STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF DECEMBER 6-7, 2018 Prepared on November 1, 2018

ITEM NUMBER:	13
SUBJECT:	Consideration of City of Atascadero's Local Agency Management Program (LAMP) for Onsite Wastewater Treatment Systems
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THIS ACTION: Adopt Resolution No. R3-2018-0007

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 onsite systems (commonly known as septic systems). The OWTS Policy established a statewide, risk-based, tiered approach for regulation and management of septic systems. The OWTS Policy which became effective May 13, 2013, establishes minimum requirements for the permitting, monitoring, and operation of septic systems.

To accommodate regional geologic and climatic conditions, the OWTS Policy allows local agencies to propose local agency management programs (LAMPs) for new and replacement OWTS. LAMPs allow local agencies to establish minimum criteria that may differ from the standards set in the OWTS Policy. Central Coast Regional Water Quality Control Board (Central Coast Water Board) staff have worked closely with local agencies that have prepared LAMPS to ensure the LAMP includes standards that are protective of water quality. The OWTS Policy requires Central Coast Water Board approval of LAMPs in the central coast region, and once approved the local agencies may permit septic systems in accordance with the LAMP. Without an approved LAMP, local agencies may permit new or replacement OWTS only if they are consistent with the siting and design requirements of OWTS Policy Tier 1.

Details on the OWTS Policy and LAMP development can be found in item 10 (*Local Agency Management Program for Implementation of the of State Onsite Wastewater Treatment System Policy – Status Update and Next Steps*) of the June 28, 2018 Central Coast Water Board meeting agenda.

https://www.waterboards.ca.gov/centralcoast/board_info/agendas/2018/june/index.html

Additionally, a status update on the ongoing coordination with local agencies that are developing LAMPs are summarized in the Executive Officer's report for this Board meeting.

¹ <u>https://www.waterboards.ca.gov/water_issues/programs/owts/docs/owts_policy.pdf</u>

This staff report provides detailed summaries of the most critical standards and operating requirements presented in the proposed Atascadero Public Works Department (Atascadero) LAMP. The LAMP was reviewed by Central Coast Water Board staff, which finds the LAMP meets all the standards of the OWTS Policy thereby ensuring the 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 beneficial uses, or causes pollution, nuisance, or contamination, or that has reasonable potential to cause a violation of water quality objectives.

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.

Atascadero informed Central Coast Water Board staff in 2013 that they would develop a LAMP for Atascadero and submitted a first draft in December 2017. Atascadero collaborated with Central Coast Water Board staff as well as local advisory committee stakeholders during LAMP development. The LAMP was modified through a written comment and response process and several technical working meetings between Central Coast Water Board and Atascadero staff.

The following sections provide detailed summaries of the most critical standards and operating requirements presented in the Atascadero LAMP to demonstrate compliance with the OWTS Policy.

Notification of OWTS to Municipal Water Suppliers and Public Water Systems

OWTS Policy section 4.3.2 requires Central Coast Water Board staff to solicit comments from the State Water Board Division of Drinking Water on proposed notifications of water purveyors prior to OWTS permitting. The Division of Drinking Water responded via email to Central Coast Water Board staff on March 16, 2018, that they had no comments on the draft Atascadero LAMP.

The Atascadero LAMP meets OWTS Policy sections 3.5, 9.2.11, and 9.2.12 that requires the LAMP to specify how and when a local agency will notify public water system owners of new installations or repairs to OWTS' dispersal areas within setbacks of public wells. Atascadero Mutual Water Company supplies drinking water for all Atascadero residents from their wells near the Salinas River. There are no existing or future OWTS dispersal areas allowed within the

setbacks of these public wells. Atascadero LAMP section 2.8 states there are established 300foot buffers called "Wellhead Protected Areas" for each of the water supply production wells. Additionally, to continue to verify private wells will not be constructed within setbacks from existing leachfields or 100% expansion areas for new OWTS, Atascadero staff will review all well applications received from the County of San Luis Obispo.

Commitment to Submit Reports

The Atascadero LAMP meets OWTS Policy sections 3.3 and 9.3.3 requirements for Annual and Water Quality Assessment Reports. OWTS Policy section 3.3 requires local agencies to submit annual spreadsheet-format reports on OWTS complaints and whether they were investigated and resolved; applications, and registrations issued as part of the local septic tank cleaning program; and permits issued for new and replacement OWTS. Annual reports are due February 1 every year following LAMP implementation. The fifth annual report is required to include an evaluation of the Water Quality Assessment Program (OWTS Policy section 9.3.2).

The Atascadero LAMP section 3.4, *Reporting to the Regional Board*, 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.

Scope of Coverage

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

LAMP section 1.1 states:

"It is the intent of the Atascadero City Council, in adopting this LAMP, to ensure that OWTS are constructed, modified, repaired, abandoned, operated, maintained, inspected and serviced in a manner that prevents environmental degradation and protects the health, safety and general welfare of the people of the City of Atascadero."

Additionally, LAMP section 1.1 states:

"The City of Atascadero's LAMP does not include the following:

- Any OWTS with projected wastewater flow of 10,000 gallons per day or more.
- Any OWTS that has above ground surface discharge.
- Any OWTS that receives high-strength wastewater, unless the waste stream is from a commercial food service facility. "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.
- Any OWTS used for winery production. (All wineries not connected to the municipal sewer system shall apply separately to the Water Board under the General Winery WDR Order No. R3- 2017-0020).
- Any OWTS that receives high-strength wastewater from a commercial food service facility:

- with a BOD higher than 900 mg/l or
- that does not have a properly sized and functioning oil/grease interceptor.
- OWTS dedicated to receiving significant amounts of wastes dumped from RV holding tanks."

<u>LAMP section 3.5</u> presents the authority granted to the Atascadero Public Works Department and Building Division to inspect OWTS, issue OWTS operating permits, grant variances of noncritical design requirements for existing OWTS repairs, and require monitoring, maintenance, and repairs of OWTS.

<u>LAMP section 4.13</u> presents the steps Atascadero will take when presented with OWTS in degraded groundwater basins and in developing an Advanced Protection Management Plan for these areas. The Advanced Protection Management Plan language in Atascadero's LAMP is functionally equivalent to the language in the Santa Barbara County and Monterey County LAMPs

Compliance with Prohibitions and Setbacks

The Atascadero LAMP meets the requirements of OWTS Policy section 9.4 et. seq. Under OWTS Policy sections 9.4.1 through 9.4.9, LAMPs may not authorize certain systems, siting, and conditions. The Atascadero LAMP complies with the OWTS Policy by incorporating OWTS Policy section 9.4 et seq. prohibitions into LAMP section 3.6 *Variances & Prohibitions*.

Under OWTS Policy section 9.4.10 et seq., LAMPs may not authorize new or replacement OWTS within minimum horizontal setbacks except as provided in section 9.4.11 for existing dispersal systems and section 9.4.12 for new dispersal systems. Following is a summary of these exceptions and how the Atascadero 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 treatment² for pathogens as specified in OWTS Policy section 10.8 and any other mitigation measures prescribed by the permitting authority.

The Atascadero LAMP adheres to all stated minimum horizontal and vertical distances between a dispersal field and all potential receiving water bodies (i.e., groundwater, a public water

² 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.

system supply well, surface water bodies, etc.). This data is presented in Tables 4.3.1, 4.11.1, and Appendix F. Following is an excerpt from Appendix F discussing when a setback variance may be granted:

"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."

Supplemental treatment is defined in Tables 4.11.1 and 4.11.2 with pathogen removal described at the end of section 4.11 in the sub-section called *OWTS with Supplemental Treatment Systems*.

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 4.11 of the Atascadero LAMP meets the OWTS Policy section 9.4 et seq. requirements.

Technical Adequacy to Protect Water Quality

The Atascadero LAMP is 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 depth to shallowest groundwater and minimum soil depth to the bottom of dispersal system trenches.
- OWTS Policy section 8.1.7 (Tables 3 and 4), Long-term application rates based on percolation rates and soils descriptions.

<u>OWTS Policy Table 1</u> 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 Atascadero LAMP specifies densities in Table 4.12.1 *Allowable Average Densities per Subdivision*. Table 4.12.1 of the LAMP is identical to Table 1 of the OWTS Policy.

<u>OWTS Policy Table 2</u> specifies allowable minimum separation distances between bottom of an OWTS dispersal field and first encountered groundwater elevation based on soil percolation rates. The Atascadero LAMP specifies the same protective requirements in Table 4.3.1 *Minimum Vertical Separation to Groundwater for Conventional OWTS Dispersal Systems.* The Atascadero LAMP also establishes a maximum percolation rate of 120 minutes per inch,

otherwise the OWTS is required to incorporate supplemental treatment to ensure protection of groundwater resources.

<u>OWTS Policy Tables 3 and 4</u> specify wastewater application rates as determined from stabilized percolation rates and design soil application rates, respectively. The Atascadero LAMP does not include Tables 3 and 4, but it does require a calculated application rate based on percolation tests and the Ryon Formula³ to ensure an appropriate disposal system sizing for the local soil conditions. The Ryon Formula is a known and approved engineering approach to deriving the appropriate wastewater application rates for an OWTS dispersal system. LAMP section 4.9, *Percolation Test Procedures for Leach Beds and Leach Lines*, details how local soil conditions are assessed and tested for hydraulic loading capacities.

The following is a summary of how the Atascadero LAMP meets OWTS Policy section 9.3.2 requirements for minimum standards of a water quality assessment program.

<u>OWTS Policy section 9.3.2</u> 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. Atascadero LAMP section 3.3 *Water Quality Assessment Program* addresses the OWTS Policy section 9.3.2 requirements. The water quality assessment program will provide, in the annual report to the Central Coast Water Board, an assessment of the data to determine relevance to OWTS, identify any obvious water quality degradation attributable to OWTS warranting follow-up investigation or action, identify any water quality data/areas where no apparent issues of concern are attributed to OWTS.

Local Code Enforcement

As of November 1, 2018, the Atascadero City Council is scheduled to tentatively approve the LAMP on November 13, 2018 (pending Central Coast Water Board approval) and plans to adopt the entire document as an ordinance by reference. The date of adoption into Atascadero City ordinances will occur immediately following LAMP approval by the Central Coast Water Board. Following adoption of the LAMP by reference, Atascadero will implement the LAMP for approximately 12 months while concurrently amending affected City of Atascadero Municipal Code Sections for consistency. During this time, in instances where a conflict exists between the Atascadero City Municipal Code and the LAMP, the LAMP will prevail.

CONCLUSION

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

RECOMMENDATION

³ Ryon Formula A = $\underline{T+6.24} \times \underline{C}$

29 2

Where A = Square feet of 3-foot wide trench dispersal area

T = Time in minutes for the 6 inches of water to drain

C = Proposed septic tank capacity

Central Coast Water Board staff recommends adopting Resolution No. R3-2018-0007 as proposed.

ATTACHMENTS

- 1. Resolution No. R3-2018-0007
- 2. Atascadero LAMP (due to large number of pages, appendices for LAMP only available online)

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