File: Kern County LAMP

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SUBJECT: **Region 6 Comments - Kern County Draft Local Agency Management Plan**

The Regional Water Quality Control Board, Lahontan Region (Water Board) staff has reviewed the May 25, 2016 draft Kern County Local Agency Management Plan (LAMP) and comments provided by Region 5. We appreciate the discussion with Region 5 and Kern County staff on July 19, 2016 to discuss comments. Region 6 provides the following comments on the Kern County LAMP.

1. Onsite Wastewater Treatment System (OWTS) Policy Section 9.1, Considerations for LAMPs (Relevant LAMP Sections, 2 & 4).

   The Water Quality Assessment Program should consider the following elements.

   - Identify areas of, and include specific assessment elements for, particular locales or areas of concern with high-risk conditions that may lead to groundwater pollution from OWTS. These areas include poor soil conditions, shallow water table, high domestic well usage, high density of OWTS, areas experiencing large numbers of failing systems, or areas where water quality data indicate trends of

increasing nitrate concentrations in ground or surface waters. Within the Region 6 portion of Kern County these areas include the following.

- Indian Wells Valley
- Northwest Antelope Valley
- North Edwards

- Identification of individual residential wells in areas of high density OWTS willing to participate in regional groundwater data collection.

- Identification of existing monitoring wells or other supply wells in areas of high density OWTS (include names of well owners and any current monitoring being conducted).

- Assess efforts to establish onsite maintenance districts or zones and feasibility of installing municipal sewage collection systems in areas of high density OWTS.

- Assess locations near high density OWTS where future groundwater monitoring wells should be installed, especially in areas of shallow groundwater.

- Assess water quality trends, especially with respect to nitrate concentrations.

2. OWTS Policy Section 9.1.9, Areas of High OWTS Density (Relevant LAMP Section, 2, Appendix B).

   Kern County requires a cumulative impact assessment for new subdivisions with lots sizes smaller than 2.5 acres, but only where individual domestic wells are used. The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) requires all groundwater with a municipal beneficial use designation to be free of pollution and the Water Board is required to maintain high quality water for future beneficial uses where feasible. The Water Board recommends that Kern County complete a cumulative impact assessment for all new subdivisions with lots smaller than 2.5 acres, regardless of whether the water supply is from on-site domestic wells or a community water system service.

3. OWTS Policy Section 9.1.10, Limits to parcel size (Relevant LAMP Section, 2).

   Clarify what Kern County is proposing for density requirements in LAMP for new and existing subdivisions. Provide justification for the parcel sizes and how ground water quality protection will be ensured.

   At a minimum, the Basin Plan's maximum density criteria for use of OWTS should be incorporated into the LAMP unless the County is proposing more restrictive density criteria (such as Tier 1 requirements in the OWTS Policy). These criteria were incorporated in 1988. The Basin Plan, Chapter 4.4, page 4.4-10 may be found at the following internet address:

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/ch4_implementplans.pdf

a. Use of OWTS for single family homes on lots subdivided after 1988 may have a gross density of no greater than two (2) single family equivalent dwelling units per acre. Developments with higher density are required to have secondary-level treatment of wastewater. Equivalent dwelling units (EDUs) are defined as 250 gallons per day per EDU. The secondary level treatment also applies to domestic wastewater discharges from commercial, industrial, recreational and all other developments with wastewater discharge volumes exceeding two EDU per acre density (500/gal/day/acre based on 250 gal/day/EDU).

b. Use of new OWTS is permitted on lots subdivided prior to 1988 if the lot sizes has a net area greater than or equal to 15,000 square feet.

4. OWTS Policy Section 9.2, Scope of Coverage (Relevant LAMP Sections, 1 & 3, p. 6).

Referrals to Water Board would result in our becoming the lead regulatory agency. Discharges would be regulated by waste discharge requirements which require annual fees and monitoring costs. We concur with Region 5 that Kern County should clarify the systems that will be referred and suggest the County retain lead for all systems up to the OWTS Policy allowed up to 10,000 gal/day.

Additionally, the County should reconsider its intent to seek Water Board approval of each new type of alternative OWTS (LAMP, Page 26; and Kern County Onsite Manual, Part 3). Water Code §13360 prohibits the Water Board from specifying the manner or method of treatment and disposal. Water Board staff welcomes consultation with County staff on specific OWTS applications. Perhaps a better phrase may be the following: "County code allows for the future additions of alternative treatment and dispersal systems, as approved by the director after receiving and considering recommendations from the appropriate Water Board."

5. OWTS Policy Section 9.2.8, Regional Salt and Nutrient Management Plans (Relevant LAMP Section, 4 p. 33, Appendix B).

The LAMP should reference the appropriate Salt and Nutrient Management Plans (Plans).

The Antelope Valley Salt and Nutrient Management Plan prepared by the Antelope Valley Integrated Regional Water Management Plan group may be accessed on the internet at: http://www.avwaterplan.org/. The Plan looks to the LAMP to ensure OWTS do not adversely affect groundwater. It concludes that with respect to nitrate, groundwater concentrations levels in the Antelope Valley Groundwater Basin are well below the MCL. It also concludes that with respect to total dissolved solids (TDS), average TDS concentrations in the Antelope Valley Groundwater Basin are below the recommended Secondary Maximum Contaminant Level, or drinking water

standard. This means that receiving groundwater in the Antelope Valley is of high quality and does not appear to have been adversely impacted by OWTS. However, as mentioned earlier, the Water Board is required by state policy and regulations to maintain high quality where feasible or unless specific findings can be made to allow degradation.

The Indian Wells Valley Salt and Nutrient Management Plan is being prepared by the Indian Wells Valley Water District and is not yet completed. The Fremont Valley Salt and Nutrient Management Plan is being prepared by the City of California City and is not yet completed. However, you can incorporate available water quality information and evaluate current water quality conditions and predict any changes (benefit or detriment) based on proposed LAMP implementation.

We look forward to working with Region 5 and Kern County to finalize a LAMP that is protective of public health and groundwater quality from OWTS discharges. Water Board staff are available to discuss our comments and concerns in more detail. If you have any questions, please contact me at (530) 542-5436 (lauri.kemper@waterboards.ca.gov), Francis Coony at (760) 241-7353 (mike.coony@waterboards.ca.gov) or Jehiel Cass at (760) 241-2434 (jehiel.cass@waterboards.ca.gov).

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