶2 shall apply twenty-four months after the date of the EPA-approved listing.
- (4) OWTS owners who commit by way of a legally binding document to connect to a centralized community wastewater collection and treatment system by a specified date are exempt from this Section. To become effective, the document shall be signed on or before twenty-four months after the effective date of this Subchapter or within twenty-four months after an EPA-approved listing that designates that a water body is impaired. In no case shall the specified date for compliance extend beyond December 31, 2015.
- (5) The compliance dates for existing OWTS in ¶1, ¶2 and ¶3 may be extended as a part of an implementation schedule for a total maximum daily load (TMDL). These compliance dates must be adopted within twenty-four months after the effective date of this Subchapter or within twenty-four months after an EPA-approved listing that designates that a water body is impaired. In no event shall the compliance dates exceed December 31, 2015.

(b) ¶(a) of this section shall not apply if the RWQCB adopts a wastewater management plan as a part of the basin plan that includes but is not limited to the identification of specific OWTS contributing to impairment of the water body and an implementation schedule for reducing the contribution of pollutants from OWTS. The wastewater management plan shall

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be adopted within twenty-four months after the effective date of this Subchapter or within twenty-four months after an EPA-approved listing that designates that a water body is impaired. The wastewater management plan must result in either elimination of the impairment or elimination of the contribution of OWTS to the impairment by December 31, 2015.

Authority Cited: CA Water Code §1058, 13291

Reference: CA Water Code §13241, 13260, 13264, 13267, 13269, and 13291

ARTICLE 7. MONITORING

§22950 Water Quality Monitoring

(a) OWTS owners with an onsite domestic well on their properties must monitor groundwater by sampling and analyzing water from a well down-gradient and within 100 feet of the OWTS discharge every five years and within 30 days upon the installation of a new OWTS. Alternatively, monitoring groundwater may be conducted by sampling and analyzing water from an onsite domestic well every five years and within 30 days upon the installation of a new OWTS.

Groundwater analyses shall be conducted in accordance with ¶(b). Existing OWTS installations shall be exempt from this requirement if the facility that the OWTS serves is provided water from a community water supply system.

(b) The owner or owner's authorized representative shall have groundwater samples collected pursuant to ¶(a) analyzed 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 the following: calcium (CA), magnesium (Mg), sodium (Na), potassium (K), iron (Fe), manganese (Mn), zinc (Zn), sulfate (SO₄), chloride (Cl), Nitrate (NO₃), nitrite (NO₂), fluoride (F), TDS, hardness, total alkalinity, carbonate (CO₃), bicarbonate (HCO₃), hydroxide (OH), MBAS, pH and total coliforms. If a sample tests positive for total coliforms, the sample shall be analyzed for fecal coliforms. The name of the site owner, the site address and the laboratory results shall be transmitted to the SWRCB in EDF format. The names and addresses of owners of tested domestic wells shall not be released to the general public pursuant to Section 1798.3 of the California Civil Code.

(c) All owners of a septic tank shall have a qualified service provider inspect the septic tank every five years to ensure that the level of settleable solids and/or scum does not impair the performance of the septic tank.

Authority Cited: CA Water Code §1058, 13291

Reference: CA Water Code §13260, 13264, 13267, 13269, and 13291

ARTICLE 8. RECORDKEEPING

(a) The owner shall retain a Record Plan and an O & M manual for any new or replaced OWTS upon completion of installation.

Authority Cited: CA Water Code §1058, 13291

Reference: CA Water Code § 13267, 13269, and 13291

ARTICLE 9. GROUNDWATER LEVEL DETERMINATIONS

§22955 Groundwater Level Monitoring

(a) Unless the seasonal high groundwater level at the site is known to be greater than 10 feet below the ground surface based on a local groundwater study, a site evaluation to determine the depth to the seasonal high groundwater shall be performed. Soil mottling observations by a qualified professional may be used to determine the seasonal high groundwater level when such determinations can be made accurately.

Where soil mottling observations cannot be made or are inconsistent, the following protocols shall be followed to determine seasonal high groundwater prior to design and installation of an OWTS:

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- (1.) To measure depth to seasonal high groundwater, a groundwater level monitoring well shall be installed to a minimum depth of ten feet in the vicinity of proposed wastewater dispersal system. If an impermeable layer is present at 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.
- (2.) For OWTS serving facilities other than single family homes, the RWQCB shall determine the number and depth of groundwater level monitoring wells.
- (3.) Measurements of depth to seasonal high groundwater shall take place after the following occur in any water year:
 - (A.) a minimum of 60% of the average annual rainfall has fallen based on records of seasonal rainfall accumulations from the nearest weather stations. If a groundwater monitoring study demonstrates to the satisfaction of the RWQCB that groundwater levels in its area of its jurisdiction are not subject to large seasonal variations, the percent of required rainfall prior to groundwater level measurements may be reduced by the RWQCB.
 - (B.) rainfall equaling at least 10% of the average annual rainfall has occurred within 45 calendar days immediately preceding the date of a measurement.
 - (C.) the groundwater level shall be measured on a minimum of three separate days that meet the criteria established in (A) and (B).
- (3.) For areas that are subject to special circumstances such as seasonal high groundwater caused by snowmelt or irrigation, a groundwater level monitoring program shall be developed and certified by a qualified professional.
- (4.) Saturated conditions caused by significant rain events that occur more than once during the evaluation of seasonal groundwater levels shall provide the basis for a determination of seasonal high groundwater.

Authority Cited: CA Water Code §1058, 13291

Reference: CA Water Code §13260, 13264, 13267, 13269, and 13291