

Central Coast Regional Water Quality Control Board

Elements of a Complete Report of Waste Discharge (ROWD) for Onsite Wastewater Treatment Systems – WQ 2014-0153- DWQ

This guidance is for new, additional, or replacement domestic wastewater flows of less than 3,500 total gallons-per-day that are in areas without a Local Agency Management Program (LAMP) in place, and do not meet Onsite Wastewater Treatment Systems ([OWTS Policy](#)) Tier 1 criteria and therefore must come to the Regional Water Quality Control Board for permitting.

OWTS applicants must provide all of the following information as part of their complete Form 200 submittal:

FORM 200 SECTION I – Facility Information

Include title (i.e., CEO, President, COO, etc.) and email addresses for all listed contact persons.

The ROWD must be signed by either an LLC member or manager given signing authority by the operating agreement of the LLC if the wastewater discharge will occur on property owned by an LLC.

FORM 200 SECTION II – Type of Discharge

Check box A, Waste Discharge to Land and check the box “Domestic/Municipal Wastewater Treatment and Disposal. Please call the Water Board if the wastewater will be discharged to a creek, stream, river, ditch, etc. to discuss enrollment into a different permit.

FORM 200 SECTION III – Location of the Facility

The location of the “Facility” is the septic tank. The location of the “Discharge Point” is the leach field or drip dispersal field, etc. These two locations will typically be nearby each other.

FORM 200 SECTION IV – Reason for Filing

Check box applicable to your needs (“New Discharge” for new systems, if unsure check “Other” and explain what you’re doing).

FORM 200 SECTION V – CEQA

Applicant must provide demonstration that the CEQA process has been adhered to for the new Facility’s proposed onsite wastewater treatment and disposal system. Acceptable documentation includes an Environmental Impact Report (EIR) or Notice of Determination (NOD). The Facility’s CEQA determination for the onsite wastewater treatment system is typically presented in the City or County’s Master Plan, which may designate the Facility’s property as being zoned appropriately.

The proposed discharge cannot be permitted without the submittal of a relevant CEQA document. See CEQA section below for more information

FORM 200 SECTION VI. Other Required Information

Provide the following information:

1. BACKGROUND

1.1. Wastewater system description

- 1.1.1. Briefly, describe what the wastewater system is and how wastewater is generated.
- 1.1.2. Provide a site location map and a site plan.
- 1.1.3. Provide information on the location of wastewater treatment system components, groundwater wells, and surface water bodies on the site plan.
- 1.1.4. Provide the Assessor's Parcel Number(s), section number(s), and Township and Range.
- 1.1.5. Describe the water supply to the residence(s), business(es), and/or other facilities being served by the wastewater system (e.g., does the water come from a private well, a water company, the city, etc.).

1.2. Service area description

- 1.2.1. State the distance in feet between the Facility's wastewater disposal system and the nearest existing regional sewer collection pipe (e.g., the city's sewer collection system). Explain why the connection to the regional sewer collection system pipe cannot be reasonably accomplished. .

2. WASTEWATER CHARACTERIZATION AND TREATMENT

2.1. Domestic wastewater characterization (untreated wastewater).

- 2.1.1. Describe the generation of wastewater (retirees, families, recreational vehicle [RV], institution, etc.). If RV waste is allowed, describe educational and engineering controls in place to minimize the potential for toxic RV waste chemicals to be discharged to the wastewater system.
- 2.1.2. Provide the domestic wastewater flow rate and describe how this flow rate is determined. Describe any special events or seasonal variations that cause high wastewater flow rates or other sources of wastewater (e.g. swimming pool filter, potable water treatment back wash water, festivals, etc.).
- 2.1.3. If making additions to the system, have an environmental laboratory analyze the domestic wastewater for Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), electrical conductivity, total nitrogen, sodium chloride, and any other specific chemicals

as needed based on site activities. Analyze the wastewater for holding tank chemicals (i.e., formaldehyde, methanol) if RV waste is discharged into the system.

2.2. Wastewater treatment system

2.2.1. Provide a wastewater treatment schematic also known as a process and instrumentation diagram.

2.2.1.2. Describe the domestic wastewater pretreatment systems (e.g. septic tank effluent pump system, grease traps, etc.).

2.2.3. Describe wastewater treatment technology (e.g., mound system, package plant, activated sludge, membrane biological reactor, septic tank, etc.). Include engineered design capacity in description.

2.2.3.1. Describe storage, treatment, and disposal of treatment residuals (e.g. sludge, septage, etc.).

2.2.4. Describe size and location of treatment equipment (e.g. septic tank volume, package treatment plant, membrane biological reactor, etc.).

2.2.5. Describe the disinfection system equipment.

2.2.6. Describe predicted wastewater effluent quality (must be equivalent to the total nitrogen per acre loading required under Tier 1 of the [OWTS Policy](#)).

For example, if the lot size is 50% of the minimum lot size allowed under Tier 1, then the designed alternative onsite treatment system must reduce the total nitrogen by 50%. If the lot size is 25% of the minimum, the mass of total nitrogen must be reduced by 75%, etc..

2.2.6.1. Characterize the wastewater for TSS, BOD, total nitrogen, and specific constituents of concern as needed. If the facility involves RV waste discharged to the system (e.g. RV Park or campground), characterize for holding tank chemicals and others as appropriate.

2.2.7. Treated effluent disposal method

2.2.7.1. Describe how treated wastewater will be dispersed (e.g. leachfield, subsurface drip).

2.2.7.2. Provide scale drawings of proposed disposal area (and the 100-percent replacement area when needed, such as for a leach field disposal system) include acreage, surrounding land use, depth to groundwater, and the proximity of drainage ways, surface waters, and municipal, industrial, or agricultural wells.

3. GROUNDWATER QUALITY

3.1. Depending upon the depth to groundwater, distance to surface water, volume of discharge (i.e. threat to groundwater quality), groundwater monitoring may be required.

Please contact Central Coast Water Board staff to determine if groundwater monitoring is required.

4. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CEQA documentation is usually obtained from the local agency Planning Department.

Acceptable CEQA documentation includes:

- 1) A Notice of Determination (NOD);
- 2) A Notice of Exemption (NOE);
- 3) A Negative Declaration (ND);
- 4) A Mitigated Negative Declaration (MND);
- 5) An Environmental Impact Report (EIR);

- 4.1. Some existing Small Domestic Systems will be determined to be categorically exempt from the California Environmental Quality Act (CEQA) under Title 14, section 15303 (new construction or conversion of small structures). **Any potential categorical exemptions should be discussed with the Regional Water Board representative prior to submitting an ROWD.**
- 4.2. Some new or expanding Small Domestic Systems will likely require CEQA evaluation that should be performed by local agencies. The CEQA evaluation shall be submitted with the ROWD. At a minimum, the evaluation shall include the Initial Study, a list of any adopted mitigation measures related to water quality, and the Notice of Determination.

OWTS POLICY DESIGN AND CONSTRUCTION REQUIREMENTS

All new onsite wastewater treatment system applications and designs must document how they will conform or not conform with the following OWTS design and construction requirements. Systems that conform to all requirements of OWTS Policy Sections 7 and 8 can be permitted by the local agency and do not need a permit from the Central Coast Water Board. For each requirement below, your application package should answer the following questions:

- 1. Does your design meet the requirement Yes/No***
- 2. If yes, document how it conforms with the requirement***
- 3. If no, provide information on how the design is protective of water quality.***

[OWTS Policy](#) **7.0 Minimum Site Evaluation and Siting Standards**

- 7.1 A qualified professional¹ 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;

¹ **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.

- 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.

- 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.

Table 1: Allowable Average Densities per Subdivision under Tier 1.	
Average Annual Rainfall* (inches per year)	Allowable Density (acres per 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

*Average annual rainfall means the average 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.

[OWTS Policy](#) 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.
- 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.
- 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 Bottom of the Dispersal System	
Percolation Rate	Minimum Depth
Percolation Rate \leq 1 MPI	Only as authorized in a Tier 2 Local Agency Management Plan
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 All new dispersal systems shall have 100 percent replacement area that is equivalent and separate, and available for future use.
- 8.1.7 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.

8.1.8 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.

8.1.9 Increased allowance for IAPMO certified dispersal systems is not allowed.

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.

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).