# STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

## STAFF REPORT FOR REGULAR MEETING OF MAY 10-11, 2018

Prepared on April 6, 2018

ITEM NUMBER: 6

SUBJECT: Consideration of Monterey County's Local Agency Management

**Program (LAMP) for Onsite Wastewater Treatment Systems** 

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THIS ACTION: Adopt Resolution No. R3-2018-0004

**SUMMARY** 

The State Water Resources Control Board's (State Water Board) *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy¹) establishes statewide regulations for septic systems. It sets minimum performance standards and allows for continued local agency oversight. To accommodate regional geologic and climatic conditions, the OWTS Policy allows local agencies to propose local agency management programs (LAMPs). LAMPs allow local agencies to establish criteria that may differ from the minimum standards set in the OWTS Policy.

The OWTS Policy requires the Central Coast Water Board to approve LAMPs via adoption of resolutions; for Monterey County's LAMP, this is achieved by adopting the attached Resolution No. R3-2018-0004 (Attachment 1). On April 3, 2018, the Monterey County Board of Supervisors approved the County's LAMP (see Attachment 2). The proposed LAMP incorporates Central Coast Regional Water Quality Control Board (Central Coast Water Board) staff comments to ensure the LAMP meets all of the standards of the OWTS Policy thereby ensuring protection of water resources.

#### **DISCUSSION**

In accordance with Water Code section 13290 et seq., the OWTS Policy sets standards for:

- a. The construction or replacement of OWTS.
- b. OWTS that are subject to a major repair.
- c. OWTS that pool or discharge waste to the surface of the ground.
- d. OWTS that are affecting, or will affect, groundwater or surface water to a degree that makes it unfit for drinking water or other uses, or cause a health or other public nuisance condition.

<sup>&</sup>lt;sup>1</sup> https://www.waterboards.ca.gov/water\_issues/programs/owts/docs/owts\_policy.pdf

The OWTS Policy also includes minimum operating requirements for OWTS that may include:

- a. Siting, construction, and performance requirements.
- b. Requirements for OWTS near certain waters listed as impaired under section 303(d) of the Clean Water Act.
- c. Authorizing local agency implementation of the requirements.
- d. Corrective action requirements.
- e. Minimum monitoring requirements.
- f. Exemption criteria.
- g. Determining when an existing OWTS is subject to major repair.
- h. A conditional waiver of waste discharge requirements.

The State Water Board and the regional water quality control boards oversee implementation of the OWTS Policy. Local agencies (e.g., county and city departments and independent districts) have the opportunity to implement a LAMP if approved by the applicable regional water board. The Monterey County Environmental Health Bureau (Environmental Health, referred to as Environmental Health Bureau [EHB] in the LAMP, Attachment 2) informed Central Coast Water Board staff in 2016 that they would develop a LAMP for Monterey County.

Over the last two years, Environmental Health has collaborated with Central Coast Water Board staff as well as local advisory committee stakeholders and technical advisory groups to develop the Monterey County LAMP. The LAMP went through one complete revision and was modified through a comment and response period between Central Coast Water Board staff and Environmental Health. The Monterey County Board of Supervisors approved the Monterey County LAMP at its April 3, 2018, board meeting. Central Coast Water Board staff presents the same LAMP version (with minor, non-substantive corrections) for Board approval (Attachment 2). The following sections of the staff report provide detailed summaries of the key standards and operating requirements presented in the Monterey County LAMP to ensure water quality protection through compliance with the OWTS Policy.

# Notification of OWTS to Municipal Water Suppliers and Public Water Systems

OWTS Policy section 4.3.2 requires the Central Coast Water Board to solicit comments from the State Water Board Division of Drinking Water (DDW) on proposed notifications of water purveyors prior to OWTS permitting. The DDW responded via email to the Central Coast Water Board on April 16, 2018, stating they had no comments on the Monterey County LAMP.

OWTS Policy sections 3.5, 9.2.11, and 9.2.12 require the LAMP to specify how and when a local agency will notify municipal water suppliers and public water system operators of system failures, new installations or repairs to OWTS' dispersal areas within setbacks of public wells and surface water intakes.

The Monterey LAMP adequately addresses notification to public well and surface water operators and the DDW in sections 4.2, 4.3, and 5.12. LAMP section 4.2 states that public well and surface water operators and the DDW will be notified by the Environmental Health "as soon as practicable, but not later than 72 hours" upon discovery of a failing OWTS. LAMP section 4.3 states that property owners or individuals completing OWTS maintenance or repairs shall disclose the activities to Environmental Health. Environmental Health regulates the installation of public water supply wells and ensures new OWTS locations are within protective horizontal and vertical setbacks as defined in Sections 5.9 Table 5-8 and 5.12 Table 5-9 of the LAMP. The

buffers come from the most protective OWTS Policy Tier 1 setbacks and are protective of existing water resources.

# **Commitment to Submit Reports**

OWTS Policy sections 3.3 and 9.3.3 cover Annual and Water Quality Assessment Reports. OWTS Policy section 3.3 requires local agencies to submit annual spreadsheet-format reports on OWTS complaints, applications, and registrations as part of the local septic tank cleaning program and on permits for new and replacement OWTS. Annual reports are due February 1 every year following LAMP implementation, beginning May 13, 2018. The fifth annual report should include an evaluation of the Water Quality Assessment Program (OWTS Policy section 9.3.2).

The Monterey LAMP section 11.4, *Record Keeping and Reporting*, pages 113 through 114, presents a complete list of reporting requirements that meets OWTS Policy sections 3.3 and 9.3.3 standards with appropriate commitments to the required reporting schedule. Therefore, the Monterey LAMP meets the OWTS Policy section 3.3 and 9.3.3 requirements.

## **Scope of Coverage**

OWTS Policy section 9.2 et seq. specifies a LAMP shall detail the scope of its coverage with key consideration given to maximum authorized projected flows and ensuring building and permitting elements have been discussed. The Monterey LAMP meets the OWTS Policy section 9.2 et seq. requirements. Following is a brief summary of how the Monterey LAMP addresses OWTS Policy section 9.2 et seq.

<u>LAMP section 1.1</u> states, "It is the intent of the EHB, as the Administrative Authority, to regulate all domestic wastewater flows up to 10,000 gallons per day ("gpd"), the maximum allowed under State regulations."

<u>LAMP sections 4.3, 5.5, 5.10.3, and 5.14</u> presents the authority granted to Environmental Health to inspect systems and issue OWTS operating permits, grant variances of non-critical design requirements for existing OWTS repairs, and require monitoring, maintenance, and repairs of OWTS.

<u>LAMP sections 4.6 and 4.7</u> presents the steps Environmental Health will take when presented with OWTS in degraded groundwater basins and in developing an Advanced Protection Management Plan for these areas.

# **Compliance with Prohibitions and Setbacks**

OWTS Policy sections 9.4.1 through 9.4.9 prohibits specific authorizations in LAMPs. The Monterey LAMP incorporates the OWTS Policy section 9.4 et seq. prohibitions in LAMP section 5.5 *Prohibitions*.

OWTS Policy section 9.4.10 et seq. prohibits new or replacement OWTS within minimum horizontal setbacks with the exception as provided in section 9.4.11 for existing dispersal systems and section 9.4.12 for new dispersal systems. Following is a brief summary of these exceptions and how the Monterey LAMP used exception 9.4.12 to ensure adequate protection of water resources.

OWTS Policy exception section 9.4.11 states that a replacement OWTS shall meet the horizontal separation to the greatest extent practicable and 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.

OWTS Policy exception section 9.4.12 states that new OWTS, installed on parcels of record existing at the time of the effective date of the OWTS Policy, that cannot meet the stated horizontal separation requirements, shall meet the horizontal separation to the greatest extent practicable and shall utilize supplemental treatment<sup>2</sup> for pathogens as specified in OWTS Policy section 10.8 and any other mitigation measures prescribed by the permitting authority.

The Monterey LAMP allows a shorter minimum distance between a dispersal field and a public water system supply well. OWTS Policy section 9.4.10.2 states a dispersal field must be 200 feet from a public water well where the effluent dispersal system depth exceeds 10 feet. The Monterey LAMP proposes in Table 5-8 that an existing dispersal system exceeding 10 feet in depth can remain in place within 150 feet of a public water system supply well as long as the OWTS incorporates supplemental treatment and disinfection. Supplemental treatment is defined or specified in Tables 4-2, 5-9, 5-10 and section 5.12.3 *Alternative OWTS with Supplemental Treatment Systems* in the Monterey LAMP. Central Coast Water Board staff agrees that a properly maintained and functioning supplemental treatment system that reduces nutrients, viruses, and bacteria to the levels stated in section 5.12.3 of the Monterey LAMP is equal to or more protective than an additional 50-feet of groundwater flow travel distance between a dispersal field and a public water system supply well.

The Monterey LAMP meets the OWTS Policy section 9.4 et seq. requirements.

## **Technical Adequacy to Protect Water Quality**

OWTS Policy section 9.1 et seq. requires local agencies to consider appropriate conditions to ensure that overall LAMPs are as protective of water quality and public health as OWTS Policy

Tier 1 Low Risk New or Replacement OWTS. OWTS Policy Tier 1 provides largely prescriptive standards for siting and construction of OWTS systems. Key summaries of the standards are in:

- OWTS Policy section 7.8 (Table 1), Allowable OWTS densities based on average annual rainfall.
- OWTS Policy section 8.1.5 (Table 2), Minimum depths to shallowest groundwater and bottom of soil below dispersal trenches.
- OWTS Policy section 8.1.7 (Tables 3 and 4), Long-term application rates based on percolation rates and soils descriptions.

<sup>&</sup>lt;sup>2</sup> As defined in the OWTS Policy, "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

Supplemental treatment is further defined in Tables 4-2, 5-9, 5-10 and section 5.12.3 *Alternative OWTS* with Supplemental Treatment Systems in the Monterey LAMP.

Allowable Average Tier 1 Subdivision density (OWTS Policy section 7.8): Table 1 specifies allowable OWTS densities for any subdivision of property made by Tentative Approval pursuant to the Subdivision Map Act occurring after the effective date of the OWTS Policy. The Monterey LAMP specifies densities in section 5.2, Table 5-1 Allowable Average Densities per Subdivision. Table 5-1 of the LAMP presented below is equivalent and as protective as Table 1 of the OWTS Policy.

LAMP Table 5-1 Allowable Average Densities per Subdivision

Average Annual Rainfall (inches per year)	Allowable Density (acres per single family dwelling unit or equivalent)
0 - 15	2.5
>15 - 20	2
>20 - 25	1.5
>25	1

Minimum soil and groundwater depths (OWTS Policy section 8.1.5): Table 2 specifies allowable minimum separation distances between bottom of an OWTS dispersal field and first encountered groundwater elevation based on soil percolation rates. The Monterey LAMP specifies protective requirements in section 5.9.3, Table 5-6 *Vertical Separation to Groundwater or Impervious Layer*. The Monterey LAMP establishes a maximum percolation rate of 90 minutes per inch, otherwise the OWTS is required to incorporate supplemental treatment to ensure protection of surface and groundwater resources.

Percolation rate- and soil type-determined wastewater application rates (OWTS Policy section 8.1.7): Tables 3 and 4 specify wastewater application rates as determined from stabilized percolation rates and design soil application rates, respectively. The Monterey LAMP includes a modified version of Table 3 and the identical Table 4 of the OWTS Policy. LAMP section 5.8, Table 5-4 Soil Application Rate as Determined from Stabilized Percolation Rates, groups ranges of percolations rates by application rates that are within 0.01 of a gallon per day per square foot application rate. Monterey LAMP Table 5-5, Soil Application Rate as Determined from Soil Texture, Structure and Grade, is identical to Table 4 of the OWTS Policy.

<u>Water quality assessment program (OWTS Policy section 9.3.2):</u> This section describes minimum standards of a water quality assessment program. Following is a brief summary of how the Monterey LAMP addresses OWTS Policy sections 9.1 et seq. and 9.3.2.

OWTS Policy section 9.3.2 requires the local agency to establish a water quality assessment program to determine the general operation status of OWTS, to evaluate the impact of OWTS discharges, and to assess the extent to which groundwater and local surface water quality may be adversely impacted by OWTS management strategies established in the LAMP. Monterey LAMP section 11.4.1.2 *Water Quality Monitoring Program* meets OWTS Policy section 9.3.2 requirements. The water quality monitoring program will provide, in the annual report to the Central Coast Water Board, cumulative impact analysis data (Section 5.2.1 of Monterey LAMP), new groundwater quality monitoring data derived from groundwater monitoring wells installed to

monitor OWTS potential impacts, and surface water monitoring data collected for the OWTS assessment program.

The Monterey LAMP meets OWTS Policy sections 9.1 et seq. and 9.3.2 requirements.

#### **Local Code Enforcement**

The Monterey County Board of Supervisors approved the LAMP and plan to adopt the entire document as an ordinance by reference. The date of adoption into Monterey County's ordinances will occur immediately following LAMP approval by the Central Coast Water Board.

# **CONCLUSION**

The Monterey County LAMP complies with the requirements set forth in the OWTS Policy. Effective implementation of the LAMP by Environmental Health will ensure the protection of surface and groundwater resources.

#### **RECOMMENDATION**

Central Coast Water Board staff recommends adopting Resolution No. R3-2018-0004 as proposed.

#### **ATTACHMENTS**

- 1. Resolution No. R3-2018-0004
- 2. Monterey County LAMP

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