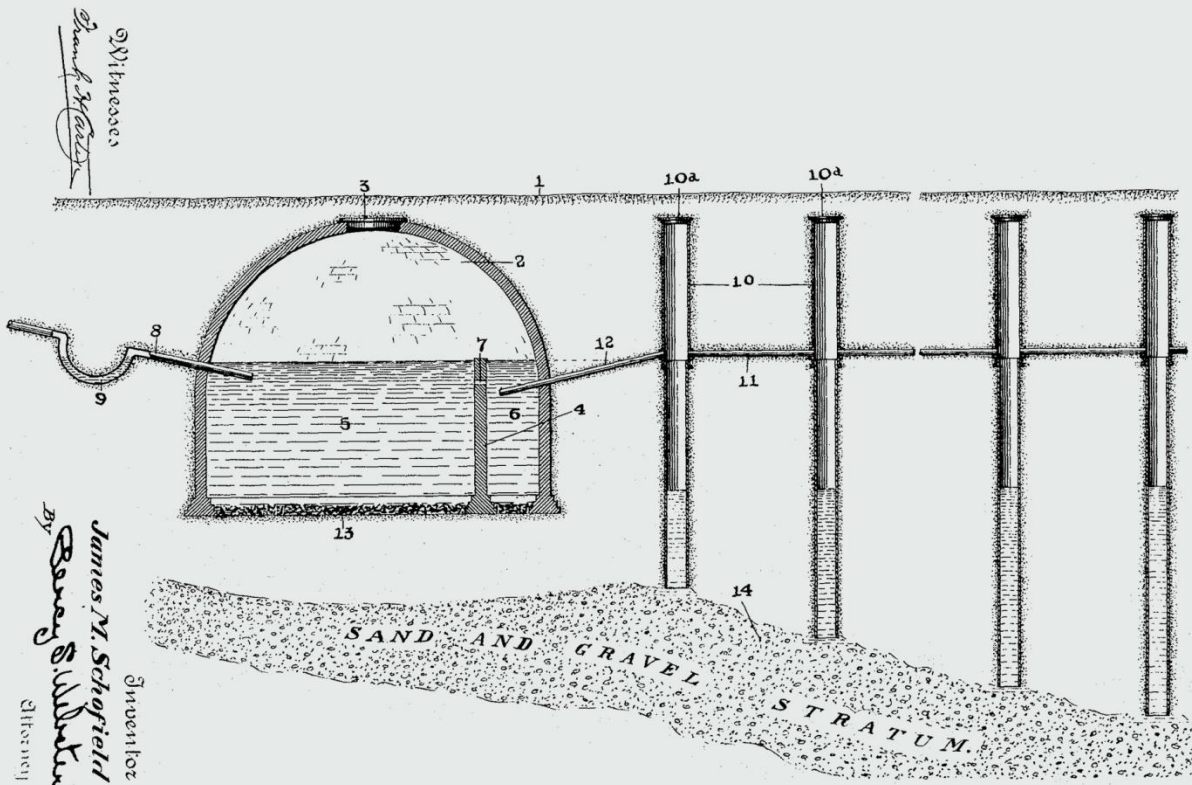


APPENDIX A
SWRCB OWTS POLICY



Witnesses
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933,121.

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ODORLESS SEWER SYSTEM.
APPLICATION FILED SEPT. 8, 1908.

Patented Sept. 7, 1909.

OWTS POLICY

Water Quality Control Policy for Siting,
Design, Operation, and Maintenance of
Onsite Wastewater Treatment Systems

June 19, 2012



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS



State of California
Edmund G. Brown Jr., Governor



California Environmental Protection Agency
Matthew Rodriguez, Secretary



State Water Resources Control Board
<http://www.waterboards.ca.gov>

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Adopted by the State Water Resources Control Board on June 19, 2012
Approved by the Office of Administrative Law on November 13, 2012
Effective Date of the Policy: May 13, 2013

Preamble – Purpose and Scope – Structure of the Policy

Preamble

Onsite wastewater treatment systems (OWTS) are useful and necessary structures that allow habitation at locations that are removed from centralized wastewater treatment systems. When properly sited, designed, operated, and maintained, OWTS treat domestic wastewater to reduce its polluting impact on the environment and most importantly protect public health. Estimates for the number of installations of OWTS in California at the time of this Policy are that more than 1.2 million systems are installed and operating. The vast majority of these are functioning in a satisfactory manner and meeting their intended purpose.

However there have been occasions in California where OWTS for a varied list of reasons have not satisfactorily protected either water quality or public health. Some instances of these failures are related to the OWTS not being able to adequately treat and dispose of waste as a result of poor design or improper site conditions. Others have occurred where the systems are operating as designed but their densities are such that the combined effluent resulting from multiple systems is more than can be assimilated into the environment. From these failures we must learn how to improve our usage of OWTS and prevent such failures from happening again.

As California's population continues to grow, and we see both increased rural housing densities and the building of residences and other structures in more varied terrain than we ever have before, we increase the risks of causing environmental damage and creating public health risks from the use of OWTS. What may have been effective in the past may not continue to be as conditions and circumstances surrounding particular locations change. So necessarily more scrutiny of our installation of OWTS is demanded of all those involved, while maintaining an appropriate balance of only the necessary requirements so that the use of OWTS remains viable.

Purpose and Scope of the Policy

The purpose of this Policy is to allow the continued use of OWTS, while protecting water quality and public health. This Policy recognizes that responsible local agencies can provide the most effective means to manage OWTS on a routine basis. Therefore as an important element, it is the intent of this policy to efficiently utilize and improve upon where necessary existing local programs through coordination between the State and local agencies. To accomplish this purpose, this Policy establishes a statewide, risk-based, tiered approach for the regulation and management of OWTS installations and replacements and sets the level of performance and protection expected from OWTS. In particular, the Policy requires actions for water bodies specifically identified as part this Policy where OWTS contribute to water quality degradation that adversely affect beneficial uses.

This Policy only authorizes subsurface disposal of domestic strength, and in limited instances high strength, wastewater and establishes minimum requirements for the permitting, monitoring, and operation of OWTS for protecting beneficial uses of waters

Preamble – Purpose and Scope – Structure of the Policy

of the State and preventing or correcting conditions of pollution and nuisance. And finally, this Policy also conditionally waives the requirement for owners of OWTS to apply for and receive Waste Discharge Requirements in order to operate their systems when they meet the conditions set forth in the Policy. Nothing in this Policy supersedes or requires modification of Total Maximum Daily Loads or Basin Plan prohibitions of discharges from OWTS.

This Policy also applies to OWTS on federal, state, and Tribal lands to the extent authorized by law or agreement.

Structure of the Policy

This Policy is structured into ten major parts:

Definitions

Definitions for all the major terms used in this Policy are provided within this part and wherever used in the Policy the definition given here overrides any other possible definition.

[\[Section 1\]](#)

Responsibilities and Duties

Implementation of this Policy involves individual OWTS owners; local agencies, be they counties, cities, or any other subdivision of state government with permitting powers over OWTS; Regional Water Quality Control Boards; and the State Water Resources Control Board.

[\[Sections 2, 3, 4, and 5\]](#)

Tier 0 – Existing OWTS

Existing OWTS that are properly functioning, and do not meet the conditions of failing systems or otherwise require corrective action (for example, to prevent groundwater impairment) as specifically described in Tier 4, and are not determined to be contributing to an impairment of surface water as specifically described in Tier 3, are automatically included in Tier 0.

[\[Section 6\]](#)

Tier 1 – Low-Risk New or Replacement OWTS

New or replacement OWTS that meet low risk siting and design requirements as specified in Tier 1, where there is not an approved Local Agency Management Program per Tier 2.

[\[Sections 7 and 8\]](#)

Tier 2 – Local Agency Management Program for New or Replacement OWTS

California is well known for its extreme range of geological and climatic conditions. As such, the establishment of a single set of criteria for OWTS would either be too restrictive so as to protect for the most sensitive case, or would have broad allowances that would not be protective enough under some circumstances. To accommodate this

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extreme variance, local agencies may submit management programs (“Local Agency Management Programs”) for approval, and upon approval then manage the installation of new and replacement OWTS under that program.

Local Agency Management Programs approved under Tier 2 provide an alternate method from Tier 1 programs to achieve the same policy purpose, which is to protect water quality and public health. In order to address local conditions, Local Agency Management Programs may include standards that differ from the Tier 1 requirements for new and replacement OWTS contained in Sections 7 and 8. As examples, a Local Agency Management Program may authorize different soil characteristics, usage of seepage pits, and different densities for new developments. Once the Local Agency Management Program is approved, new and replacement OWTS that are included within the Local Agency Management Program may be approved by the Local Agency. A Local Agency, at its discretion, may include Tier 1 standards within its Tier 2 Local Agency Management Program for some or all of its jurisdiction. However, once a Local Agency Management Program is approved, it shall supersede Tier 1 and all future OWTS decisions will be governed by the Tier 2 Local Agency Management Program until it is modified, withdrawn, or revoked.

[\[Section 9\]](#)

Tier 3 – Impaired Areas

Existing, new, and replacement OWTS that are near impaired water bodies may be addressed by a TMDL and its implementation program, or special provisions contained in a Local Agency Management Program. If there is no TMDL or special provisions, new or replacement OWTS within 600 feet of impaired water bodies listed in Attachment 2 must meet the specific requirements of Tier 3.

[\[Section 10\]](#)

Tier 4 – OWTS Requiring Corrective Action

OWTS that require corrective action or are either presently failing or fail at any time while this Policy is in effect are automatically included in Tier 4 and must follow the requirements as specified.

[\[Section 11\]](#)

Conditional Waiver of Waste Discharge Requirements

The requirement to submit a report of waste discharge for discharges from OWTS that are in conformance with this policy is waived.

[\[Section 12\]](#)

Effective Date

When this Policy becomes effective.

[\[Section 13\]](#)

Financial Assistance

Procedures for local agencies to apply for funds to establish low interest loan programs for the assistance of OWTS owners in meeting the requirements of this Policy.

[\[Section 14\]](#)

Preamble – Purpose and Scope – Structure of the Policy

[Attachment 1](#)

AB 885 Regulatory Program Timelines.

[Attachment 2](#)

Tables 4 and 5 specifically identify those impaired water bodies that have Tier 3 requirements and must have a completed TMDL by the date specified.

[Attachment 3](#)

Table 6 shows where one Regional Water Board has been designated to review and, if appropriate, approve new Local Agency Management Plans for a local agency that is within multiple Regional Water Boards' jurisdiction.

What Tier Applies to my OWTS?

Existing OWTS that conform to the requirements for Tier 0 will remain in Tier 0 as long as they continue to meet those requirements. An existing OWTS will temporarily move from Tier 0 to Tier 4 if it is determined that corrective action is needed. The existing OWTS will return to Tier 0 once the corrective action is completed if the repair does not qualify as major repair under Tier 4. Any major repairs conducted as corrective action must comply with Tier 1 requirements or Tier 2 requirements, whichever are in effect for that local area. An existing OWTS will move from Tier 0 to Tier 3 if it is adjacent to an impaired water body listed on Attachment 2, or is covered by a TMDL implementation plan.

In areas with no approved Local Agency Management Plan, new and replacement OWTS that conform to the requirements of Tier 1 will remain in Tier 1 as long as they continue to meet those requirements. A new or replacement OWTS will temporarily move from Tier 1 to Tier 4 if it is determined that corrective action is needed. The new or replacement OWTS will return to Tier 1 once the corrective action is completed. A new or replacement OWTS will move from Tier 1 to Tier 3 if it is adjacent to an impaired water body, or is covered by a TMDL implementation plan.

In areas with an approved Local Agency Management Plan, new and replacement OWTS that conform to the requirements of the Tier 2 Local Agency Management Plan will remain in Tier 2 as long as they continue to meet those requirements. A new or replacement OWTS will temporarily move from Tier 2 to Tier 4 if it is determined that corrective action is needed. The new or replacement OWTS will return to Tier 2 once the corrective action is completed. A new or replacement OWTS will move from Tier 2 to Tier 3 if it is adjacent to an impaired water body, or is covered by a TMDL implementation plan, or is covered by special provisions for impaired water bodies contained in a Local Agency Management Program.

Preamble – Purpose and Scope – Structure of the Policy

Existing, new, and replacement OWTS in specified areas adjacent to water bodies that are identified by the State Water Board as impaired for pathogens or nitrogen and listed in Attachment 2 are in Tier 3. Existing, new, and replacement OWTS covered by a TMDL implementation plan, or covered by special provisions for impaired water bodies contained in a Local Agency Management Program are also in Tier 3. These OWTS will temporarily move from Tier 3 to Tier 4 if it is determined that corrective action is needed. The new or replacement OWTS will return to Tier 3 once the corrective action is completed.

Existing, new, and replacement OWTS that do not conform with the requirements to receive coverage under any of the Tiers (e.g., existing OWTS with a projected flow of more than 10,000 gpd) do not qualify for this Policy's conditional waiver of waste discharge requirements, and will be regulated separately by the applicable Regional Water Board.

Definitions

1.0 Definitions. The following definitions apply to this Policy:

“303 (d) list” means the same as **“Impaired Water Bodies.”**

“At-grade system” means an OWTS dispersal system with a discharge point located at the preconstruction grade (ground surface elevation). The discharge from an at-grade system is always subsurface.

“Average annual rainfall” means the average of the annual amount of precipitation for a location over a year as measured by the nearest National Weather Service station for the preceding three decades. For example the data set used to make a determination in 2012 would be the data from 1981 to 2010.

“Basin Plan” means the same as “water quality control plan” as defined in Division 7 (commencing with Section 13000) of the Water Code. Basin Plans are adopted by each Regional Water Board, approved by the State Water Board and the Office of Administrative Law, and identify surface water and groundwater bodies within each Region’s boundaries and establish, for each, its respective beneficial uses and water quality objectives. Copies are available from the Regional Water Boards, electronically at each Regional Water Boards website, or at the State Water Board’s *Plans and Policies* web page (http://www.waterboards.ca.gov/plans_policies/).

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

“CEDEN” means California Environmental Data Exchange Network and information about it is available at the State Water Boards website or <http://www.ceden.org/index.shtml>.

“Cesspool” means an excavation in the ground receiving domestic wastewater, designed to retain the organic matter and solids, while allowing the liquids to seep into the soil. Cesspools differ from seepage pits because cesspool systems do not have septic tanks and are not authorized under this Policy. The term cesspool does not include pit-privies and out-houses which are not regulated under this Policy.

“Clay” means a soil particle; the term also refers to a type of soil texture. As a soil particle, clay consists of individual rock or mineral particles in soils having diameters <0.002 mm. As a soil texture, clay is the soil material that is comprised of 40 percent or more clay particles, not more than 45 percent sand and not more than 40 percent silt particles using the USDA soil classification system.

“Cobbles” means rock fragments 76 mm or larger using the USDA soil classification systems.

“Dispersal system” means a leachfield, seepage pit, mound, at-grade, subsurface drip field, evapotranspiration and infiltration bed, or other type of system for final wastewater treatment and subsurface discharge.

Definitions

“Domestic wastewater” means wastewater with a measured strength less than high-strength wastewater and is 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 may include wastewater from commercial buildings such as office buildings, retail stores, and some restaurants, or from industrial facilities where the domestic wastewater is segregated from the industrial wastewater. Domestic wastewater may include incidental RV holding tank dumping but does not include wastewater consisting of a significant portion of RV holding tank wastewater such as at RV dump stations. Domestic wastewater does not include wastewater from industrial processes.

“Dump Station” means a facility intended to receive the discharge of wastewater from a holding tank installed on a recreational vehicle. A dump station does not include a full hook-up sewer connection similar to those used at a recreational vehicle park.

“Domestic well” means a groundwater well that provides water for human consumption and is not regulated by the California Department of Public Health.

“Earthen material” means a substance composed of the earth’s crust (i.e. soil and rock).

“EDF” see “electronic deliverable format.”

“Effluent” means sewage, water, or other liquid, partially or completely treated or in its natural state, flowing out of a septic tank, aerobic treatment unit, dispersal system, or other OWTS component.

“Electronic deliverable format” or **“EDF”** means the data standard adopted by the State Water Board for submittal of groundwater quality monitoring data to the State Water Board’s internet-accessible database system Geotracker (<http://geotracker.waterboards.ca.gov/>).

“Escherichia coli” means a group of bacteria predominantly inhabiting the intestines of humans or other warm-blooded animals, but also occasionally found elsewhere. Used as an indicator of human fecal contamination.

“Existing OWTS” means an OWTS that was constructed and operating prior to the effective date of this Policy, and OWTS for which a construction permit has been issued prior to the effective date of the Policy.

“Flowing water body” means a body of running water flowing over the earth in a natural water course, where the movement of the water is readily discernible or if water is not present it is apparent from review of the geology that when present it does flow, such as in an ephemeral drainage, creek, stream, or river.

“Groundwater” means water below the land surface that is at or above atmospheric pressure.

Definitions

- “High-strength wastewater”** means wastewater having a 30-day average concentration of biochemical oxygen demand (BOD) greater than 300 milligrams-per-liter (mg/L) or of total suspended solids (TSS) greater than 330 mg/L or a fats, oil, and grease (FOG) concentration greater than 100 mg/L prior to the septic tank or other OWTS treatment component.
- “IAPMO”** means the International Association of Plumbing and Mechanical Officials.
- “Impaired Water Bodies”** means those surface water bodies or segments thereof that are identified on a list approved first by the State Water Board and then approved by US EPA pursuant to Section 303(d) of the federal Clean Water Act.
- “Local agency”** means any subdivision of state government that has responsibility for permitting the installation of and regulating OWTS within its jurisdictional boundaries; typically a county, city, or special district.
- “Major repair”** means either: (1) for a dispersal system, repairs required for an OWTS dispersal system due to surfacing wastewater effluent from the dispersal field and/or wastewater backed up into plumbing fixtures because the dispersal system is not able to percolate the design flow of wastewater associated with the structure served, or (2) for a septic tank, repairs required to the tank for a compartment baffle failure or tank structural integrity failure such that either wastewater is exfiltrating or groundwater is infiltrating.
- “Mottling”** means a soil condition that results from oxidizing or reducing minerals due to soil moisture changes from saturated to unsaturated over time. Mottling is characterized by spots or blotches of different colors or shades of color (grays and reds) interspersed within the dominant color as described by the USDA soil classification system. This soil condition can be indicative of historic seasonal high groundwater level, but the lack of this condition may not demonstrate the absence of groundwater.
- “Mound system”** means an aboveground dispersal system (covered sand bed with effluent leachfield elevated above original ground surface inside) used to enhance soil treatment, dispersal, and absorption of effluent discharged from an OWTS treatment unit such as a septic tank. Mound systems have a subsurface discharge.
- “New OWTS”** means an OWTS permitted after the effective date of this Policy.
- “NSF”** means NSF International (a.k.a. National Sanitation Foundation), a not for profit, non-governmental organization that develops health and safety standards and performs product certification.
- “Oil/grease interceptor”** means a passive interceptor that has a rate of flow exceeding 50 gallons-per-minute and that is located outside a building. Oil/grease interceptors are used for separating and collecting oil and grease from wastewater.

Definitions

“Onsite wastewater treatment system(s)” (OWTS) means individual disposal systems, community collection and disposal systems, and alternative collection and disposal systems that use subsurface disposal. The short form of the term may be singular or plural. OWTS do not include “graywater” systems pursuant to Health and Safety Code Section 17922.12.

“Percolation test” means a method of testing water absorption of the soil. The test is conducted with clean water and test results can be used to establish the dispersal system design.

“Permit” means a document issued by a local agency that allows the installation and use of an OWTS, or waste discharge requirements or a waiver of waste discharge requirements that authorizes discharges from an OWTS.

“Person” means any individual, firm, association, organization, partnership, business trust, corporation, company, State agency or department, or unit of local government who is, or that is, subject to this Policy.

“Pit-privy” (a.k.a. outhouse, pit-toilet) means self-contained waterless toilet used for disposal of non-water carried human waste; consists of a shelter built above a pit in the ground into which human waste falls.

“Policy” means this Policy for Siting, Design, Operation and Management of OWTS.

“Pollutant” means any substance that alters water quality of the waters of the State to a degree that it may potentially affect the beneficial uses of water, as listed in a Basin Plan.

“Projected flows” means wastewater flows into the OWTS determined in accordance with any of the applicable methods for determining average daily flow in the *USEPA Onsite Wastewater Treatment System Manual, 2002*, or for Tier 2 in accordance with an approved Local Agency Management Program.

“Public Water System” is a water system regulated by the California Department of Public Health or a Local Primacy Agency pursuant to Chapter 12, Part 4, California Safe Drinking Water Act, Section 116275 (h) of the California Health and Safety Code.

“Public Water Well” is a ground water well serving a public water system. A spring which is not subject to the California Surface Water Treatment Rule (SWTR), CCR, Title 22, sections 64650 through 64666 is a public well.

“Qualified professional” means an individual licensed or certified by a State of California agency to design OWTS and practice as professionals for other associated reports, as allowed under their license or registration. Depending on the work to be performed and various licensing and registration requirements, this may include an individual who possesses a registered environmental health specialist certificate or is currently licensed as a professional engineer or professional geologist. For the purposes of performing site evaluations, Soil Scientists certified by the Soil Science Society of America are considered qualified professionals. A local agency may modify this definition as part of its Local Agency Management Program.

Definitions

“Regional Water Board” is any of the Regional Water Quality Control Boards designated by Water Code Section 13200. Any reference to an action of the Regional Water Board in this Policy also refers to an action of its Executive Officer, including the conducting of public hearings, pursuant to any general or specific delegation under Water Code Section 13223.

“Replacement OWTS” means an OWTS that has its treatment capacity expanded, or its dispersal system replaced or added onto, after the effective date of this Policy.

“Sand” means a soil particle; this term also refers to a type of soil texture. As a soil particle, sand consists of individual rock or mineral particles in soils having diameters ranging from 0.05 to 2.0 millimeters. As a soil texture, sand is soil that is comprised of 85 percent or more sand particles, with the percentage of silt plus 1.5 times the percentage of clay particles comprising less than 15 percent.

“Seepage pit” means a drilled or dug excavation, three to six feet in diameter, either lined or gravel filled, that receives the effluent discharge from a septic tank or other OWTS treatment unit for dispersal.

“Septic tank” means a watertight, covered receptacle designed for primary treatment of wastewater 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.

“Service provider” means a person capable of operating, monitoring, and maintaining an OWTS in accordance to this Policy.

“Silt” means a soil particle; this term also refers to a type of soil texture. As a soil particle, silt consists of individual rock or mineral particles in soils having diameters ranging from between 0.05 and 0.002 mm. As a soil texture, silt is soil that is comprised as approximately 80 percent or more silt particles and not more than 12 percent clay particles using the USDA soil classification system.

“Single-family dwelling unit” means a structure that is usually occupied by just one household or family and for the purposes of this Policy is expected to generate an average of 250 gallons per day of wastewater.

“Site” means the location of the OWTS and, where applicable, a reserve dispersal area capable of disposing 100 percent of the design flow from all sources the OWTS is intended to serve.

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

Definitions

“Soil” means the naturally occurring body of porous mineral and organic materials on the land surface, which is composed of unconsolidated materials, including 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 soil textural triangle developed by the United States Department of Agriculture (USDA) as found in Soil Survey Staff, USDA; *Soil Survey Manual, Handbook 18*, U.S. Government Printing Office, Washington, DC, 1993, p. 138. For the purposes of this Policy, soil shall contain earthen material of particles smaller than 0.08 inches (2 mm) in size.

“Soil Structure” means the arrangement of primary soil particles into compound particles, peds, or clusters that are separated by natural planes of weakness from adjoining aggregates.

“Soil texture” means the soil class that describes the relative amount of sand, clay, silt and combinations thereof as defined by the classes of the soil textural triangle developed by the USDA (referenced above).

“State Water Board” is the State Water Resources Control Board

“Supplemental treatment” means any OWTS or component of an OWTS, except a septic tank or dosing tank, that performs additional wastewater treatment so that the effluent meets a predetermined performance requirement prior to discharge of effluent into the dispersal field.

“SWAMP” means Surface Water Ambient Monitoring Program and more information is available at: http://www.waterboards.ca.gov/water_issues/programs/swamp/

“Telemetric” means the ability to automatically measure and transmit OWTS data by wire, radio, or other means.

“TMDL” is the acronym for "total maximum daily load." Section 303(d)(1) of the Clean Water Act requires each State to establish a TMDL for each impaired water body to address the pollutant(s) causing the impairment. In California, TMDLs are usually adopted as Basin Plan amendments and contain implementation plans detailing how water quality standards will be attained.

“Total coliform” means a group of bacteria consisting of several *genera* belonging to the family *Enterobacteriaceae*, which includes *Escherichia coli* bacteria.

“USDA” means the U.S. Department of Agriculture.

“Waste discharge requirement” or **“WDR”** means an operation and discharge permit issued for the discharge of waste pursuant to Section 13260 of the California Water Code.

Responsibilities and Duties

Responsibilities and Duties

2.0 OWTS Owners Responsibilities and Duties

- 2.1 All new, replacement, or existing OWTS within an area that is subject to a Basin Plan prohibition of discharges from OWTS, must comply with the prohibition. If the prohibition authorizes discharges under specified conditions, the discharge must comply with those conditions and the applicable provisions of this Policy.
- 2.2 Owners of OWTS shall adhere to the requirements prescribed in local codes and ordinances. Owners of new and replacement OWTS covered by this Policy shall also meet the minimum standards contained in Tier 1, or an alternate standard provided by a Local Agency Management Program per Tier 2, or shall comply with the requirements of Tier 3 if near an impaired water body and subject to Tier 3, or shall provide corrective action for their OWTS if their system meets conditions that place it in Tier 4.
- 2.3 Owners of OWTS shall comply with any and all permitting conditions imposed by a local agency that do not directly conflict with this Policy, including any conditions that are more stringent than required by this Policy.
- 2.4 To receive coverage under this Policy and the included waiver of waste discharges, OWTS shall only accept and treat flows of domestic wastewater. In addition, OWTS that accept high-strength wastewater from commercial food service buildings are covered under this Policy and the waiver of waste discharge requirements if the wastewater does not exceed 900 mg/L BOD and there is a properly sized and functioning oil/grease interceptor (a.k.a grease trap).
- 2.5 Owners of OWTS shall maintain their OWTS in good working condition including inspections and pumping of solids as necessary, or as required by local ordinances, to maintain proper function and assure adequate treatment.
- 2.6 The following owners of OWTS shall notify the Regional Water Board by submitting a Report of Waste Discharge for the following:
 - 2.6.1 a new or replacement OWTS that does not meet the conditions and requirements set forth in either a Local Agency Management Program if one is approved, an existing local program if it is less than 60 months from the effective date of the Policy and a Local Agency Management Program is not yet approved, or Tier 1 if no Local Agency Management Program has been approved and it is more than 60 months after the effective date of this Policy;
 - 2.6.2 any OWTS, not under individual waste discharge requirements or a waiver of individual waste discharge requirements issued by a Regional Water Board, with the projected flow of over 10,000 gallons-per-day;

Responsibilities and Duties

- 2.6.3 any OWTS that receives high-strength wastewater, unless the waste stream is from a commercial food service building;
- 2.6.4 any OWTS that receives high-strength wastewater from a commercial food service building: (1) with a BOD higher than 900 mg/L, or (2) that does not have a properly sized and functioning oil/grease interceptor.
- 2.7 All Reports of Waste Discharge shall be accompanied by the required application fee pursuant to California Code of Regulations, title 23, section 2200.

3.0 Local Agency Requirements and Responsibilities

- 3.1 Local agencies, in addition to implementing their own local codes and ordinances, shall determine whether the requirements within their local jurisdiction will be limited to the water quality protection afforded by the statewide minimum standards in Tier 0, Tier 1, Tier 3, and Tier 4, or whether the local agency will implement a Local Agency Management Program in accordance with Tier 2. Except for Tier 3, local agencies may continue to implement their existing OWTS permitting programs in compliance with the Basin Plan in place at the effective date of the Policy until 60 months after the effective date of this Policy, or approval of a Local Agency Management Program, whichever comes first, and may make minor adjustments as necessary that are in compliance with the applicable Basin Plan and this Policy. Tier 3 requirements take effect on the effective date of this Policy. In the absence of a Tier 2 Local Agency Management Program, to the extent that there is a direct conflict between the applicable minimum standards and the local codes or ordinances (such that it is impossible to comply with both the applicable minimum standards and the local ordinances or codes), the more restrictive standards shall govern.
- 3.2 If preferred, the local agency may at any time provide the State Water Board and all affected Regional Water Board(s) written notice of its intent to regulate OWTS using a Local Agency Management Program with alternative standards as authorized in Tier 2 of this Policy. A proposed Local Agency Management Program that conforms to the requirements of that Section shall be included with the notice. A local agency shall not implement a program different than the minimum standards contained in Tier 1 and 3 of this Policy after 60 months from the effective date of this Policy until approval of the proposed Local Agency Management Program is granted by either the Regional Water Board or State Water Board. All initial program submittals desiring approval prior to the 60 month limit shall be received no later than 36 months from the effective date of this Policy. Once approved, the local agency shall adhere to the Local Agency Management Program, including all requirements, monitoring, and reporting. If at any time a local agency wishes to modify its Local Agency Management Program, it shall provide the State Water Board and all affected Regional Water Board(s) written notice of its intended modifications and will continue to implement its existing Local Agency Management Program until the modifications are approved.

Responsibilities and Duties

- 3.3 All local agencies permitting OWTS shall report annually to the Regional Water Board(s). If a local agency's jurisdictional area is within the boundary of multiple Regional Water Boards, the local agency shall send a copy of the annual report to each Regional Water Board. The annual report shall include the following information (organized in a tabular spreadsheet format) and summarize whether any further actions are warranted to protect water quality or public health:
 - 3.3.1 number and location of complaints pertaining to OWTS operation and maintenance, and identification of those which were investigated and how they were resolved;
 - 3.3.2 shall provide the applications and registrations issued as part of the local septic tank cleaning registration program pursuant to Section 117400 et seq. of the California Health and Safety Code;
 - 3.3.3 number, location, and description of permits issued for new and replacement OWTS and which Tier the permit is issued.
- 3.4 All local agencies permitting OWTS shall retain permanent records of their permitting actions and will make those records available within 10 working days upon written request for review by a Regional Water Board. The records for each permit shall reference the Tier under which the permit was issued.
- 3.5 A local agency shall notify the owner of a public well or water intake and the California Department of Public Health as soon as practicable, but not later than 72 hours, upon its discovery of a failing OWTS as described in sections 11.1 and 11.2 within the setbacks described in sections 7.5.6 through 7.5.10.
- 3.6 A local agency may implement this Policy, or a portion thereof, using its local authority to enforce the policy, as authorized by an approval from the State Water Board or by the appropriate Regional Water Board.
- 3.7 Nothing in the Policy shall preclude a local agency from adopting or retaining standards for OWTS in an approved Local Agency Management Program that are more protective of the public health or the environment than are contained in this Policy.
- 3.8 If at any time a local agency wishes to withdraw its previously submitted and approved Tier 2 Local Agency Management Program, it may do so upon 60 days written notice. The notice of withdrawal shall specify the reason for withdrawing its Tier 2 program, the effective date for cessation of the program and resumption of permitting of OWTS only under Tiers 1, 3, and 4.

4.0 Regional Water Board Functions and Duties

- 4.1 The Regional Water Boards have the principal responsibility for overseeing the implementation of this Policy.
- 4.2 Regional Water Boards shall incorporate the requirements established in this Policy by amending their Basin Plans within 12 months of the effective date of this Policy, pursuant to Water Code Section 13291(e). The Regional Water

Responsibilities and Duties

Boards may also consider whether it is necessary and appropriate to retain or adopt any more protective standards. To the extent that a Regional Water Board determines that it is necessary and appropriate to retain or adopt any more protective standards, it shall reconcile those region-specific standards with this Policy to the extent feasible, and shall provide a detailed basis for its determination that each of the more protective standards is necessary and appropriate.

- 4.2.1 Notwithstanding 4.2 above, the North Coast Regional Water Board will continue to implement its existing Basin Plan requirements pertaining to OWTS within the Russian River watershed until it adopts the Russian River TMDL, at which time it will comply with section 4.2 for the Russian River watershed.
- 4.3 The Regional Water Board designated in Attachment 3 shall review, and if appropriate, approve a Local Agency Management Program submitted by the local agency pursuant to Tier 2 in this Policy. Upon receipt of a proposed Local Agency Management Program, the Regional Water Board designated in Attachment 3 shall have 90 days to notify the local agency whether the submittal contains all the elements of a Tier 2 program, but may request additional information based on review of the proposed program. Approval must follow a noticed hearing with opportunity for public comment. If a Local Agency Management Program is disapproved, the Regional Water Board designated in Attachment 3 shall provide a written explanation of the reasons for the disapproval. A Regional Water Board may approve a Local Agency Management Program while disapproving any proposed special provisions for impaired water bodies contained in the Local Agency Management Program. If no action is taken by the respective Regional Water Board within 12 months of the submission date of a complete Local Agency Management Program, the program shall be forwarded to the State Water Board for review and approval pursuant to Section 5 of this Policy.
 - 4.3.1 Where the local agency's jurisdiction lies within more than one Regional Water Board, staff from the affected Regional Water Boards shall work cooperatively to assure that water quality protection in each region is adequately protected. If the Regional Water Board designated in Attachment 3 approves the Local Agency Management Program over the written objection of an affected Regional Water Board, that Regional Water Board may submit the dispute to the State Water Board under Section 5.3.
 - 4.3.2 Within 30 days of receipt of a proposed Local Agency Management Program, a Regional Water Board will forward a copy to and solicit comments from the California Department of Public Health regarding a Local Agency Management Program's proposed policies and procedures, including notification to local water purveyors prior to OWTS permitting.
- 4.4 Once a Local Agency Management Program has been approved, any affected Regional Water Board may require modifications or revoke authorization of a local agency to implement a Tier 2 program, in accordance with the following:

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- 4.4.1 The Regional Water Board shall consult with any other Regional Water Board(s) having jurisdiction over the local agency before providing the notice described in section 4.4.2.
- 4.4.2 Written notice shall be provided to the local agency detailing the Regional Water Board's action, the cause for such action, remedies to prevent the action from continuing to completion, and appeal process and rights. The local agency shall have 90 days from the date of the written notice to respond with a corrective action plan to address the areas of non-compliance, or to request the Regional Water Board to reconsider its findings.
- 4.4.3 The Regional Water Board shall approve, approve conditionally, or deny a corrective action plan within 90 days of receipt. The local agency will have 90 days to begin implementation of a corrective action plan from the date of approval or 60 days to request reconsideration from the date of denial. If the local agency fails to submit an acceptable corrective action plan, fails to implement an approved corrective action plan, or request reconsideration, the Regional Water Board may require modifications to the Local Agency Management Program, or may revoke the local agency's authorization to implement a Tier 2 program.
- 4.4.4 Requests for reconsideration by the local agency shall be decided by the Regional Water Board within 90 days and the previously approved Local Agency Management Program shall remain in effect while the reconsideration is pending.
- 4.4.5 If the request for reconsideration is denied, the local agency may appeal to the State Water Board and the previously approved Local Agency Management Program shall remain in effect while the appeal is under consideration. The State Water Board shall decide the appeal within 90 days. All decisions of the State Water Board are final.
- 4.5 The appropriate Regional Water Board shall accept and consider any requests for modification or revocation of a Local Agency Management Program submitted by any person. The Regional Water Board will notify the person making the request and the local agency implementing the Local Agency Management Program at issue by letter within 90 days whether it intends to proceed with the modification or revocation process per Section 4.4 above, or is dismissing the request. The Regional Water Board will post the request and its response letter on its website.
- 4.6 A Regional Water Board may issue or deny waste discharge requirements or waivers of waste discharge requirements for any new or replacement OWTS within a jurisdiction of a local agency without an approved Local Agency Management Program if that OWTS does not meet the minimum standards contained in Tier 1.
- 4.7 The Regional Water Boards will implement any notifications and enforcement requirements for OWTS determined to be in Tier 3 of this Policy.

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- 4.8 Regional Water Boards may adopt waste discharge requirements, or conditional waivers of waste discharge requirements, that exempt individual OWTS from requirements contained in this Policy.

5.0 State Water Board Functions and Duties

- 5.1 As the state agency charged with the development and adoption of this Policy, the State Water Board shall periodically review, amend and/or update this Policy as required.
- 5.2 The State Water Board may take any action assigned to the Regional Water Boards in this Policy.
- 5.3 The State Water Board shall resolve disputes between Regional Water Boards and local agencies as needed within 12 months of receiving such a request by a Regional Water Board or local agency, and may take action on its own motion in furtherance of this Policy. As part of this function, the State Water Board shall review and, if appropriate, approve Local Agency Management Programs in cases where the respective Regional Water Board has failed to consider for approval a Local Agency Management Program. The State Water Board shall approve Local Agency Management Programs at a regularly noticed board hearing and shall provide for public participation, including notice and opportunity for public comment. Once taken up by the State Water Board, Local Agency Management Programs shall be approved or denied within 180 days.
- 5.4 A member of the public may request the State Water Board to resolve any dispute regarding the Regional Water Board's approval of a Local Agency Management Program if the member of the public timely raised the disputed issue before the Regional Water Board. Such requests shall be submitted within 30 days after the Regional Water Board's approval of the Local Agency Management Program. The State Water Board shall notify the member of the public, the local agency, and the Regional Water Board within 90 days whether it intends to proceed with dispute resolution.
- 5.5 The State Water Board shall accept and consider any requests for modification or revocation of a Local Agency Management Program submitted by any person, where that person has previously submitted said request to the Regional Water Board and has received notice from the Regional Water Board of its dismissal of the request. The State Water Board will notify the person making the request and the local agency implementing the Local Agency Management Program at issue by letter within 90 days whether it intends to proceed with the modification or revocation process per Section 4.4 above, or is dismissing the request. The State Water Board will post the request and its response letter on its website.
- 5.6 The State Water Board or its Executive Director, after approving any Impaired Water Bodies [303 (d)] List, and for the purpose of implementing Tier 3 of this Policy, shall update Attachment 2 to identify those water bodies where: (1) it is likely that operating OWTS will subsequently be determined to be a contributing

Responsibilities and Duties

source of pathogens or nitrogen and therefore it is anticipated that OWTS would receive a loading reduction, and (2) it is likely that new OWTS installations discharging within 600 feet of the water body would contribute to the impairment. This identification shall be based on information available at the time of 303 (d) listing and may be further updated based on new information. Updates to Attachment 2 will be processed as amendments to this Policy.

- 5.7 The State Water Board will make available to local agencies funds from its Clean Water State Revolving Fund loan program for mini-loan programs to be operated by the local agencies for the making of low interest loans to assist private property owners with complying with this Policy.

Tier 0 – Existing OWTS

Tier 0 – Existing OWTS

Existing OWTS that are properly functioning and do not meet the conditions of failing systems or otherwise require corrective action (for example, to prevent groundwater impairment) as specifically described in Tier 4, and are not determined to be contributing to an impairment of surface water as specifically described in Tier 3, are automatically included in Tier 0.

6.0 Coverage for Properly Operating Existing OWTS

- 6.1 Existing OWTS are automatically covered by Tier 0 and the herein included waiver of waste discharge requirements if they meet the following requirements:
 - 6.1.1 have a projected flow of 10,000 gallons-per-day or less;
 - 6.1.2 receive only domestic wastewater from residential or commercial buildings, or high-strength wastewater from commercial food service buildings that does not exceed 900 mg/L BOD and has a properly sized and functioning oil/grease interceptor (a.k.a. grease trap);
 - 6.1.3 continue to comply with any previously imposed permitting conditions;
 - 6.1.4 do not require supplemental treatment under Tier 3;
 - 6.1.5 do not require corrective action under Tier 4; and
 - 6.1.6 do not consist of a cesspool as a means of wastewater disposal.
- 6.2 A Regional Water Board or local agency may deny coverage under this Policy to any OWTS that is:
 - 6.2.1 Not in compliance with Section 6.1;
 - 6.2.2 Not able to adequately protect the water quality of the waters of the State, as determined by the Regional Water Board after considering any input from the local agency. A Regional Water Board may require the submission of a report of waste discharge to receive Region specific waste discharge requirements or waiver of waste discharge requirements so as to be protective.
- 6.3 Existing OWTS currently under waste discharge requirements or individual waiver of waste discharge requirements will remain under those orders until notified in writing by the appropriate Regional Water Board that they are covered under this Policy.

Tier 1 – Low Risk New or Replacement OWTS

Tier 1 – Low Risk New or Replacement OWTS

New or replacement OWTS meet low risk siting and design requirements as specified in Tier 1, where there is not an approved Local Agency Management Program per Tier 2.

7.0 Minimum Site Evaluation and Siting Standards

- 7.1 A qualified professional shall perform all necessary soil and site evaluations for all new OWTS and for existing OWTS where the treatment or dispersal system will be replaced or expanded.
- 7.2 A site evaluation shall determine that adequate soil depth is present in the dispersal area. Soil depth is measured vertically to the point where bedrock, hardpan, impermeable soils, or saturated soils are encountered or an adequate depth has been determined. Soil depth shall be determined through the use of soil profile(s) in the dispersal area and the designated dispersal system replacement area, as viewed in excavations exposing the soil profiles in representative areas, unless the local agency has determined through historical or regional information that a specific site soil profile evaluation is unwarranted.
- 7.3 A site evaluation shall determine whether the anticipated highest level of groundwater within the dispersal field and its required minimum dispersal zone is not less than prescribed in Table 2 by estimation using one or a combination of the following methods:
 - 7.3.1 Direct observation of the highest extent of soil mottling observed in the examination of soil profiles, recognizing that soil mottling is not always an indicator of the uppermost extent of high groundwater; or
 - 7.3.2 Direct observation of groundwater levels during the anticipated period of high groundwater. Methods for groundwater monitoring and determinations shall be decided by the local agency; or
 - 7.3.3 Other methods, such as historical records, acceptable to the local agency.
 - 7.3.4 Where a conflict in the above methods of examination exists, the direct observation method indicating the highest level shall govern.
- 7.4 Percolation test results in the effluent disposal area shall not be faster than one minute per inch (1 MPI) or slower than one hundred twenty minutes per inch (120 MPI). All percolation test rates shall be performed by presoaking of percolation test holes and continuing the test until a stabilized rate is achieved.
- 7.5 Minimum horizontal setbacks from any OWTS treatment component and dispersal systems shall be as follows:
 - 7.5.1 5 feet from parcel property lines and structures;
 - 7.5.2 100 feet from water wells and monitoring wells, unless regulatory or legitimate data requirements necessitate that monitoring wells be located closer;

Tier 1 – Low Risk New or Replacement OWTS

- 7.5.3 100 feet from any unstable land mass or any areas subject to earth slides identified by a registered engineer or registered geologist; other setback distance are allowed, if recommended by a geotechnical report prepared by a qualified professional.
- 7.5.4 100 feet from springs and flowing surface water bodies where the edge of that water body is the natural or levied bank for creeks and rivers, or may be less where site conditions prevent migration of wastewater to the water body;
- 7.5.5 200 feet from vernal pools, wetlands, lakes, ponds, or other surface water bodies where the edge of that water body is the high water mark for lakes and reservoirs, and the mean high tide line for tidally influenced water bodies;
- 7.5.6 150 feet from a public water well where the depth of the effluent dispersal system does not exceed 10 feet;
- 7.5.7 Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake point, within the catchment of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.
- 7.5.8 Where the effluent dispersal system is located more than 1,200 feet but less than 2,500 feet from a public water systems' surface water intake point, within the catchment of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.
- 7.6 Prior to issuing a permit to install an OWTS the permitting agency shall determine if the OWTS is within 1,200 feet of an intake point for a surface water treatment plant for drinking water, is in the drainage catchment in which the intake point is located, and located such that it may impact water quality at the intake point such as being upstream of the intake point for a flowing water body. If the OWTS is within 1,200 feet of an intake point for a surface water treatment plant for drinking water, is in the drainage catchment in which the intake point is located, and is located such that it may impact water quality at the intake point:
 - 7.6.1 The permitting agency shall provide a copy of the permit application to the owner of the water system of their proposal to install an OWTS within 1,200 feet of an intake point for a surface water treatment. If the owner of the water system cannot be identified, then the permitting agency will notify California Department of Public Health Drinking Water Program.
 - 7.6.2 The permit application shall include a topographical plot plan for the parcel showing the OWTS components, the property boundaries, proposed structures, physical address, and name of property owner.

Tier 1 – Low Risk New or Replacement OWTS

- 7.6.3 The permit application shall provide the estimated wastewater flows, intended use of proposed structure generating the wastewater, soil data, and estimated depth to seasonally saturated soils.
- 7.6.4 The public water system owner shall have 15 days from receipt of the permit application to provide recommendations and comments to the permitting agency.
- 7.7 Natural ground slope in all areas used for effluent disposal shall not be greater than 25 percent.
- 7.8 The average density for any subdivision of property made by Tentative Approval pursuant to the Subdivision Map Act occurring after the effective date of this Policy and implemented under Tier 1 shall not exceed the allowable density values in Table 1 for a single-family dwelling unit, or its equivalent, for those units that rely on OWTS.

Average Annual Rainfall (in/yr)	Allowable Density (acres/single family dwelling unit)
0 - 15	2.5
>15 - 20	2
>20 - 25	1.5
>25 - 35	1
>35 - 40	0.75
>40	0.5

8.0 Minimum OWTS Design and Construction Standards

8.1 OWTS Design Requirements

- 8.1.1 A qualified professional shall design all new OWTS and modifications to existing OWTS where the treatment or dispersal system will be replaced or expanded. A qualified professional employed by a local agency, while acting in that capacity, may design, review, and approve a design for a proposed OWTS, if authorized by the local agency.
- 8.1.2 OWTS shall be located, designed, and constructed in a manner to ensure that effluent does not surface at any time, and that percolation of effluent will not adversely affect beneficial uses of waters of the State.
- 8.1.3 The design of new and replacement OWTS shall be based on the expected influent wastewater quality with a projected flow not to exceed 3,500 gallons per day, the peak wastewater flow rates for purposes of sizing hydraulic components, the projected average daily flow for purposes of sizing the dispersal system, the characteristics of the site, and the required level of treatment for protection of water quality and public health.

Tier 1 – Low Risk New or Replacement OWTS

- 8.1.4 All dispersal systems shall have at least twelve (12) inches of soil cover, except for pressure distribution systems, which must have at least six (6) inches of soil cover.
- 8.1.5 The minimum depth to the anticipated highest level of groundwater below the bottom of the leaching trench, and the native soil depth immediately below the leaching trench, shall not be less than prescribed in Table 2.

Table 2: Tier 1 Minimum Depths to Groundwater and Minimum Soil Depth from the Bottom of the Dispersal System	
Percolation Rate	Minimum Depth
Percolation Rate \leq 1 MPI	Only as authorized in a Tier 2 Local Agency Management Program
1 MPI < Percolation Rate \leq 5 MPI	Twenty (20) feet
5 MPI < Percolation Rate \leq 30 MPI	Eight (8) feet
30 MPI < Percolation Rate \leq 120 MPI	Five (5) feet
Percolation Rate > 120 MPI	Only as authorized in a Tier 2 Local Agency Management Program
MPI = minutes per inch	

- 8.1.6 Dispersal systems shall be a leachfield, designed using not more than 4 square-feet of infiltrative area per linear foot of trench as the infiltrative surface, and with trench width no wider than 3 feet. Seepage pits and other dispersal systems may only be authorized for repairs where siting limitations require a variance. Maximum application rates shall be determined from stabilized percolation rate as provided in Table 3, or from soil texture and structure determination as provided in Table 4.
- 8.1.7 Dispersal systems shall not exceed a maximum depth of 10 feet as measured from the ground surface to the bottom of the trench.

Tier 1 – Low Risk New or Replacement OWTS

Table 3: Application Rates as Determined from Stabilized Percolation Rate							
Percolation Rate (minutes per Inch)	Application Rate (gallons per day per square foot)		Percolation Rate (minutes per Inch)	Application Rate (gallons per day per square foot)		Percolation Rate (minutes per Inch)	Application Rate (gallons per day per square foot)
<1	Requires Local Management Program		31	0.522		61	0.197
1	1.2		32	0.511		62	0.194
2	1.2		33	0.5		63	0.19
3	1.2		34	0.489		64	0.187
4	1.2		35	0.478		65	0.184
5	1.2		36	0.467		66	0.18
6	0.8		37	0.456		67	0.177
7	0.8		38	0.445		68	0.174
8	0.8		39	0.434		69	0.17
9	0.8		40	0.422		70	0.167
10	0.8		41	0.411		71	0.164
11	0.786		42	0.4		72	0.16
12	0.771		43	0.389		73	0.157
13	0.757		44	0.378		74	0.154
14	0.743		45	0.367		75	0.15
15	0.729		46	0.356		76	0.147
16	0.714		47	0.345		77	0.144
17	0.7		48	0.334		78	0.14
18	0.686		49	0.323		79	0.137
19	0.671		50	0.311		80	0.133
20	0.657		51	0.3		81	0.13
21	0.643		52	0.289		82	0.127
22	0.629		53	0.278		83	0.123
23	0.614		54	0.267		84	0.12
24	0.6		55	0.256		85	0.117
25	0.589		56	0.245		86	0.113
26	0.578		57	0.234		87	0.11
27	0.567		58	0.223		88	0.107
28	0.556		59	0.212		89	0.103
29	0.545		60	0.2		90	0.1
30	0.533					>90 - 120	0.1

Tier 1 – Low Risk New or Replacement OWTS

Table 4: Design Soil Application Rates			
(Source: USEPA Onsite Wastewater Treatment Systems Manual, February 2002)			
Soil Texture (per the USDA soil classification system)	Soil Structure Shape	Grade	Maximum Soil Application Rate(gallons per day per square foot)¹
Coarse Sand, Sand, Loamy Coarse Sand, Loamy Sand	Single grain	Structureless	0.8
Fine Sand, Very Fine Sand, Loamy Fine Sand, Loamy Very Fine Sand	Single grain	Structureless	0.4
Coarse Sandy Loam, Sandy Loam	Massive	Structureless	0.2
	Platy	Weak	0.2
		Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
Moderate, Strong		0.6	
Fine Sandy Loam, very fine Sandy Loam	Massive	Structureless	0.2
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.2
		Moderate, Strong	0.4
Loam	Massive	Structureless	0.2
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Silt Loam	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Sandy Clay Loam, Clay Loam, Silty Clay Loam	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.2
		Moderate, Strong	0.4
Sandy Clay, Clay, or Silty Clay	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	Prohibited
		Moderate, Strong	0.2

¹ Soils listed as prohibited may be allowed under the authority of the Regional Water Board, or as allowed under an approved Local Agency Management Program per Tier 2.

Tier 1 – Low Risk New or Replacement OWTS

- 8.1.8 All new dispersal systems shall have 100 percent replacement area that is equivalent and separate, and available for future use.
- 8.1.9 No dispersal systems or replacement areas shall be covered by an impermeable surface, such as paving, building foundation slabs, plastic sheeting, or any other material that prevents oxygen transfer to the soil.
- 8.1.10 Rock fragment content of native soil surrounding the dispersal system shall not exceed 50 percent by volume for rock fragments sized as cobbles or larger and shall be estimated using either the point-count or line-intercept methods.
- 8.1.11 Increased allowance for IAPMO certified dispersal systems is not allowed under Tier 1.

8.2 OWTS Construction and Installation

- 8.2.1 All new or replacement septic tanks and new or replacement oil/grease interceptor tanks shall comply with the standards contained in Sections K5(b), K5(c), K5(d), K5(e), K5(k), K5(m)(1), and K5(m)(3)(ii) of Appendix K, of Part 5, Title 24 of the 2007 California Code of Regulations.
- 8.2.2 All new septic tanks shall comply with the following requirements:
 - 8.2.2.1 Access openings shall have watertight risers, the tops of which shall be set at most 6 inches below finished grade; and
 - 8.2.2.2 Access openings at grade or above shall be locked or secured to prevent unauthorized access.
- 8.2.3 New and replacement OWTS septic tanks shall be limited to those approved by the International Association of Plumbing and Mechanical Officials (IAPMO) or stamped and certified by a California registered civil engineer as meeting the industry standards, and their installation shall be according to the manufacturer's instructions.
- 8.2.4 New and replacement OWTS septic tanks shall be designed to prevent solids in excess of three-sixteenths (3/16) of an inch in diameter from passing to the dispersal system. 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 in compliance with this requirement.

Tier 1 – Low Risk New or Replacement OWTS

- 8.2.5 A Licensed General Engineering Contractor (Class A), General Building Contractor (Class B), Sanitation System Contractor (Specialty Class C-42), or Plumbing Contractor (Specialty Class C-36) shall install all new OWTS and replacement OWTS in accordance with California Business and Professions Code Sections 7056, 7057, and 7058 and Article 3, Division 8, Title 16 of the California Code of Regulations. A property owner may also install his/her own OWTS if the as-built diagram and the installation are inspected and approved by the Regional Water Board or local agency at a time when the OWTS is in an open condition (not covered by soil and exposed for inspection).

Tier 2 – Local Agency OWTS Management Program

Tier 2 – Local Agency OWTS Management Program

Local agencies may submit management programs for approval, and upon approval then manage the installation of new and replacement OWTS under that program. Local Agency Management Programs approved under Tier 2 provide an alternate method from Tier 1 programs to achieve the same policy purpose, which is to protect water quality and public health. In order to address local conditions, Local Agency Management Programs may include standards that differ from the Tier 1 requirements for new and replacement OWTS contained in Sections 7 and 8. As examples, a Local Agency Management Program may authorize different soil characteristics, usage of seepage pits, and different densities for new developments. Once the Local Agency Management Program is approved, new and replacement OWTS that are included within the Local Agency Management Program may be approved by the Local Agency. A Local Agency, at its discretion, may include Tier 1 standards within its Tier 2 Local Agency Management Program for some or all of its jurisdiction. However, once a Local Agency Management Program is approved, it shall supersede Tier 1 and all future OWTS decisions will be governed by the Tier 2 Local Agency Management Program until it is modified, withdrawn, or revoked.

9.0 Local Agency Management Program for Minimum OWTS Standards

The Local Agency Management Program for minimum OWTS Standards is a management program where local agencies can establish minimum standards that are differing requirements from those specified in Tier 1 (Section 7 and Section 8), including the areas that do not meet those minimum standards and still achieve this Policy's purpose. Local Agency Management Programs may include any one or combination of the following to achieve this purpose:

- Differing system design requirements;
- Differing siting controls such as system density and setback requirements;
- Requirements for owners to enter monitoring and maintenance agreements; and/or
- Creation of an onsite management district or zone.

9.1 Where different and/or additional requirements are needed to protect water quality the local agency shall consider the following, as well as any other conditions deemed appropriate, when developing Local Agency Management Program requirements:

- 9.1.1 Degree of vulnerability to pollution from OWTS due to hydrogeological conditions.
- 9.1.2 High Quality waters or other environmental conditions requiring enhanced protection from the effects of OWTS.
- 9.1.3 Shallow soils requiring a dispersal system installation that is closer to ground surface than is standard.
- 9.1.4 OWTS is located in area with high domestic well usage.

Tier 2 – Local Agency OWTS Management Program

- 9.1.5 Dispersal system is located in an area with fractured bedrock.
 - 9.1.6 Dispersal system is located in an area with poorly drained soils.
 - 9.1.7 Surface water is vulnerable to pollution from OWTS.
 - 9.1.8 Surface water within the watershed is listed as impaired for nitrogen or pathogens.
 - 9.1.9 OWTS is located within an area of high OWTS density.
 - 9.1.10 A parcel's size and its susceptibility to hydraulic mounding, organic or nitrogen loading, and whether there is sufficient area for OWTS expansion in case of failure.
 - 9.1.11 Geographic areas that are known to have multiple, existing OWTS predating any adopted standards of design and construction including cesspools.
 - 9.1.12 Geographic areas that are known to have multiple, existing OWTS located within either the pertinent setbacks listed in Section 7.5 of this Policy, or a setback that the local agencies finds is appropriate for that area.
- 9.2 The Local Agency Management Program shall detail the scope of its coverage, such as the maximum authorized projected flows for OWTS, as well as a clear delineation of those types of OWTS included within and to be permitted by the program, and provide the local site evaluation, siting, design, and construction requirements, and in addition each of the following:
- 9.2.1 Any local agency requirements for onsite wastewater system inspection, monitoring, maintenance, and repairs, including procedures to ensure that replacements or repairs to failing systems are done under permit from the local governing jurisdiction.
 - 9.2.2 Any special provisions applicable to OWTS within specified geographic areas near specific impaired water bodies listed for pathogens or nitrogen. The special provisions may be substantive and/or procedural, and may include, as examples: consultation with the Regional Water Board prior to issuing permits, supplemental treatment, development of a management district or zone, special siting requirements, additional inspection and monitoring.
 - 9.2.3 Local Agency Management Program variances, for new installations and repairs in substantial conformance, to the greatest extent practicable. Variances are not allowed for the requirements stated in sections 9.4.1 through 9.4.9.
 - 9.2.4 Any educational, training, certification, and/or licensing requirements that will be required of OWTS service providers, site evaluators, designers, installers, pumpers, maintenance contractors, and any other person relating to OWTS activities.
 - 9.2.5 Education and/or outreach program including informational materials to inform OWTS owners about how to locate, operate, and maintain their

Tier 2 – Local Agency OWTS Management Program

OWTS as well as any Water Board order (e.g., Basin Plan prohibitions) regarding OWTS restrictions within its jurisdiction. The education and/or outreach program shall also include procedures to ensure that alternative onsite system owners are provided an informational maintenance or replacement document by the system designer or installer. This document shall cite homeowner procedures to ensure maintenance, repair, or replacement of critical items within 48 hours following failure. If volunteer well monitoring programs are available within the local agency's jurisdiction, the outreach program shall include information on how well owners may participate.

- 9.2.6 An assessment of existing and proposed disposal locations for septage, the volume of septage anticipated, and whether adequate capacity is available.
 - 9.2.7 Any consideration given to onsite maintenance districts or zones.
 - 9.2.8 Any consideration given to the development and implementation of, or coordination with, Regional Salt and Nutrient Management Plans.
 - 9.2.9 Any consideration given to coordination with watershed management groups.
 - 9.2.10 Procedures for evaluating the proximity of sewer systems to new or replacement OWTS installations.
 - 9.2.11 Procedures for notifying the owner of a public water system prior to issuing an installation or repair permit for an OWTS, if the OWTS is within 1,200 feet of an intake point for a surface water treatment plant for drinking water, is in the drainage area catchment in which the intake point is located, and is located such that it may impact water quality at the intake point such as upstream of the intake point for a flowing water body, or if the OWTS is within a horizontal sanitary setback from a public well.
 - 9.2.12 Policies and procedures that will be followed when a proposed OWTS dispersal area is within the horizontal sanitary setback of a public well or a surface water intake point. These policies and procedures shall either indicate that supplemental treatment as specified in 10.9 and 10.10 of this policy are required for OWTS that are within a horizontal sanitary setback of a public well or surface water intake point, or will establish alternate siting and operational criteria for the proposed OWTS that would similarly mitigate the potential adverse impact to the public water source.
 - 9.2.13 Any plans for the phase-out or discontinuance of cesspool usage.
- 9.3 The minimum responsibilities of the local agency for management of the Local Agency Management Program include:
- 9.3.1 Maintain records of the number, location, and description of permits issued for OWTS where a variance is granted.

Tier 2 – Local Agency OWTS Management Program

- 9.3.2 Maintain a water quality assessment program to determine the general operation status of OWTS and to evaluate the impact of OWTS discharges, and assess the extent to which groundwater and local surface water quality may be adversely impacted. The focus of the assessment should be areas with characteristics listed under section 9.1. The assessment program will include monitoring and analysis of water quality data, review of complaints, variances, failures, and any information resulting from inspections. The assessment may use existing water quality data from other monitoring programs and/or establish the terms, conditions, and timing for monitoring done by the local agency. At a minimum this assessment will include monitoring data for nitrates and pathogens, and may include data for other constituents which are needed to adequately characterize the impacts of OWTS on water quality. Other monitoring programs for which data may be used include but are not limited to any of the following:
- 9.3.2.1. Random well samples from a domestic well sampling program.
 - 9.3.2.2. Routine real estate transfer samples if those are performed and reported.
 - 9.3.2.3. Review of public system sampling reports done by the local agency or another municipality responsible for the public system.
 - 9.3.2.4. Water quality testing reports done at the time of new well development if those are reported.
 - 9.3.2.5. Beach water quality testing data performed as part of Health and Safety Code Section 115885.
 - 9.3.2.6. Receiving water sampling performed as a part of a NPDES permit.
 - 9.3.2.7. Data contained in the California Water Quality Assessment Database.
 - 9.3.2.8. Groundwater sampling performed as part of Waste Discharge Requirements.
 - 9.3.2.9. Groundwater data collected as part of the Groundwater Ambient Monitoring and Assessment Program and available in the Geotracker Database.
- 9.3.3 Submit an annual report by February 1 to the applicable Regional Water Board summarizing the status of items 9.3.1 through 9.3.2 above. Every fifth year, submit an evaluation of the monitoring program and an assessment of whether water quality is being impacted by OWTS, identifying any changes in the Local Agency Management Program that will be undertaken to address impacts from OWTS. The first report will commence one year after approval of the local agency's Local Agency Management Program. In addition to summarizing monitoring data collected per 9.3.2 above, all groundwater monitoring data generated by the local agency shall be submitted in EDF format for inclusion into

Tier 2 – Local Agency OWTS Management Program

Geotracker, and surface water monitoring shall be submitted to CEDEN in a SWAMP comparable format.

- 9.4 The following are not allowed to be authorized in a Local Agency Management Program:
- 9.4.1 Cesspools of any kind or size.
 - 9.4.2 OWTS receiving a projected flow over 10,000 gallons per day.
 - 9.4.3 OWTS that utilize any form of effluent disposal that discharges on or above the post installation ground surface such as sprinklers, exposed drip lines, free-surface wetlands, or a pond.
 - 9.4.4 Slopes greater than 30 percent without a slope stability report approved by a registered professional.
 - 9.4.5 Decreased leaching area for IAPMO certified dispersal systems using a multiplier less than 0.70.
 - 9.4.6 OWTS utilizing supplemental treatment without requirements for periodic monitoring or inspections.
 - 9.4.7 OWTS dedicated to receiving significant amounts of wastes dumped from RV holding tanks.
 - 9.4.8 Separation of the bottom of dispersal system to groundwater less than two (2) feet, except for seepage pits, which shall not be less than 10 feet.
 - 9.4.9 Installation of new or replacement OWTS where public sewer is available. The public sewer may be considered as not available when such public sewer or any building or exterior drainage facility connected thereto is located more than 200 feet from any proposed building or exterior drainage facility on any lot or premises that abuts and is served by such public sewer. This provision does not apply to replacement OWTS where the connection fees and construction cost are greater than twice the total cost of the replacement OWTS and the local agency determines that the discharge from the OWTS will not affect groundwater or surface water to a degree that makes it unfit for drinking or other uses.
 - 9.4.10 Except as provided for in sections 9.4.11 and 9.4.12, new or replacement OWTS with minimum horizontal setbacks less than any of the following:
 - 9.4.10.1 150 feet from a public water well where the depth of the effluent dispersal system does not exceed 10 feet in depth.
 - 9.4.10.2 200 feet from a public water well where the depth of the effluent dispersal system exceeds 10 feet in depth.
 - 9.4.10.3 Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth the horizontal setback required to achieve a two-year travel time for microbiological contaminants shall be evaluated. A qualified professional shall conduct this evaluation. However in no case shall the setback be less than 200 feet.

Tier 2 – Local Agency OWTS Management Program

- 9.4.10.4 Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake point, within the catchment of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.
- 9.4.10.5 Where the effluent dispersal system is located more than 1,200 feet but less than 2,500 feet from a public water systems' surface water intake point, within the catchment area of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.
- 9.4.11 For replacement OWTS that do not meet the above horizontal separation requirements, the replacement OWTS shall meet the horizontal separation to the greatest extent practicable. In such case, the replacement OWTS shall utilize supplemental treatment and other mitigation measures, unless the permitting authority finds that there is no indication that the previous system is adversely affecting the public water source, and there is limited potential that the replacement system could impact the water source based on topography, soil depth, soil texture, and groundwater separation.
- 9.4.12 For new OWTS, installed on parcels of record existing at the time of the effective date of this Policy, that cannot meet the above horizontal separation requirements, the OWTS shall meet the horizontal separation to the greatest extent practicable and shall utilize supplemental treatment for pathogens as specified in section 10.8 and any other mitigation measures prescribed by the permitting authority.
- 9.5 A Local Agency Management Program for OWTS must include adequate detail, including technical information to support how all the criteria in their program work together to protect water quality and public health.
- 9.6 A Regional Water Board reviewing a Local Agency Management Program shall consider, among other things, the past performance of the local program to adequately protect water quality, and where this has been achieved with criteria differing from Tier 1, shall not unnecessarily require modifications to the program for purposes of uniformity, as long as the Local Agency Management Program meets the requirements of Tier 2.

Tier 3 – Impaired Areas

Tier 3 – Advanced Protection Management Programs for Impaired Areas

Existing, new, and replacement OWTS that are near impaired water bodies may be addressed by a TMDL and its implementation program, or special provisions contained in a Local Agency Management Program. If there is no TMDL or special provisions, new or replacement OWTS within 600 feet of impaired water bodies listed in Attachment 2 must meet the applicable specific requirements of Tier 3.

10.0 Advanced Protection Management Program

An Advanced Protection Management Program is the minimum required management program for all OWTS located near a water body that has been listed as impaired due to nitrogen or pathogen indicators pursuant to Section 303(d) of the Clean Water Act. Local agencies are authorized to implement Advanced Protection Management Programs in conjunction with an approved Local Agency Management Program or, if there is no approved Local Agency Management Program, Tier 1. Local agencies are encouraged to collaborate with the Regional Water Boards by sharing any information pertaining to the impairment, provide advice on potential remedies, and regulate OWTS to the extent that their authority allows for the improvement of the impairment.

10.1 The geographic area for each water body's Advanced Protection Management Program is defined by the applicable TMDL, if one has been approved. If there is not an approved TMDL, it is defined by an approved Local Agency Management Program, if it contains special provisions for that water body. If it is not defined in an approved TMDL or Local Agency Management Program, it shall be 600 linear feet [in the horizontal (map) direction] of a water body listed in Attachment 2 where the edge of that water body is the natural or levied bank for creeks and rivers, the high water mark for lakes and reservoirs, and the mean high tide line for tidally influenced water bodies, as appropriate. OWTS near impaired water bodies that are not listed on Attachment 2, and do not have a TMDL and are not covered by a Local Agency Management Program with special provisions, are not addressed by Tier 3.

10.2 The requirements of an Advanced Protection Management Program will be in accordance with a TMDL implementation plan, if one has been adopted to address the impairment. An adopted TMDL implementation plan supersedes all other requirements in Tier 3. All TMDL implementation plans adopted after the effective date of this Policy that contain load allocations for OWTS shall include a schedule that requires compliance with the load allocations as soon as practicable, given the watershed-specific circumstances. The schedule shall require that OWTS implementation actions for OWTS installed prior to the TMDL implementation plan's effective date shall commence within 3 years after the TMDL implementation plan's effective date, and that OWTS implementation actions for OWTS installed after the TMDL implementation plan's effective date shall commence immediately. The TMDL implementation plan may use some or all of the Tier 3 requirements and shall establish the applicable area of

Tier 3 – Impaired Areas

implementation for OWTS requirements within the watershed. For those impaired water bodies that do have an adopted TMDL addressing the impairment, but the TMDL does not assign a load allocation to OWTS, no further action is required unless the TMDL is modified at some point in the future to include actions for OWTS. Existing, new, and replacement OWTS that are near impaired water bodies and are covered by a Basin Plan prohibition must also comply with the terms of the prohibition, as provided in Section 2.1.

- 10.3 In the absence of an adopted TMDL implementation plan, the requirements of an Advanced Protection Management Program will consist of any special provisions for the water body if any such provisions have been approved as part of a Local Agency Management Program.
- 10.4 The Regional Water Boards shall adopt TMDLs for impaired water bodies identified in Attachment 2, in accordance with the specified dates.
 - 10.4.1 If a Regional Water Board does not complete a TMDL within two years of the time period specified in Attachment 2, coverage under this Policy's waiver of waste discharge requirements shall expire for any OWTS that has any part of its dispersal system discharging within the geographic area of an Advanced Protection Management Program. The Regional Water Board shall issue waste discharge requirements, general waste discharge requirements, waivers of waste discharge requirements, or require corrective action for such OWTS. The Regional Water Board will consider the following when establishing the waste discharge requirements, general waste discharge requirements, waivers of waste discharge requirements, or requirement for corrective action:
 - 10.4.1.1 Whether supplemental treatment should be required.
 - 10.4.1.2 Whether routine inspection of the OWTS should be required.
 - 10.4.1.3 Whether monitoring of surface and groundwater should be performed.
 - 10.4.1.4 The collection of a fee for those OWTS covered by the order.
 - 10.4.1.5 Whether owners of previously-constructed OWTS should file a report by a qualified professional in accordance with section 10.5.
 - 10.4.1.6 Whether owners of new or replacement OWTS should file a report of waste discharge with additional supporting technical information as required by the Regional Water Board.
- 10.5 If the Regional Water Board requires owners of OWTS to submit a qualified professional's report pursuant to Section 10.4.1.5, the report shall include a determination of whether the OWTS is functioning properly and as designed or requires corrective actions per Tier 4, and regardless of its state of function, whether it is contributing to impairment of the water body.
 - 10.5.1 The qualified professional's report may also include, but is not limited to:

Tier 3 – Impaired Areas

- 10.5.1.1 A general description of system components, their physical layout, and horizontal setback distances from property lines, buildings, wells, and surface waters.
 - 10.5.1.2 A description of the type of wastewater discharged to the OWTS such as domestic, commercial, or industrial and classification of it as domestic wastewater or high-strength waste.
 - 10.5.1.3 A determination of the systems design flow and the volume of wastewater discharged daily derived from water use, either estimated or actual if metered.
 - 10.5.1.4 A description of the septic tank, including age, size, material of construction, internal and external condition, water level, scum layer thickness, depth of solids, and the results of a one-hour hydrostatic test.
 - 10.5.1.5 A description of the distribution box, dosing siphon, or distribution pump, and if flow is being equally distributed throughout the dispersal system, as well as any evidence of solids carryover, clear water infiltration, or evidence of system backup.
 - 10.5.1.6 A description of the dispersal system including signs of hydraulic failure, condition of surface vegetation over the dispersal system, level of ponding above the infiltrative surface within the dispersal system, other possible sources of hydraulic loading to the dispersal area, and depth of the seasonally high groundwater level.
 - 10.5.1.7 A determination of whether the OWTS is discharging to the ground's surface.
 - 10.5.1.8 For a water body listed as an impaired water body for pathogens, a determination of the OWTS dispersal system's separation from its deepest most infiltrative surface to the highest seasonal groundwater level or fractured bedrock.
 - 10.5.1.9 For a water body listed as an impaired water body for nitrogen, a determination of whether the groundwater under the dispersal field is reaching the water body, and a description of the method used to make the determination.
- 10.6 For new, replacement, and existing OWTS in an Advanced Protection Management Program, the following are not covered by this Policy's waiver but may be authorized by a separate Regional Water Board order:
- 10.6.1 Cesspools of any kind or size.
 - 10.6.2 OWTS receiving a projected flow over 10,000 gallons per day.
 - 10.6.3 OWTS that utilize any form of effluent disposal on or above the ground surface.
 - 10.6.4 Slopes greater than 30 percent without a slope stability report approved by a registered professional.

Tier 3 – Impaired Areas

- 10.6.5 Decreased leaching area for IAPMO certified dispersal systems using a multiplier less than 0.70.
- 10.6.6 OWTS utilizing supplemental treatment without requirements for periodic monitoring or inspections.
- 10.6.7 OWTS dedicated to receiving significant amounts of wastes dumped from RV holding tanks.
- 10.6.8 Separation of the bottom of dispersal system to groundwater less than two (2) feet, except for seepage pits, which shall not be less than 10 feet.
- 10.6.9 Minimum horizontal setbacks less than any of the following:
 - 10.6.9.1 150 feet from a public water well where the depth of the effluent dispersal system does not exceed 10 feet in depth;
 - 10.6.9.2 200 feet from a public water well where the depth of the effluent dispersal system exceeds 10 feet in depth:
 - 10.6.9.3 Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth the horizontal setback required to achieve a two-year travel time for microbiological contaminants shall be evaluated. A qualified professional shall conduct this evaluation. However in no case shall the setback be less than 200 feet.
 - 10.6.9.4 Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake point, within the catchment of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.
 - 10.6.9.5 Where the effluent dispersal system is located more than 1,200 feet but less than 2,500 feet from a public water systems' surface water intake point, within the catchment of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.
 - 10.6.9.6 For replacement OWTS that do not meet the above horizontal separation requirements, the replacement OWTS shall meet the horizontal separation to the greatest extent practicable. In such case, the replacement OWTS shall utilize supplemental treatment and other mitigation measures.
 - 10.6.9.7 For new OWTS, installed on parcels of record existing at the time of the effective date of this Policy, that cannot meet the above horizontal separation requirements, the OWTS shall meet the horizontal separation to the greatest extent practicable and shall

Tier 3 – Impaired Areas

utilize supplemental treatment for pathogens as specified in section 10.10 and any other mitigation measures as prescribed by the permitting authority.

10.7 The requirements contained in Section 10 shall not apply to owners of OWTS that are constructed and operating, or permitted, on or prior to the date that the nearby water body is added to Attachment 2 who commit by way of a legally binding document to connect to a centralized wastewater collection and treatment system regulated through WDRs as specified within the following timeframes:

10.7.1 The owner must sign the document within forty-eight months of the date that the nearby water body is initially listed on Attachment 2.

10.7.2 The specified date for the connection to the centralized community wastewater collection and treatment system shall not extend beyond nine years following the date that the nearby water body is added to Attachment 2.

10.8 In the absence of an adopted TMDL implementation plan or Local Agency Management Program containing special provisions for the water body, all new or replacement OWTS permitted after the date that the water body is initially listed in Attachment 2 that have any discharge within the geographic area of an Advanced Protection Management Program shall meet the following requirements:

10.8.1 Utilize supplemental treatment and meet performance requirements in 10.9 if impaired for nitrogen and 10.10 if impaired for pathogens,

10.8.2 Comply with the setback requirements of Section 7.5.1 to 7.5.5, and

10.8.3 Comply with any applicable Local Agency Management Program requirements.

10.9 Supplemental treatment requirements for nitrogen

10.9.1 Effluent from the supplemental treatment components designed to reduce nitrogen shall be certified by NSF, or other approved third party tester, to meet a 50 percent reduction in total nitrogen when comparing the 30-day average influent to the 30-day average effluent.

10.9.2 Where a drip-line dispersal system is used to enhance vegetative nitrogen uptake, the dispersal system shall have at least six (6) inches of soil cover.

Tier 3 – Impaired Areas

- 10.10 Supplemental treatment requirements for pathogens
- 10.10.1 Supplemental treatment components designed to perform disinfection shall provide sufficient pretreatment of the wastewater so that effluent from the supplemental treatment components does not exceed a 30-day average TSS of 30 mg/L and shall further achieve an effluent fecal coliform bacteria concentration less than or equal to 200 Most Probable Number (MPN) per 100 milliliters.
- 10.10.2 The minimum soil depth and the minimum depth to the anticipated highest level of groundwater below the bottom of the dispersal system shall not be less than three (3) feet. All dispersal systems shall have at least twelve (12) inches of soil cover.
- 10.11 OWTS in an Advanced Protection Management Program with supplemental treatment shall be designed to meet the applicable performance requirements above and shall be stamped or approved by a Qualified Professional.
- 10.12 Prior to the installation of any proprietary treatment OWTS in an Advanced Protection Management Program, all such treatment components shall be tested by an independent third party testing laboratory.
- 10.13 The ongoing monitoring of OWTS in an Advanced Protection Management Program with supplemental treatment components designed to meet the performance requirements in Sections 10.9 and 10.10 shall be monitored in accordance with the operation and maintenance manual for the OWTS or more frequently as required by the local agency or Regional Water Board.
- 10.14 OWTS in an Advanced Protection Management Program with supplemental treatment components shall be equipped with a visual or audible alarm as well as a telemetric alarm that alerts the owner and service provider in the event of system malfunction. Where telemetry is not possible, the owner or owner's agent shall inspect the system at least monthly while the system is in use as directed and instructed by a service provider and notify the service provider not less than quarterly of the observed operating parameters of the OWTS.
- 10.15 OWTS in an Advanced Protection Management Program designed to meet the disinfection requirements in Section 10.10 shall be inspected for proper operation quarterly while the system is in use by a service provider unless a telemetric monitoring system is capable of continuously assessing the operation of the disinfection system. Testing of the wastewater flowing from supplemental treatment components that perform disinfection shall be sampled at a point in the system after the treatment components and prior to the dispersal system and shall be conducted quarterly based on analysis of total coliform with a minimum detection limit of 2.2 MPN. All effluent samples must include the geographic coordinates of the sample's location. Effluent samples shall be taken by a service provider and analyzed by a California Department of Public Health certified laboratory.

Tier 3 – Impaired Areas

- 10.16 The minimum responsibilities of a local agency administering an Advanced Protection Management Program include those prescribed for the Local Agency Management Programs in Section 9.3 of this policy, as well as monitoring owner compliance with Sections 10.13, 10.14, and 10.15.

Tier 4 – OWTS Requiring Corrective Action

Tier 4 – OWTS Requiring Corrective Action

OWTS that require corrective action or are either presently failing or fail at any time while this Policy is in effect are automatically included in Tier 4 and must follow the requirements as specified. OWTS included in Tier 4 must continue to meet applicable requirements of Tier 0, 1, 2 or 3 pending completion of corrective action.

11.0 Corrective Action for OWTS

- 11.1 Any OWTS that has pooling effluent, discharges wastewater to the surface, or has wastewater backed up into plumbing fixtures, because its dispersal system is no longer adequately percolating the wastewater is deemed to be failing, no longer meeting its primary purpose to protect public health, and requires major repair, and as such the dispersal system must be replaced, repaired, or modified so as to return to proper function and comply with Tier 1, 2, or 3 as appropriate.
- 11.2 Any OWTS septic tank failure, such as a baffle failure or tank structural integrity failure such that either wastewater is exfiltrating or groundwater is infiltrating is deemed to be failing, no longer meeting its primary purpose to protect public health, and requires major repair, and as such shall require the septic tank to be brought into compliance with the requirements of Section 8 in Tier 1 or a Local Agency Management Program per Tier 2.
- 11.3 Any OWTS that has a failure of one of its components other than those covered by 11.1 and 11.2 above, such as a distribution box or broken piping connection, shall have that component repaired so as to return the OWTS to a proper functioning condition and return to Tier 0, 1, 2, or 3.
- 11.4 Any OWTS that has affected, or will affect, groundwater or surface water to a degree that makes it unfit for drinking or other uses, or is causing a human health or other public nuisance condition shall be modified or upgraded so as to abate its impact.
- 11.5 If the owner of the OWTS is not able to comply with corrective action requirements of this section, the Regional Water Board may authorize repairs that are in substantial conformance, to the greatest extent practicable, with Tiers 1 or 3, or may require the owner of the OWTS to submit a report of waste discharge for evaluation on a case-by-case basis. Regional Water Board response to such reports of waste discharge may include, but is not limited to, enrollment in general waste discharge requirements, issuance of individual waste discharge requirements, or issuance of waiver of waste discharge requirements. A local agency may authorize repairs that are in substantial conformance, to the greatest extent practicable, with Tier 2 in accordance with section 9.2.3 if there is an approved Local Agency Management Program, or with an existing program if a Local Agency Management Program has not been approved and it is less than 5 years from the effective date of the Policy.

Tier 4 – OWTS Requiring Corrective Action

- 11.6 Owners of OWTS will address any corrective action requirement of Tier 4 as soon as is reasonably possible, and must comply with the time schedule of any corrective action notice received from a local agency or Regional Water Board, to retain coverage under this Policy.
- 11.7 Failure to meet the requirements of Tier 4 constitute a failure to meet the conditions of the waiver of waste discharge requirements contained in this Policy, and is subject to further enforcement action.

Waiver – Effective Date – Financial Assistance

Conditional Waiver of Waste Discharge Requirements

- 12.0 In accordance with Water Code section 13269, the State Water Board hereby waives the requirements to submit a report of waste discharge, obtain waste discharge requirements, and pay fees for discharges from OWTS covered by this Policy. Owners of OWTS covered by this Policy shall comply with the following conditions:
- 12.0.1 The OWTS shall function as designed with no surfacing effluent.
 - 12.0.2 The OWTS shall not utilize a dispersal system that is in soil saturated with groundwater.
 - 12.0.3 The OWTS shall not be operated while inundated by a storm or flood event.
 - 12.0.4 The OWTS shall not cause or contribute to a condition of nuisance or pollution.
 - 12.0.5 The OWTS shall comply with all applicable local agency codes, ordinances, and requirements.
 - 12.0.6 The OWTS shall comply with and meet any applicable TMDL implementation requirements, special provisions for impaired water bodies, or supplemental treatment requirements imposed by Tier 3.
 - 12.0.7 The OWTS shall comply with any corrective action requirements of Tier 4.
- 12.1 This waiver may be revoked by the State Water Board or the applicable Regional Water Board for any discharge from an OWTS, or from a category of OWTS.

Effective Date

- 13.0 This Policy becomes effective six months after its approval by the Office of Administrative Law, and all deadlines and compliance dates stated herein start at such time.

Waiver – Effective Date – Financial Assistance

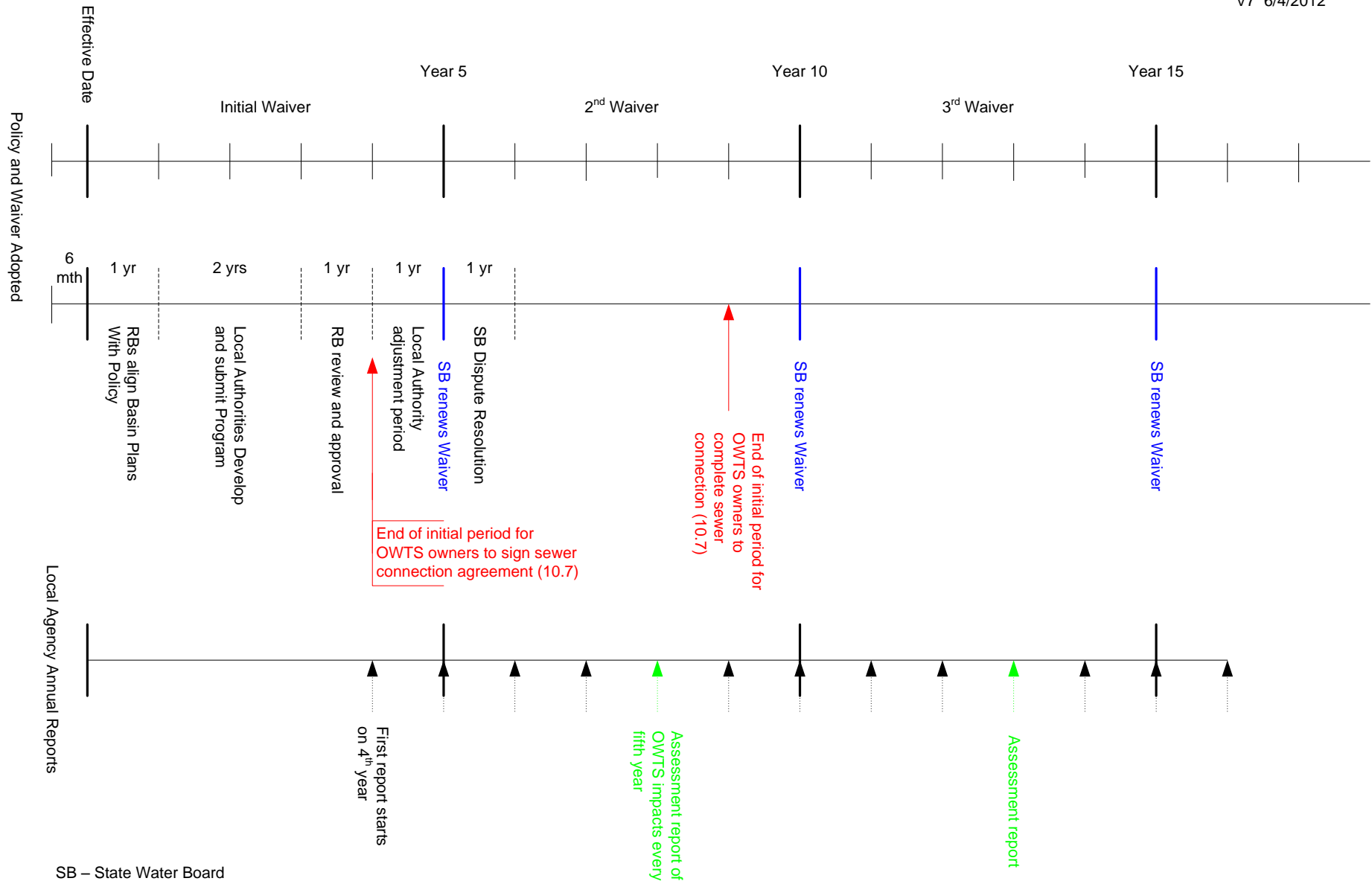
Financial Assistance

- 14.0 Local Agencies may apply to the State Water Board for funds from the Clean Water State Revolving Fund for use in mini-loan programs that provide low interest loan assistance to private property owners with costs associated with complying with this Policy.
 - 14.1 Loan interest rates for loans to local agencies will be set by the State Water Board using its policies, procedures, and strategies for implementing the Clean Water State Revolving Fund program, but will typically be one-half of the States most recent General Obligation bond sale. Historically interest rates have ranged between 2.0 and 3.0 percent.
 - 14.2 Local agencies may add additional interest points to their loans made to private entities to cover their costs of administering the mini-loan program.
 - 14.3 Local agencies may submit their suggested loan eligibility criteria for the min-loan program they wish to establish to the State Water Board for approval, but should consider the legislative intent stated in Water Code Section 13291.5 is that assistance is encouraged for private property owners whose cost of complying with the requirements of this policy exceeds one-half of one percent of the current assessed value of the property on which the OWTS is located.

Attachment 1

OWTS Policy Time Lines

V7 6/4/2012



Attachment 2

The tables below specifically identify those impaired water bodies where: (1) it is likely that operating OWTS will subsequently be determined to be a contributing source of pathogens or nitrogen and therefore it is anticipated that OWTS would receive a loading reduction, and (2) it is likely that new OWTS installations discharging within 600 feet of the water body would contribute to the impairment. Per this Policy (Tier 3, Section 10) the Regional Water Boards must adopt a TMDL by the date specified in the table. The State Water Board, at the time of approving future 303 (d) Lists, will specifically identify those impaired water bodies that are to be added or removed from the tables below.

Table 5. Water Bodies impaired for pathogens that are subject to Tier 3 as of 2012.

REGION NO	REGION NAME	WATERBODY NAME	COUNTIES	TMDL Completion Date
1	North Coast	Clam Beach	Humboldt	2020
1	North Coast	Luffenholtz Beach	Humboldt	2020
1	North Coast	Moonstone County Park	Humboldt	2020
1	North Coast	Russian River HU, Lower Russian River HA, Guerneville HSA, mainstem Russian River from Fife Creek to Dutch Bill Creek	Sonoma	2016
1	North Coast	Russian River HU, Lower Russian River HA, Guerneville HSA, Green Valley Creek watershed	Sonoma	2016
1	North Coast	Russian River HU, Middle Russian River HA, Geyserville HSA, mainstem Russian River at Healdsburg Memorial Beach and unnamed tributary at Fitch Mountain	Sonoma	2016
1	North Coast	Russian River HU, Middle Russian River HA, mainstem Laguna de Santa Rosa	Sonoma	2016
1	North Coast	Russian River HU, Middle Russian River HA, mainstem Santa Rosa Creek	Sonoma	2016
1	North Coast	Trinidad State Beach	Humboldt	2020
2	San Francisco Bay	China Camp Beach	Marin	2014
2	San Francisco Bay	Lawsons Landing	Marin	2015
2	San Francisco Bay	Pacific Ocean at Bolinas Beach	Marin	2014

Attachment 2

REGION NO	REGION NAME	WATERBODY NAME	COUNTIES	TMDL Completion Date
2	San Francisco Bay	Pacific Ocean at Fitzgerald Marine Reserve	San Mateo	2016
2	San Francisco Bay	Pacific Ocean at Muir Beach	Marin	2015
2	San Francisco Bay	Pacific Ocean at Pillar Point Beach	San Mateo	2016
2	San Francisco Bay	Petaluma River	Marin, Sonoma	2017
2	San Francisco Bay	Petaluma River (tidal portion)	Marin, Sonoma	2017
2	San Francisco Bay	San Gregorio Creek	San Mateo	2019
3	Central Coast	Pacific Ocean at Point Rincon (mouth of Rincon Cr, Santa Barbara County)	Santa Barbara	2015
3	Central Coast	Rincon Creek	Santa Barbara, Ventura	2015
4	Los Angeles	Canada Larga (Ventura River Watershed)	Ventura	2017
4	Los Angeles	Coyote Creek	Los Angeles, Orange	2015
4	Los Angeles	Rincon Beach	Ventura	2017
4	Los Angeles	San Antonio Creek (Tributary to Ventura River Reach 4)	Ventura	2017
4	Los Angeles	San Gabriel River Reach 1 (Estuary to Firestone)	Los Angeles	2015
4	Los Angeles	San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam)	Los Angeles	2015
4	Los Angeles	San Gabriel River Reach 3 (Whittier Narrows to Ramona)	Los Angeles	2015
4	Los Angeles	San Jose Creek Reach 1 (SG Confluence to Temple St.)	Los Angeles	2015
4	Los Angeles	San Jose Creek Reach 2 (Temple to I-10 at White Ave.)	Los Angeles	2015
4	Los Angeles	Sawpit Creek	Los Angeles	2015
4	Los Angeles	Ventura River Reach 3 (Weldon Canyon to Confl. w/ Coyote Cr)	Ventura	2017
4	Los Angeles	Walnut Creek Wash (Drains from Puddingstone Res)	Los Angeles	2015
5	Central Valley	Wolf Creek (Nevada County)	Nevada, Placer	2020
5	Central Valley	Woods Creek (Tuolumne County)	Tuolumne	2020
7	Colorado River	Alamo River	Imperial	2017

Attachment 2

REGION NO	REGION NAME	WATERBODY NAME	COUNTIES	TMDL Completion Date
7	Colorado River	Palo Verde Outfall Drain and Lagoon	Imperial, Riverside	2017
8	Santa Ana	Canyon Lake (Railroad Canyon Reservoir)	Riverside	2019
8	Santa Ana	Fulmor, Lake	Riverside	2019
8	Santa Ana	Goldenstar Creek	Riverside	2019
8	Santa Ana	Los Trancos Creek (Crystal Cove Creek)	Orange	2017
8	Santa Ana	Lytle Creek	San Bernardino	2019
8	Santa Ana	Mill Creek Reach 1	San Bernardino	2015
8	Santa Ana	Mill Creek Reach 2	San Bernardino	2015
8	Santa Ana	Morning Canyon Creek	Orange	2017
8	Santa Ana	Mountain Home Creek	San Bernardino	2019
8	Santa Ana	Mountain Home Creek, East Fork	San Bernardino	2019
8	Santa Ana	Silverado Creek	Orange	2017
8	Santa Ana	Peters Canyon Channel	Orange	2017
8	Santa Ana	Santa Ana River, Reach 2	Orange, Riverside	2019
8	Santa Ana	Temescal Creek, Reach 6 (Elsinore Groundwater sub basin boundary to Lake Elsinore Outlet)	Riverside	2019
8	Santa Ana	Seal Beach	Orange	2017
8	Santa Ana	Serrano Creek	Orange	2017
8	Santa Ana	Huntington Harbour	Orange	2017

Attachment 2

Table 6. Water Bodies impaired for nitrogen that are subject to Tier 3.

REGION NO.	REGION NAME	WATERBODY NAME	COUNTIES	TMDL Completion Date
1	North Coast	Russian River HU, Middle Russian River HA, mainstem Laguna de Santa Rosa	Sonoma	2015
2	San Francisco Bay	Lagunitas Creek	Marin	2016
2	San Francisco Bay	Napa River	Napa, Solano	2014
2	San Francisco Bay	Petaluma River	Marin, Sonoma	2017
2	San Francisco Bay	Petaluma River (tidal portion)	Marin, Sonoma	2017
2	San Francisco Bay	Sonoma Creek	Sonoma	2014
2	San Francisco Bay	Tomales Bay	Marin	2019
2	San Francisco Bay	Walker Creek	Marin	2016
4	Los Angeles	Malibu Creek	Los Angeles	2016
4	Los Angeles	San Antonio Creek (Tributary to Ventura River Reach 4)	Ventura	2013
8	Santa Ana	East Garden Grove Wintersburg Channel	Orange	2017
8	Santa Ana	Grout Creek	San Bernardino	2015
8	Santa Ana	Rathbone (Rathbun) Creek	San Bernardino	2015
8	Santa Ana	Summit Creek	San Bernardino	2015
8	Santa Ana	Serrano Creek	Orange	2017

Attachment 3

Regional Water Boards, upon mutual agreement, may designate one Regional Water Board to regulate a person or entity that is under the jurisdiction of both (Water Code Section 13228). The following table identifies the designated Regional Water Board for all counties within the State for purposes of reviewing and, if appropriate, approving new Local Agency Management Plans.

Table 7. Regional Water Board designations by County.

County	Regions with Jurisdiction	Designated Region
Alameda	2,5	2
Alpine	5,6	6
Amador	5	5
Butte	5	5
Calaveras	5	5
Colusa	5	5
Contra Costa	2,5	2
Del Norte	1	1
El Dorado	5,6	5
Fresno	5	5
Glenn	5,1	5
Humboldt	1	1
Imperial	7	7
Inyo	6	6
Kern	3,4,5,6	5
Kings	5	5
Lake	5,1	5
Lassen	5,6	6
Los Angeles	4,6	4
Madera	5	5
Marin	2,1	2
Mariposa	5	5
Mendocino	1	1
Merced	5	5
Modoc	1,5,6	5
Mono	6	6
Monterey	3	3
Napa	2,5	2
Nevada	5,6	5
Orange	8,9	8

County	Regions with Jurisdiction	Designated Region
Placer	5,6	5
Plumas	5	5
Riverside	7,8,9	7
Sacramento	5	5
San Benito	3,5	3
San Bernardino	6,7,8	6
San Diego	9,7	9
San Francisco	2	2
San Joaquin	5	5
San Luis Obispo	3,5	3
San Mateo	2,3	2
Santa Barbara	3	3
Santa Clara	2,3	2
Santa Cruz	3	3
Shasta	5	5
Sierra	5,6	5
Siskiyou	1,5	1
Solano	2,5	5
Sonoma	1,2	1
Stanislaus	5	5
Sutter	5	5
Tehama	5	5
Trinity	1	1
Tulare	5	5
Tuolumne	5	5
Ventura	4,3	4
Yolo	5	5
Yuba	5	5

APPENDIX B
CENTRAL COAST RWQCB
ONSITE WASTEWATER MANAGEMENT
PLAN GUIDANCE

~ GUIDANCE ~

**CENTRAL COAST WATER BOARD
CHECKLIST FOR DEVELOPING & REVIEWING
ONSITE WASTEWATER MANAGEMENT PLANS**

GOAL: Implementation of onsite management plan will protect and enhance ground and surface water. Each local agency is likely to have unique site limitations and potential water quality issues associated with onsite systems, and management measures to address those issues. Accordingly, the onsite management plan should be flexible and agency-specific. The plan must address each component required in the Basin Plan, however the means and degree to which each component is addressed is flexible. Following is based upon the order in which requirements appear in the Basin Plan, minus duplicative requirements (Chapter 4, Section VIII.D.)

Note: Many components of an effective onsite wastewater management plan may already be implemented by the local permitting jurisdiction or other resource agencies. To prevent duplicative efforts and maximize efficiency, such existing practices should be utilized to the maximum extent practical and summarized in the plan. For example, water quality monitoring data may be available from local health departments, water purveyors, Central Coast Water Board programs, etc. Such data can be used to support management plan activities providing the data is technically sound and adequately summarized in the plan. Adequate documentation should also be included to address any components omitted from a plan, such as those actions performed by other agencies or not applicable due to specified local conditions. The following guidance is based upon requirements adopted by the Central Coast Water Board on May 9, 2008, and not yet approved by the State Water Board.

1. Survey and evaluation of existing onsite systems.
 - a. Identify areas served by existing onsite systems throughout jurisdiction. (Section should establish a baseline, include maps or GIS layers, identify areas suitable for conventional systems, summarize basis for suitability, etc.)
 - b. Identify problematic areas (site limitations, failure rates, water quality impacts).
 - c. Management measures 2, 3, 7 & 8 are implemented in problematic areas.
2. Water quality (ground and surface water) monitoring program.
 - a. Ground and/or surface water monitoring in areas likely to detect and prevent degradation. (Include existing data sources and observations where available, document data sources, and document the basis for determining areas likely to be degraded.)
 - b. Monitoring locations/depth are representative and can characterize early effects.
 - c. Monitoring results support implementation measures and protection of water quality and beneficial uses.
3. Projections of onsite disposal system demand and determination of methods to best meet demand.
 - a. Documentation/details that demand will be met without degrading water quality. (Section will reflect each agency's existing and planned policies, include feedback loops to ensure policies are working, and periodic reevaluation.)

- b. If sewerage is proposed, a realistic schedule is provided. (Include legal authority to prohibit onsite systems within specified proximity of sewer or other tools, summarize measures to prevent water quality impacts until sewer is provided.)
4. Recommendations and requirements for existing onsite wastewater system inspection, monitoring, maintenance and repairs. (Consider different levels for conventional vs. alternative systems.)
 - a. Recommendations & requirements are consistent with Basin Plan.
 - b. Recommendations & requirements are implemented in an effective manner. (Include feedback loop to ensure effectiveness of policies described.)
 - c. Replacements/repairs comply with Basin Plan recommendations, requirements and prohibitions. (Management proposed if repairs can not meet Basin Plan standards, deed restrictions, etc.)
 - d. Method for informing onsite system owners is described and effective.
 - e. Tracking of system failures, pumping, or other means of identifying problems.
 - f. Implementation methods are supported by adequate resources. (Identify who implements or will implement actions.)
5. Recommendations and requirements for new onsite wastewater systems.
 - a. Recommendations & requirements are consistent with Basin Plan.
 - b. Recommendations & requirements are implemented in effective manner. (Include feedback loop to ensure effectiveness of policies described.)
 - c. Site suitability tests are performed and support design.
 - d. Permitting process ensures proper siting, design, construction & maintenance.
 - e. Permitting conditions reflect Basin Plan criteria and protects set-aside areas.
 - f. Property owners are notified of proper installation, operation & maintenance. (Describe when and how notification will occur in the local permitting process.)
 - g. Alternative systems are prohibited unless consistent with specified criteria. (Includes water quality protection criteria for alternative systems, if allowed.)
 - h. Alternative system criteria include means of verifying ongoing compliance (performance monitoring and reporting).
 - i. Alternative system owners are provided maintenance or replacement document by the system designer or installer, citing homeowner procedures to ensure maintenance, repair, or replacement of critical items within 48 hours.
 - j. Provisions to ensure long-term performance of alternative systems (service contract, deed restrictions, disclosures, etc.)
 - g. Implementation methods are supported by adequate resources. (Identify who implements or will implement actions.)
6. Alternative means of disposing of sewage in the event of disposal system failure and/or irreversible degradation from onsite disposal. (Define how local agency characterizes system failure or irreversible degradation and how it will be detected.)
 - a. List of alternate disposal options. (Availability of capacity at each optional disposal facility should be documented.)
 - b. Estimated cost of wastewater disposal alternatives.
7. Education and outreach program.
 - a. Sample information is fact-based, accurate, user-friendly, and lasting.
 - b. Provisions for public inquiry and assistance.

8. Enforcement options. (Including maintenance of alternative systems and commitment to follow through).
 - a. Local ordinance reflects Basin Plan criteria.
 - b. Local enforcement tools are available and commitment is clearly stated. (Describe escalation of enforcement and who will implement each action.)
9. Septage management.
 - a. Septage volume estimated.
 - b. Long-term disposal capacity (authorization if site not owned by same agency).
 - c. Septage disposal plans & schedule, if site not currently available.
 - d. Discussion of private hauling company coordination with local agencies.
10. Program administration, staffing, records keeping, installation and repairs tracking, and financing (are adequate resources provided to support all activities).
 - a. Clear delegation of tasks, who does what.
 - b. Staff/contract inspectors use detailed checklist to verify construction compliance.
 - c. Periodic summary reports, contents of report, and feedback loop.
 - d. Local ordinance reflects Basin Plan criteria and supports management plan implementation.

APPENDIX C
OWTS DESIGN / CONSTRUCTION
COMPARISON TABLE

OWTS Policy Comparisons

RWQCB OWTS POLICY SECTION	Category	Atascadero	LAMP
7.1	Qualified Professional	Same	Same
7.2	Depth of soil	Same	3 feet (bottom of dispersal system)
7.3	Depth to G.W.	10 feet	5ft (shallow dispersal system) 10ft (bottom of seepage pit)
7.4	Percolation Test Rate	Exceed 120 min/in (Lot must be > 2 acres)	0.83 to 5.12 gal/ft ² /day
7.5	Minimum Setbacks	Same	LAMP or Plumbing Code
7.7	Maximum Slope	30%	30% (slope stability report needed)
7.8	Allowable Average Densities	2 acres	2 acres
8.1.1	Design: qualified Profession	Same	Same
8.1.3	Maximum Waste Flow	Same	Same
8.1.4	Soil Cover	12 inches (minimum)	12 to 18 inches (shall not exceed 24 inches)
8.1.5	Minimum Depth to G.W.	Perc rate > 30 MPI = 5ft	5ft (shallow dispersal system) 10ft (bottom of seepage pit)
8.1.6	Leach Field Requirements	Same	Ryon Formula
8.1.7	Dispersal System Maximum Depth	Same	Same
8.1.8	Expansion/Replacement Area	Same	Same
8.1.9	Impermeable Surface	Allowed	Allowed
8.1.10	Rock Fragment Content	Same	Same
8.1.11	Alternative Systems	Same	Same
8.2	OTWS Construction and Installation	Qualified professionals	Qualified professionals

APPENDIX D
PRELIMINARY COST ESTIMATES
FOR POTENTIAL EXPANSION OF
SANITARY SEWER COLLECTION
SYSTEM

APPENDIX D

Estimated Sewer Expansion Costs

SANITARY SEWER EXPANSION AREA 1				
ITEM	UNIT	QUANTITY	UNIT PRICE	ESTIMATED CONSTRUCTION COST
8" GRAVITY SEWER	LF	5931	\$200.00	\$1,186,200
6" FORCE MAIN	LF	1434	\$125.00	\$179,250
MANHOLE	EA	14	\$7,500.00	\$105,000
LIFT STATION	EA	1	\$150,000.00	\$150,000
SSCO	EA	4	\$4,500.00	\$18,000
AREA TOTAL				\$1,638,450
NUMBER OF PARCELS SERVED				52
ESTIMATED COST PER PARCEL SERVED				\$31,508.65

SANITARY SEWER EXPANSION AREA 2				
ITEM	UNIT	QUANTITY	UNIT PRICE	ESTIMATED CONSTRUCTION COST
8" GRAVITY SEWER	LF	29335	\$200.00	\$5,867,000
6" FORCE MAIN	LF	1312	\$125.00	\$164,000
MANHOLE	EA	56	\$7,500.00	\$420,000
LIFT STATION	EA	2	\$150,000.00	\$300,000
SSCO	EA	26	\$4,500.00	\$117,000
AREA TOTAL				\$6,868,000
NUMBER OF PARCELS SERVED				398
ESTIMATED COST PER PARCEL SERVED				\$17,256.28

SANITARY SEWER EXPANSION AREA 3				
ITEM	UNIT	QUANTITY	UNIT PRICE	ESTIMATED CONSTRUCTION COST
8" GRAVITY SEWER	LF	19561	\$200.00	\$3,912,200
6" FORCE MAIN	LF	131	\$125.00	\$16,375
MANHOLE	EA	39	\$7,500.00	\$292,500
LIFT STATION	EA	4	\$150,000.00	\$600,000
SSCO	EA	23	\$4,500.00	\$103,500
AREA TOTAL				\$4,924,575
NUMBER OF PARCELS SERVED				316
ESTIMATED COST PER PARCEL SERVED				\$15,584.10

SANITARY SEWER EXPANSION AREA 4				
ITEM	UNIT	QUANTITY	UNIT PRICE	ESTIMATED CONSTRUCTION COST
8" GRAVITY SEWER	LF	22793	\$200.00	\$4,558,600
6" FORCE MAIN	LF	21	\$125.00	\$2,625
MANHOLE	EA	50	\$7,500.00	\$375,000
LIFT STATION	EA	1	\$150,000.00	\$150,000
SSCO	EA	20	\$4,500.00	\$90,000
AREA TOTAL				\$5,176,225
NUMBER OF PARCELS SERVED				363
ESTIMATED COST PER PARCEL SERVED				\$14,259.57

SANITARY SEWER EXPANSION AREA 5				
ITEM	UNIT	QUANTITY	UNIT PRICE	ESTIMATED CONSTRUCTION COST
8" GRAVITY SEWER	LF	40787	\$200.00	\$8,157,400
6" FORCE MAIN	LF	0	\$125.00	\$0
MANHOLE	EA	79	\$7,500.00	\$592,500
LIFT STATION	EA	0	\$150,000.00	\$0
SSCO	EA	39	\$4,500.00	\$175,500
AREA TOTAL				\$8,925,400
NUMBER OF PARCELS SERVED				577
ESTIMATED COST PER PARCEL SERVED				\$15,468.63

TOTAL (ALL ZONES)	\$27,532,650
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APPENDIX E
OWTS EASEMENT REQUIREMENTS

APPENDIX E

OWTS Requirements for Easements

- The City of Atascadero may approve the installation of Onsite Wastewater Treatment Systems (OWTS) or a portion thereof within easements on private property if the City determines there are no other feasible locations available for its installation on the property served by the OWTS.
- To assist the City in its determination to approve use of any easement, the property owner or applicant will provide necessary testing, analysis, and other evidence prepared by a Qualified Professional (QP) to substantiate the lack of feasible locations for siting the OWTS or its components entirely on the property served by the OWTS.
- The City may approve the installation of an OWTS or a portion thereof within a private easement on a property not served by the OWTS when the private easement has been recorded at the Assessor's Office dedicating the private easement for OWTS use.
- No OWTS or portion thereof will be permitted to be located within any public road right-of-way or easement. The City Engineer may approve the crossing of a public right-of-way or easement to convey wastewater to an OWTS, located outside the public way or easement, in unique circumstances that demonstrate undue hardship on the property owner or applicant to avoid using public right-of-way or easement. Wastewater dispersal is strictly prohibited in public ways and easements.
- The City may approve the installation of an OWTS or a portion thereof within an ingress/egress easement or private road that provides access to more than one property if the City determines there are no other feasible locations available for its installation on the property being served by the OWTS.
- The City may approve the installation of an OWTS or a portion thereof within a utility easement if the City determines there are no other feasible locations available for its installation on the property being served by the OWTS. If approved, there shall not be any overhead obstructions, such as electrical lines, and all required horizontal and vertical setbacks from other utilities are maintained at all times.
- The installation of OWTS within flood plain/hazard area shall be avoided. Where suitable sites outside of flood hazard areas are not available, wastewater dispersal systems may be located in flood hazard areas on sites where the effects of inundation, under conditions of the design, are minimized. Applicants are advised to contact the Building Division to inquire whether additional requirements apply.
- No dispersal systems or replacement areas shall be covered by an impermeable surface or other material that prevents oxygen transfer to the soil.

APPENDIX F
OWTS SETBACK REQUIREMENTS

APPENDIX F

OWTS Setback Requirements

MINIMUM HORIZONTAL DISTANCE IN CLEAR REQUIRED FROM	SEPTIC TANK	DISPOSAL FIELD	SEEPAGE PIT
Building or structures ¹	8 feet	8 feet	8 feet
Property line adjoining private property	5 feet	5 feet	8 feet
Private water supply wells or monitoring well ⁴	100 feet	100 feet	150 feet
Public water supply well public where the depth of the effluent dispersal system does not exceed 10 feet in depth ⁷	150 feet	150 feet	200 feet
Public water supply well where the depth of the effluent dispersal system exceeds 10 feet in depth ⁷	200 feet	200 feet	200 feet
Streams, springs, and rivers ^{4,5}	100 feet	100 feet ³	150 feet
Vernal pools, wetlands, lakes, ponds, reservoirs, and ocean ⁵	200 feet	200 feet	200 feet
Trees ⁶	10 feet	10 feet	10 feet
Seepage pits ³	5 feet	5 feet	12 feet
Disposal field ³	5 feet	4 feet ²	5 feet
On-site domestic water service line	5 feet	5 feet	5 feet
Distribution box (Water meter)	5 feet	5 feet	5 feet
Pressure public water main	10 feet	10 feet	10 feet
Unstable land mass	100 feet	100 feet	100 feet

1. Including porches and steps, whether covered or uncovered, breezeways, roofed porte cocheres, roofed patios, carports, covered walks, covered driveways, and similar structures or appurtenances.
2. Plus 2 feet for each additional 1 foot of depth in excess of 1 foot below the bottom of the drain line.
3. Where disposal fields, seepage pits, or both are installed in sloping ground, the minimum horizontal distance between any part of the leaching system and ground surface shall be 15 feet.
4. Where special hazards are involved, the distance required shall be increased as may be directed by the Local Agency.
5. 400 feet from the high water mark if within 1,200 feet of a of a public water system's surface water catchment. 200 feet from the high water mark if within >1,200 but <2,500 feet of a public surface water intake. For flowing bodies of water, the surface water intake shall be upstream or the setback distance.
6. For oak trees the distance shall be 15 feet from the trunk or 5 feet beyond the estimated mature drip line of the branches.
7. Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth the horizontal setback required to achieve a two-year travel time for microbiological contaminants shall be evaluated. A qualified professional shall conduct this evaluation. However in no case shall the setback be less than 200 feet.

OWTS Setback Requirement Notes

Setback clearance for dispersal fields/pits shall be measured from the closest edge of the floodway as determined by the Building Division.

Due to site constraints of a property, located within a flood hazard area, the applicant shall be required to demonstrate that the proposed OWTS is designed with additional protective measures to prevent contamination of surface water or runoffs and minimize other risks associated with flooding, such as, infiltration into the dispersal system when the area is inundated by flood water or the potential of scour over and into the dispersal system that could adversely impact the absorption capability of the dispersal system and the overall function of the OWTS.

The City may waive the setback requirements in consideration of a hydrogeological assessment prepared and certified by a registered Professional Civil Engineer, Geologist, Hydro-geologist, or Engineering Geologist confirming that neither the proposed dispersal system nor the subject drainage course will ever generate sufficient lateral infiltration that could negatively impact each other, declaring the location for the proposed dispersal area suitable. The assessment shall be based on the wetted perimeter within the drainage course, and the zone of influence from the dispersal system when they are active at their full potential.

The hydrogeological assessment shall be site specific and prepared for the specific dispersal system that is being proposed. The assessment shall be based on a study of the interrelationship between the geologic conditions and surface and subsurface waters, conducted in at least one excavation located directly between the dispersal system and the subject drainage course to a depth not less than 10 feet below the anticipated bottom of the dispersal system.

The hydrogeological assessment shall describe the determining factors and examine the hydrogeological properties that provided a basis for the conclusion. The assessment shall identify the existence of any hydrogeological elements that could support the possibility of lateral infiltration, such as, high hydraulic gradients, high hydraulic conductivity of soil, slow-permeable or impermeable layers, saturated zones, presence of perched water, elevation differential between the dispersal system and the drainage course, potential inflow of surface and subsurface water and wastewater, possibility of groundwater recharge, presence of vegetative growth, seasonal variations and climatic factors, etc.

In situations where hydraulic gradient suggests the possibility of effluent migration toward the drainage course, even though the hydrogeological assessment has concluded that OWTS will not have any impact on the drainage course, the City may require supplemental treatment and disinfection components.

APPENDIX G
OWTS EVALUATION FORM

APPENDIX G

CERTIFICATION OF EXISTING ONSITE WASTEWATER TREATMENT SYSTEM

Property Information: APN: _____ Date of Inspection: _____

1. Owner: _____ Address: _____ City: _____

FAILURE TO PROVIDE ALL REQUIRED INFORMATION SHALL PREVENT THE OWNER FROM OBTAINING ENVIRONMENTAL HEALTH APPROVAL

2. Show design and location on a scale of 1:20 or 1:40 of the sewage disposal system and 100% expansion area in relation to dwellings structures, wells, rock outcroppings, drainage, watercourses, etc.

3. a. I examined existing subsurface sewage disposal system at the above location on _____ and determined that the capacity is _____ gallons and that there is _____ sq. ft. of leach line bottom area. There are _____ bedrooms in the dwelling and there are _____ fixture units.

b. There are _____ leach line(s), each _____ ft. long Depth _____ ft. Rock Plastic Chamber

c. There are _____ Seepage pit(s), each _____ ft. in diameter, and _____ ft. TD. _____ ft. BI

d. The leach bed is _____ ft. by _____ ft., total _____ sq. ft. of leached area. Depth is _____ ft.

4. a. Construction of septic tank (Please check one of the following):

Concrete Fiberglass Steel Other: _____

b. Internal dimensions of septic: Length _____ ft. Width _____ ft. Depth _____ ft.

c. Condition of tank (please answer yes or no for each question): Inlet Tee present? Yes No

Tank Structure deteriorated? Yes No Outlet Tee present? Yes No

Effluent Filter present? Yes No Two compartments? Yes No

d. Condition of D-Box Level? Yes No Replaced? Yes No

5. a. While pumping the tank, did effluent flow back into tank from absorption system? Yes No

b. Prior to pumping, was the liquid level in the tank above the outlet tee? Yes No

c. Was the area around the lids oxidized? Yes No

d. Is design of system gravity feed? Yes No

e. Were well(s) observed on this or adjacent property? Yes No

If Yes, indicate distance of well from: Septic tank _____ ft. Leach lines _____ Seepage Pits _____ ft.

f. Distance from springs, lakes, and natural water courses (check all that apply):

Septic Tank _____ ft. Leach lines _____ ft. Seepage Pits _____ ft.

g. Is sewer within 200 ft. of structure and abuts property line? Yes No

Additional Comments: _____

h. How long has dwelling been vacant? (if applicable) _____ months _____ weeks N/A

6. a. It is my opinion that the system appears to be in good working order and can be expected to function properly with proper maintenance. No repairs are necessary at this time.

b. It is my opinion that the system is not in good working order and will not function properly without the following repairs

I certify under penalty of perjury that the foregoing is true and correct.

Signature: _____ Print Name: _____

Contractor License No.: _____ Expiration Date: _____

Pumper Co.: _____ Phone Number: _____

Address: _____ City: _____ Zip: _____

APPENDIX H
OWTS SEPTIC TANK / FLOW
DESIGN CRITERIA

APPENDIX H

Septic Tank Capacity

Single-Family Dwellings (# of Bedrooms)	Multiple Dwelling Units or Apartments (One Bedroom Each)	Other Uses (Maximum Fixture Units)	Minimum Septic Tank Capacity (Gallons)
1 or 2	-	15	750
3	-	20	1000
4	2 Units	25	1200
5 or 6	3	33	1500
	4	45	2000
	5	55	2250
	6	60	2500
	7	70	2750
	8	80	3000
	9	90	3250
	10	100	3500

- Extra bedroom: 150 gallons each
- Extra dwelling units over 10: 250 gallons each
- Extra fixture units over 100: 25 gallons per fixture unit
- Septic tank sizes in this table include sludge storage capacity and the connection of domestic food waste disposal units without volume increase
- Single family dwelling capacity requirements also apply to mobile homes not installed in a mobile home park.

Estimated Waste Sewage Flow Rates

TYPE OF OCCUPANCY		GALLONS PER DAY
1	Airports	15 per employee
		5 per passenger
2	Auto washers	Check with equipment manufacturer
3	Bowling alleys (snack bar only)	75 per lane
4	Camps	
	Campground with central comfort station	35 per person
	Campground with flush toilets, no showers	25 per person
	Day camps (no meals served)	15 per person
	Summer and seasonal	50 per person
5	Churches(Sanctuary)	5 per seat
	with kitchen waste	7 per seat
6	Dance halls	5 per person
7	Factories	
	no showers	25 per employee
	with showers	35 per employee
	Cafeteria, add	5 per employee
8	Hospitals	250 per bed
	kitchen waste only	25 per bed
	laundry waste only	40 per bed
9	Hotels (no kitchen waste)	60 per bed (2 person)
10	Institutions (Resident)	75 per person
	Nursing home	125 per person
	Rest home	125 per person
11	Laundries, self-service	
	(minimum 10 hours per day)	300 per machine

	Commercial	Per manufacturer's specifications
12	Motel	50 per bed space
	with kitchen	60 per bed space
13	Offices	20 per employee
14	Parks	
	Picnic parks (toilets only)	20 per parking space
	Recreational vehicles	
	without water hook-up	75 per space
	with water and sewer hook-up	100 per space
15	Restaurants - cafeterias	50 per seat
16	Schools - Staff and office	20 per person
	Elementary students	15 per person
	Intermediate and high	20 per student
	with gym and showers, add	5 per student
	with cafeteria, add	3 per student
	Boarding, total waste	100 per person
17	Service station, toilets	1000 for 1st bay
		500 for each additional bay
18	Stores	20 per employee
	Public restrooms, add	1 per 10 square feet of floor space
19	Swimming pools, public	10 per person
20	Theaters, auditoriums	5 per seat
	Drive-in	10 per space

APPENDIX I
ALTERNATIVE OWTS SOIL REPLACEMENT
REQUIREMENTS

APPENDIX I

Soil Replacement Requirements for Alternative OWTS

When there is less than two (2) feet of continuous, natural, undisturbed soil between the bottom of a proposed dispersal system and bedrock, fractured bedrock, or an impervious layer; the soil has an absorption rate slower than 120 MPI; or there is inadequate soil depth to groundwater, manufactured/engineered soil with similar composition characteristics of loamy sand may be added to or replace the existing native soil so that the site conditions meet or exceed the specific depth and absorption rate requirements. The compaction characteristics of the manufactured soil shall correspond as close as possible to the native soil of the surrounding area.

An alternative system is required where engineered soil is used to improve percolation rates, comply with the two (2) foot minimum soil requirement, or meet the requirements for minimum vertical setback to groundwater. The total absorption surface area required for the pressurized distribution system is determined in the manner as typical leach field. Additional effluent treatment including disinfection shall be required where the possibility of groundwater contamination exists.

Engineered soil shall compensate for the lack of in-place soil or the replacement of poorly drained soil at a ratio of 1.5 to 1; so that 1.5' of engineered soil material is required for a 1' deficiency in the soil column. In no case shall engineered soil compensate for more than 2' of the minimum native soil depth requirements and ground may be built up by engineering/manufactured soil to a maximum of 3' in depth.

The manufactured/engineered soil shall be re-composed and re-graded uniformly to provide homogenized absorption capability, equivalent to soil category of loamy sand. The manufactured/engineered soil must be certified by a California Registered Professional Soil/Geotechnical Engineer who shall prove through sieve analysis and other quantifying tests that the desirable composition and compaction has been achieved.

Adequate number of percolation tests shall be conducted in the area where manufactured soil has been provided to confirm that the percolation rates are in correlation with loamy sand soil category. The results of the percolation tests conducted in the area shall affirm uniformity in soil composition and compaction.

When deemed necessary, the City may require supplemental treatment systems and/or disinfection component for any existing or new NOWTS to ensure the protection of the underlying groundwater quality and public health.

APPENDIX J
FUTURE OWTS EXPANSION AREA
REQUIREMENTS

APPENDIX J

Future Expansion Area

- When the original approval includes the previous percolation test results for 100% future expansion area and the percolations rates are within the acceptable range of 0.83 to 5.12 gallons per sq. ft. per day for seepage pits and 5 to 60 minutes per inch for leach fields, no additional percolation tests will be required as long as the future dispersal fields/pits are installed as originally approved.
- For the purposes of the 10% exemption, the current footprint is considered the area occupied by all existing habitable structures that were permitted at the time when OWTS was initially approved, i.e., the main house including garage as a one story building. This does not include roof overhangs, balconies, patios, decks, driveways, carports, swimming pools/spas, storage structures, landscaping and areas confined by the design of the permitted structures. Any existing detached structure, habitable or otherwise (e.g., studio, workshop, barn, etc.), that was approved by the City (i.e., No Impact approval).
- The determination made by the professional geologist may be based on evaluations that were previously conducted by a professional geologist within the area or upon reliable source provided that the evaluations were conducted consistent with the current departmental guidelines. The statement made by the professional geologist shall be supported by practical principles and fundamentals of geology that are based on geological circumstances that exist at the site.

APPENDIX K
OWTS SEPTIC TANK INSPECTION FORM

**City of Atascadero
Septic Tank Inspection Report**

SEPTIC TANK DEFICIENCIES REQUIRING FOLLOW-UP

Reference #	Deficiency	Typical Corrective Action	Permit Required
NOD-1	Inadequate access to both compartments	Install risers &/or lids to meet current code requirements	No
NOD-2	Access ports deeper than 24 inches	Install risers to within one foot of grade	No
NOD-3	Deteriorated access lid(s)	Replace lids	No
NOD-4	Deteriorated top of tank	Replace / repair	No
NOD-5	Deteriorated baffle between compartments	Replace / repair	No
NOD-6	Other		
NTC-1	Severely damaged or deteriorated septic tank	Replace septic tank	Yes
NTC-2	Unfilled seepage pit	Fill w/ rock or abandon	Yes
NTC-3	Cesspool (permeable sides & bottom)	Abandon & replace with approved septic tank and disposal field	Yes
NTC-4	Failed disposal field with discharge to surface	Add new field w/ diverter valve - match or exceed existing field	Yes
NTC-5	System constructed without required permit	Obtain permit	Yes
NTC-6	Discharge of graywater to ground surface or drainage course	Direct wastewater to approved disposal field	Yes
NTC-7	Septic tank constructed of metal or wood	Replace septic tank	Yes
NTC-8	Septic tank located under structure	Requires abandonment and replacement with an approved septic tank or removal or relocation of structure	Yes
RTC-1	Disposal field not adequately absorbing septic tank effluent	Clear blockage / repair pipe	No
		Replace / repair disposal field	Yes
RTC-2	Inadequate tank capacity	Replace with proper size tank	Yes
RTC-3	Missing inlet / outlet tee(s)	Replace missing tee(s)	No
RTC-4	Other		

NOD – Notice of Deficiency

NTC – Notice to Correct

RTC – Recommendation to Correct

APPENDIX L
OWTS INFORMATIONAL HANDOUT

Record of Service

Date	Work Done	Contractor

Remember to always dispose of wastewater from your home into the septic tank. This includes all sink, bath, shower, toilet, washing machine and dishwasher wastewaters. Any of these waters can contain disease-causing microorganisms or environmental pollutants.

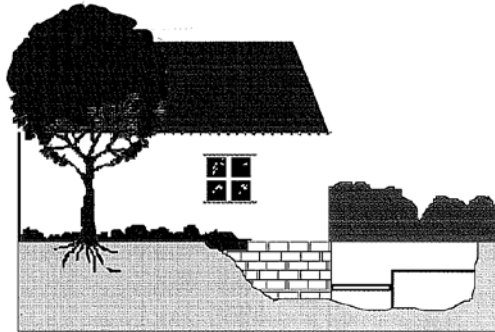
For More Information

For more information please call the City of Atascadero Public Works Department.
(805) 470-3456

A Reference Guide

Your Septic System

for Homeowners



Caring for your Septic System

Septic systems must be maintained regularly to work properly. Solids and scum that accumulate in the septic tank should be pumped out every three to five years to protect the leachfield from clogging.

Neglect or abuse of your septic system can cause it to fail. Failing septic systems can:

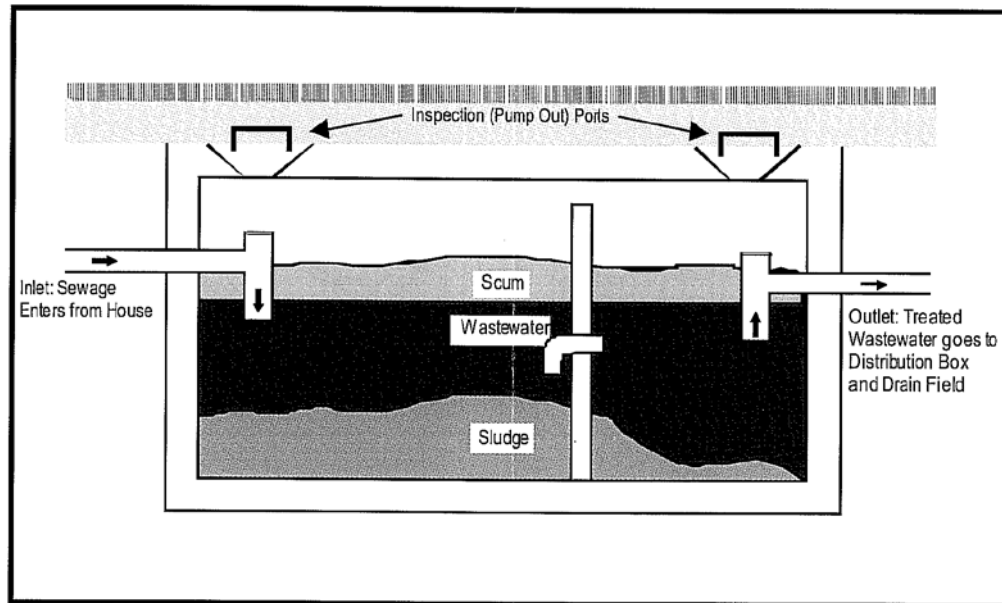
- Cause a serious health threat to your family and neighbors;
- reduce the value of your property;
- be very expensive to repair;
- degrade the environment, especially

lakes, streams, and groundwater; and

- put thousands of water supply users at risk if you live in a public water supply watershed.

Be alert to the warning signs of a failing system:

- sewage surfacing over the drainfield (especially after storms);
- sewage back-ups in the house;
- lush, green growth over the drainfield;
- slow draining toilets or drains;
- sewage odors.



Tips to Avoid Trouble

Do have your tank inspected every 3 to 4 years by a licensed septic tank pumper. If you have a garbage disposal unit, pump the tank at more frequent intervals.

Do keep a record of pumping, inspections, and other maintenance. Use the back page of this brochure to record maintenance dates.

Do practice water conservation. Repair dripping faucets and leaking toilets, run washing machines and dishwashers only when full, avoid long showers, and use water saving features in faucets, showerheads and toilets.

Do learn the location of your septic tank and drainfield. Keep a sketch of it handy for service visits. If your system has a flow diversion valve, learn its location and turn it once a year. Alternating drainfields can add many years to the life of your system.

Do divert roof drains and surface water from driveways and hillsides away from the septic system. Keep sump pumps and house drains away from the septic system as well.

Do use bleach and disinfectants sparingly. Bleach, disinfectants, and drain and toilet bowl cleaners can kill bacteria that are essential to the operation of the septic system system.

Don't allow anyone to drive or park over any part of the system. The area over the drainfield should be left undisturbed with only a mowed grass cover. Roots from nearby trees or shrubs may clog and damage your drain lines. Paving over a drainfield will reduce its efficiency and is prohibited.

Don't make repairs to your septic system without obtaining the required health department permit. Always use professional licensed septic system contractors for maintenance and repairs.

Don't use commercial septic tank additives or caustic drain chemicals. These products may hurt your system in the long run.

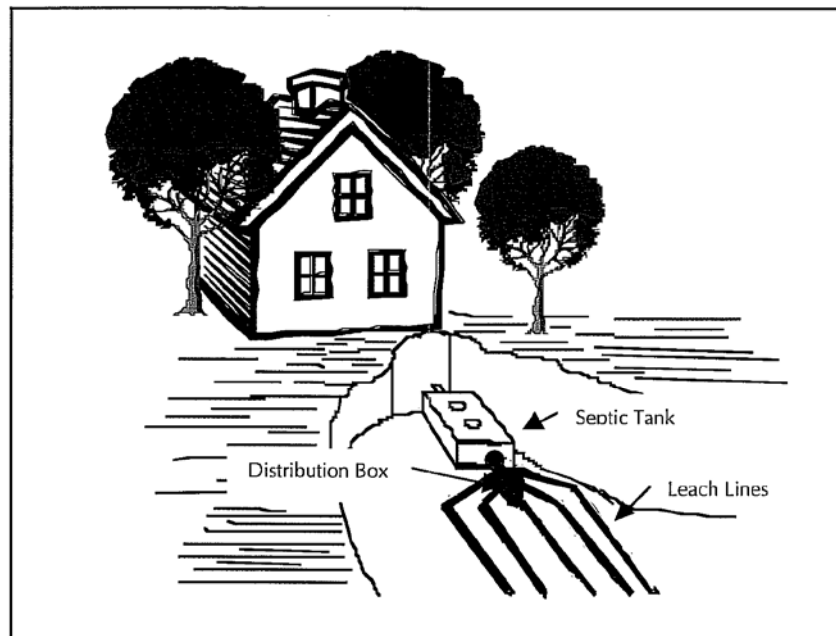
Don't use your toilet as a trash can by dumping nondegradables down your toilet or drains. Also, don't poison your septic system and the groundwater by pouring harmful chemicals down the drain. They can kill the beneficial bacteria that treat your wastewater. Keep the following materials out of your septic systems:



How Septic Systems Work

Septic systems are individual wastewater treatment systems that use a buried settling tank and the soil to treat small wastewater flows, usually from individual homes. They are typically used in rural or large lot settings where centralized wastewater treatment is impractical.

All septic systems are individually designed for each site but are based on the same principles.



A typical septic system consists of a septic tank, a distribution box and a drainfield, all connected by pipes. Your septic system treats your household wastewater by temporarily holding it in the septic tank where heavy solids and lighter scum are allowed to separate from the wastewater. This separation process is known as primary treatment. The solids stored in the tank are partially decomposed by bacteria and later removed, along with the lighter scum by a professional septic tank pumper. Failure to pump out accumulated solids and scum will eventually result in clogging of the drainfield and failure of the system.

When the partially treated wastewater leaves the tank, it typically flows into a distribution box that divides the flow among a network of drainfield trenches. Drainage holes in each line allow the wastewater to be absorbed into the soil. The wastewater then slowly seeps into the subsurface soil where it is further treated and purified (secondary treatment). A properly located and functioning septic system does not pollute the groundwater.