TO: Blair Allen, P.E., Region 2

FROM: Eric Rapport, C.HG., C.E.G. & Robin Merod, Ph.D., P.E., Region 5

DATE: 16 June 2017

SIGNATURE: Original signed by

SUBJECT: REVIEW REQUEST FROM REGION 2, ALAMEDA COUNTY LAMP

INTRODUCTION

The State Water Resources Control Board (State Board) *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy, or Policy) in part allows Local Agencies to propose Local Agency Management Programs (LAMPs) for Regional Water Quality Control Board (Regional Board) approvals. Under OWTS Policy Tier 2, LAMPs can propose alternative local standards to those in Tier 1; however the standards should meet the same overall purpose to protect water quality and human health.

Local Agencies, largely county environmental health agencies, in some cases span multiple Regional Board jurisdictions. In these cases, Policy §4.3 and Attachment 3 designate one Regional Board to review and approve LAMPs. Policy §4.3.1 nonetheless requires Regional Boards to work cooperatively and assure adequate water quality protection in each region.

On 1 June 2017, Region 2, OWTS Policy Designated Region, requested our staff's general opinion on a LAMP from Alameda County. The following summarizes our review of; proposed notifications, commitment to submit reports, technical adequacy to protect water quality, scope of coverage, compliance with prohibitions and setbacks, and other pertinent standards. Note that our review covers only key Policy Sections, and does not replace your complete and detailed review.

LAMP REVIEW

Proposed Notifications

Within 30 days of receiving a proposed LAMP, Policy §4.3.2 requires Designated Regions to solicit comments from Division of Drinking Water (DDW) on proposed notifications of water purveyors prior to OWTS permitting. State Board Guidance requests our focus on Policy §§3.5, 9.2.11, and 9.2.12. On 1 June 2017, Region 2 staff solicited comments from DDW. Nonetheless, we find that the LAMP does not meet some minimum standards for notifications.

Policy §3.5 generally requires a Local Agency to notify public water well or water intake owners and DDW as soon as practicable, but no later than 72 hours upon discovery of a failing OWTS (Policy §§11.1 and 11.2) within setbacks in Policy §7.5.6 through 7.5.10 [sic, should be through 7.5.8]. We find that the LAMP does not address the notification requirements for a failing OWTS. We searched LAMP Section 4 under the subsection titled *OWTS Notification to Public Water System Owner(s)*, pages 40-41, and found no time limit for notification of water purveyors

and DDW upon discovery of an OWTS failure. We searched the total document for the County's definition of a failing system, (e.g., pooling effluent and baffle failures) and found none.

Policy §9.2.11 generally requires a Local Agency to notify public water system owners of pending installation and repair permits within 1,200 feet of a surface water intake, within its drainage area catchment, and located such that it might impact water quality. We find that LAMP Section 4, Item (3) under the subsection titled *OWTS Notification to Public Water System Owner(s)*, page 40, meets these standards.

Policy §9.2.12 generally requires a Local Agency to propose procedures when a dispersal area would be within a horizontal setback of a public well or surface water intake, either supplemental treatments for nitrogen and pathogens (Policy §§10.9 and 10.10), or alternative siting and operational criteria. We find that LAMP Section 4, Item (3) under the subsection titled *OWTS Notification to Public Water System Owner(s)* and the complete subsection titled *Procedures for Dispersal Field Located Within Public Well/Intake Setback*, pages 40-42, meet these standards.

Commitment to Submit Reports

Policy §§3.3 and 9.3.3 cover Annual, and Water Quality Assessment Reports. Policy §3.3 generally 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 permits for new and replacement OWTS (see Policy §§3.3.1, 3.3.2, and 3.3.3). Annual Reports are due 1 February every year following LAMP implementation, beginning 13 May 2018. The fifth annual report should include an evaluation of the Water Quality Assessment Program (Policy §9.3.2). We find that the LAMP Section 6 under the subsection titled *Reporting to Regional Water Board*, page 48, meets general requirements for reporting.

Technical Adequacy to Protect Water Quality

OWTS Policy Tier 1 provides largely prescriptive standards for siting and construction standards; key summaries are in Policy §§7.8 (Table 1), 8.1.5 (Table 2), and 8.1.7 (Tables 3 and 4), respectively; allowable OWTS densities based on average annual rainfall; minimum depths to shallowest groundwater and bottom of soil below dispersal trenches; and long term application rates based on percolation rates and soils descriptions. For Tier 2, Policy §9.1 et seq. requires Local Agencies to consider appropriate conditions to ensure that the LAMP is overall as protective of water quality and public health as Tier 1. We find that LAMP Appendix A, *Supporting Rationale for Alameda County OWTS Siting and Design Criteria*, compares Alameda County's siting requirements and those of Tier 1; the County's requirements are consistently more conservative. Appendix B, *OWTS Usage and Loading Estimates for Alameda County*, Section titled *Potential Areas of Concern*, pages B-5 and B-6, Figure B-4, Tables B-4 and 5, and *Focus Area Maps*, identify areas of concern and focus (two of which are either near or within Region 5 jurisdiction, Focus Area 9, Tesla Avenue/Greenville Road and Focus Area 11, Mines Road). In general, the LAMP adequately considers Policy §9.1 et seq. and is generally more protective than the minimum requirements of the OWTS Policy.

Policy §9.3.2 describes minimum standards of a Water Quality Assessment Program. Based on several discussions with the California Conference of Directors of Environmental Health, in Region 5 a reasonable minimum data scope would be; state small community water systems, Geotracker GAMA-Secure, monitoring wells from permitted facilities, and private domestic wells; but only if a Local Agency routinely requires sampling, for example as proof of potable water or

to settle a dispute between a landlord and tenant. We find that LAMP Section 6, Item (4) under the subsection titled *Water Quality Assessment*, page 47, meets the minimum scope of data compilation for Water Quality Assessment Reports.

While beyond Region 5 jurisdiction, a preliminary review of Geotracker GAMA Secure shows wells with nitrate above maximum contaminant level within the last ten years near Livermore, a hydrogeologically vulnerable area.

Scope of Coverage

Policy §9.2 et seq. describes scope of coverage. We consider Policy §§9.2.1 through 9.2.10 generally beyond the scope of this review; our key consideration is maximum authorized projected flows. LAMP Section 1: *Introduction and Background*, *Introduction*, page 1, shows that the LAMP covers OWTS with projected flows up to10,000 gallons per day, consistent with OWTS Policy standards (see also OWTS Policy Preamble and §9.4.2).

Compliance with Prohibitions and Setbacks

Policy §9.4 et seq. prohibits some authorizations in LAMPs, and gives minimum horizontal setbacks for new and replacement OWTS from public supply wells and surface water intakes. We find that the LAMP conforms with Policy prohibitions and setbacks. LAMP Section 5, *Prohibitions*, pages 44 through 45, addresses OWTS Policy §9.4.

FINDINGS AND CONCLUSIONS

Except for the notification requirements for failing OWTS, we find that the subject LAMP appears to meet minimum standards in key portions of the OWTS Policy.

If you would like to schedule a teleconference or meeting to discuss Alameda County's LAMP, please contact either me, or Eric Rapport, our Regional OWTS Policy Implementation Program Lead.