

San Francisco Bay Regional Water Quality Control Board

MEMORANDUM

TO: Bruce Wolfe, Executive Officer

FROM: Blair Allen, P.E.
Water Resources Control Engineer
Watershed Management Division



DATE: November 17, 2015

Water Board File No. 788849

SUBJECT: Water Board Approval of Santa Clara County Local Agency Management Plan for Onsite Wastewater Treatment Systems

Summary

Santa Clara County prepared and submitted a Local Agency Management Plan (LAMP) for Onsite Wastewater Treatment Systems (OWTS), describing the County's current and future program for regulating OWTS. The LAMP was developed in accordance with the Water Board's Basin Plan and the State Water Resources Control Board's *Policy for the Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems, June 19, 2012* (OWTS Policy). The OWTS Policy identifies the San Francisco Bay Regional Water Board as the lead agency for review and approval of the LAMP. Santa Clara County submitted the LAMP to the Water Board for review and approval. Water Board staff have reviewed the Santa Clara County Local Agency Management Plan and find it acceptable and hereby recommend approval.

OWTS Policy and LAMP

The OWTS Policy allows a local government agency with authority over OWTS (Local Agency) to regulate OWTS within its jurisdiction in accordance with a locally-customized regulatory program or LAMP. The LAMP pathway is described in OWTS Policy Tier 2, and requires preparation, review, and approval of LAMP documentation. The objective is to describe the Local Agency's program for regulating OWTS, including technical standards for design, installation, and operation of OWTS, and protocol for permitting and oversight of new and replacement OWTS. The OWTS Policy, in sections 3.0 through 3.5, and 9.0 through 9.6, provides requirements for LAMP development and content.

The OWTS Policy, at section 4.0, provides protocol for Regional Water Board review, and, if appropriate, approval of a LAMP. For cases where local government jurisdiction lies within more than one Regional Water Board, the OWTS Policy designates one Regional Water Board as the lead agency for review and approval, with cooperative review by the other Regional Water Board(s). This situation is true for Santa Clara County, which lies partly within both the San Francisco Bay and Central Coast Regional Water Boards. The OWTS Policy designates the San Francisco Bay Regional Water Board as the lead agency for review and approval of the Santa Clara County LAMP.

DR. TERRY F. YOUNG, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

Santa Clara County OWTS Program

All OWTS in Santa Clara County are permitted and regulated by the County's Department of Environmental Health (DEH). OWTS are primarily located in the unincorporated County, but OWTS within incorporated jurisdictions are also regulated by the DEH, through designation of the County as the public health officer and local adoption of the County's OWTS requirements. The County estimates that there are now about 12,500 individual OWTS installations. We do not expect the Water Board's acceptance of the Santa Clara County LAMP to significantly change the County's existing, robust, OWTS review process.

OWTS in Santa Clara County are subject to the requirements of the County's OWTS Ordinance and related regulations. The OWTS Ordinance is comprised of Santa Clara County Ordinance Code, Division B-11, Chapter IV, "Onsite Wastewater Treatment," and Chapter V "Inspection Reports of Onsite Wastewater Treatment Systems." In 2010, the County initiated a comprehensive review of its OWTS program and regulations. As an outgrowth, it updated the OWTS Ordinance in 2013 and developed a new Onsite Systems Manual containing all implementing regulations and criteria in 2014. The new OWTS Ordinance now allows for the use of *alternative* OWTS in addition to *conventional* OWTS and will increase the number of developable parcels from 2,600 to 3,700. This change was evaluated in the Environmental Impact Report approved as part of the Ordinance adoption process.

The Onsite Systems Manual provides the policy, procedural and technical details for implementation of the OWTS Ordinance. It includes permitting forms and procedures, site evaluation requirements and methods, guidelines for cumulative impact studies and geotechnical reports, design details and guidelines for both conventional and alternative systems, OWTS performance evaluation procedures, operation and monitoring requirements, and related technical and procedural information. The Onsite Systems Manual is maintained by the DEH, and will be reviewed and updated from time-to-time to keep pace with new issues, policies, procedures, and technologies affecting the use and management of OWTS in Santa Clara County. Substantive changes will require approval by the DEH director and by the Regional Water Board.

The Onsite Systems Manual is organized in five main sections as follows:

Part 1: Policies and Administrative Procedures.

This section describes administrative procedures. It covers general requirements for subdivisions, new construction, remodels, and repairs. It also includes DEH policies developed to clarify and explain various Ordinance provisions and protocols.

Part 2: Site Evaluation Methods and Investigation Requirements.

This section includes procedures and requirements, including those for soil and site evaluations, percolation tests, groundwater determinations, geotechnical report requirements, and guidelines for cumulative impact assessments.

Part 3: General and Conventional OWTS Requirements.

This section contains general requirements for all OWTS and specific design requirements for conventional OWTS. It includes procedures for plan submittal, system installation and inspections, and criteria for OWTS system design flows, septic tanks, dispersal trenches, and pumping systems.

Part 4: Guidelines for Alternative Systems.

This section contains requirements for design and construction of alternative treatment and dispersal systems permitted under the OWTS Ordinance. It includes a description of system types and applicability, siting, design and construction requirements, and monitoring and maintenance requirements.

Part 5: Operation, Monitoring, and Maintenance (OM&M).

This section contains protocols for the operation, monitoring and maintenance of conventional and alternative OWTS, including performance monitoring, and evaluation of functional status.

The Santa Clara County OWTS Ordinance and the Santa Clara County Onsite Systems Manual contain all pertinent OWTS requirements for the County's OWTS Program and form the basis of the Santa Clara County Local Area Management Plan.

Santa Clara County Local Agency Management Plan

Santa Clara County prepared and submitted its *Local Agency Management Plan for Onsite Wastewater Treatment Systems, County of Santa Clara, Department of Environmental Health, July 2014* (Santa Clara County LAMP), describing the County's current and future program for regulating OWTS. Santa Clara County submitted the Santa Clara County LAMP by cover letter dated August 29, 2014, received September 10, 2014, for review and consideration of approval by the Water Board.

Santa Clara County also prepared and submitted a cross-reference index or checklist for the LAMP. This index illustrates how and where the LAMP addresses all OWTS Policy requirements. The index is tabulated by Policy sections in sequence, for the LAMP requirements, which are given in sections 3 through 3.5 and sections 9 through 9.6. The tabulation includes section number, topic, and requirements summary, the corresponding location in the LAMP where each of those items is addressed, and legal authority that assures proper implementation of each item.

A complete copy of the Santa Clara County LAMP and cross-reference index are available via the Water Board's website: http://www.waterboards.ca.gov/sanfranciscobay/public_notices/.

LAMP Organization and Content

The Santa Clara County LAMP is organized to present a comprehensive explanation of the various requirements, policies, procedures and measures used to regulate the use of OWTS in Santa Clara County. It is also structured to address the items listed in the OWTS Policy pertaining to Local Agency Requirements and Responsibilities (OWTS Policy section 3.0) and Local Agency Management Program for Minimum OWTS Standards (OWTS Policy section 9.0).

The Santa Clara County LAMP is organized in six sections and two appendices as outlined below:

Section 1 - Introduction and Background.

This section describes the overall purpose, scope, geographic area and key elements of the LAMP.

Section 2 - Environmental Conditions, OWTS Use & Water Quality Management in Santa Clara County.

This section describes background environmental conditions pertinent to the use and suitability for OWTS, extent of OWTS in the County, and summary of OWTS management approaches adopted for protection of water quality in Santa Clara County.

Section 3 - OWTS Siting, Design, and Construction Requirements.

This section describes criteria and key requirements for siting, design and construction of OWTS, per the requirement of OWTS Policy section 9.2 and applicable items of sections 7.0 and 8.0.

Section 4 – Special Management Issues.

This section describes the LAMP provisions corresponding with special OWTS management issues of OWTS Policy sections 9.2.1 through 9.2.12.

Section 5 - Prohibitions.

This section describes the LAMP provisions corresponding with required prohibitions of OWTS Policy section 9.4.

Section 6 – Program Administration.

This section presents the County's plan for administering the LAMP, including record keeping, on-going assessment of water quality issues related to OWTS, and reporting to the Water Board, as required in OWTS Policy section 9.3.

Appendix A – Supporting Rationale.

This section presents supporting rationale, including literature sources, for various siting and design requirements, focusing on vertical separation distance requirements for conventional and alternative OWTS, and highlighting the LAMP requirements and management practices that are more protective than the minimum provisions of the OWTS Policy.

Appendix B – Nitrate and Salt Loading.

This section presents estimates of wastewater discharge volumes, nitrate loading and salt loading contributions to groundwater from the approximately 12,500 existing OWTS in Santa Clara County. This will be part of the County's ongoing assessment of water quality impacts from OWTS.

In accordance with the OWTS Policy, the Santa Clara County LAMP includes a Water Quality Assessment Program. The objectives are to determine operational status of OWTS, assess possible impacts of OWTS on groundwater and surface water quality, and identify areas for changes to existing management practices. The OWTS-water quality assessment effort will use watershed sub-basins delineated during the County's OWTS program update, allowing ongoing use of existing GIS-based mapping, OWTS inventories, and nitrate and salt loading analyses conducted to date. The LAMP also includes reporting to the Water Board, through annual reports summarizing recent OWTS activities for new and replacement OWTS, and five-year Water Quality Assessment Reports.

LAMP Review

Santa Clara County lies partly within both the San Francisco Bay and Central Coast Regional Water Boards' jurisdictions. The OWTS Policy designates the San Francisco Bay Regional Water Board as the lead agency for review and approval of the Santa Clara County LAMP, with consultation of water boards with overlapping jurisdiction.

Staffs of both Regional Water Boards were engaged throughout the course of developing the Santa Clara County LAMP, as well as the preceding multi-year process of developing an updated County ordinance for OWTS, a new Onsite Systems Manual to compile all technical standards, and a corresponding environmental impact report (EIR).

The San Francisco Bay Regional Water Board notified the Central Coast Regional Water Board staff by email on September 29, 2015, of our intent to approve the Santa Clara County LAMP and requested any comments the Central Coast Regional Water Board may have.

The Santa Clara County Board of Supervisors held numerous public hearings in the course of the County's work to update its OWTS program, including a hearing on November 5, 2013, to certify the final EIR for the County's updated OWTS program, and hearings on October 17, 2013, and November 26, 2013, to adopt Ordinance No. NS-517.85 amending Chapters IV and V of Division

B11 of the County of Santa Clara Ordinance Code relating to Onsite Wastewater Treatment Systems within Santa Clara County.

San Francisco Bay Regional Water Board staff reviewed the Santa Clara County LAMP and finds the program described for regulation of OWTS to be acceptable and complete with respect to both the requirements and recommendations of the OWTS Policy, and current appropriate practices for OWTS installation, operation, and management. Water Board staff recommend approval of the Santa Clara County Local Agency Management Plan.

Web-Posted Public Notice of Pending Approval

The San Francisco Bay Regional Water Board will post this memo and related documents on its website for at least 21 days as public notice of anticipated approval of the Santa Clara County LAMP. The Water Board will also distribute this memo to stakeholders through the Water Board's email subscription list for Regional Water Board Meetings. The public notice posting will allow interested parties to submit comments on the matter including any request for a public hearing by the Water Board. If no requests for a public hearing are received, then the Water Board anticipates approval of the LAMP by letter from the Executive Officer. If the Water Board receives requests for a public hearing, the Water Board will then consider including the matter on the agenda of the Water Board's next regular monthly meeting, for a public hearing, and determination of the next steps toward approval of the LAMP.

If you have any questions or comments about these matters, please contact Water Board staff Blair Allen, at Blair.Allen@waterboards.ca.gov or (510) 622-2305.

Reference Documents

OWTS Policy

The OWTS Policy is available at:

<http://www.waterboards.ca.gov/water_issues/programs/owts/board_adopted_policy.shtml>.

Water Board "ECM" electronic files for Santa Clara County LAMP Documents

Subject Title	ECM Doc #	File Size (KB)
Santa Clara County OWTS- LAMP Xmit Letter (08-29-2014)	2031435	40
Santa Clara County OWTS- LAMP July 2014 (08-29-2014)	1935482	7,872
Santa Clara County OWTS- LAMP- Cross-Reference Checklist (9-17-2015)	2031425	59
Santa Clara County OWTS- Onsite Systems Manual (May 2014)	2031428	6,150
Santa Clara County OWTS- SCCounty Ordinance NS-517-85 (County Code for OWTS, Adopted 9-3-13, Effective 12-26-2013)	2031518	181
Santa Clara County OWTS- 2013 Update & 2014 LAMP- Presentation to RWQCB2 (2-12-2015)	2031447	2,691
Santa Clara County OWTS- 2013 Update & Ordinance Final EIR (July 2013) (SCH# 2011112024)	2031525	4,809

(ECM PIN # = CW-788849. CIWQS Place# = 788849. Place Name = OWTS in Santa Clara County).

Santa Clara County OWTS Documents via internet and Santa Clara County website

Santa Clara County OWTS web site:

<https://www.sccgov.org/sites/cpd/programs/LU/Pages/home.aspx>

Santa Clara County OWTS Program Final EIR (July 2013):

https://www.sccgov.org/sites/cpd/programs/LU/Documents/LU_EIR.pdf

Santa Clara County OWTS Manual:

https://www.sccgov.org/sites/cpd/programs/LU/Documents/LU_Onsite_Systems_Manual.pdf

Memo Distribution

- (1) San Francisco Bay Regional Water Board web site.
- (2) Water Board ECM electronic files for Case File No. 788849
- (3) Santa Clara County Department of Environmental Health
Attention: Michael Balliet, Director, Consumer Protection Division
1555 Berger Drive, Suite 300
San Jose, CA 95112-2716
email: michael.balliet@deh.sccgov.org
- (4) Central Coast Regional Water Board
Attention: Howard Kolb, PE, Water Resources Control Engineer
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
email: howard.kolb@waterboards.ca.gov
- (5) State Water Resources Control Board, Division of Water Quality
Attention: Timothy R. O'Brien, PG/CEG/CHG, Senior Engineering Geologist
Waste Discharge Requirements Permit Unit
Division of Water Quality
Sacramento, CA
email: tobrien@waterboards.ca.gov
- (6) State Water Resources Control Board, Division of Drinking Water
Attention: Eric Lacy, PE, District Engineer
Santa Clara District
Division of Drinking Water
State Water Resources Control Board
email: Eric.Lacy@waterboards.ca.gov