The City of Adelanto (City) submitted a Draft Local Area Management Program (LAMP) to the Lahontan Regional Water Quality Control Board (Water Board), dated May 13, 2016. The City proposes a LAMP (Tier 2) for new and replacement onsite wastewater treatment systems (OWTS) instead of Tier 1 compliance under the State Board’s OWTS Policy. Our comments are presented in the body of this letter.

Issues of Concern

A. Water Quality Assessment Program (WQAP) – We recognize that the single most challenging issue for the City and Water Board is implementing a meaningful, cost-effective, and adequate WQAP to satisfy OWTS Policy §9.3. The City identifies the Salt and Nutrient Management Program (SNMP) for identification of existing groundwater data sources. However, the proposed program does not describe how the City will select and use the data to meet OWTS Policy §9.3.2 requirements to assess the impact of OWTS on surface and groundwater.

A Policy Tier 2 LAMP involves a fundamental shift from a purely prescriptive to partially performance-based program as described in OWTS Policy §9.5 and §9.6. The monitoring and WQAP should address or include the following principles.

- Be adaptive and modified over time in collaboration with affected stakeholders.
- Include specific elements for particular areas of high risk to water quality impairment such as high density 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. In Adelanto, these areas may include existing or proposed OWTS discharges within municipal production well capture zones.
- Identify individual owner residential wells in areas of high density OWTS willing to participate in regional groundwater data collection.
- Assess feasibility of extending municipal sewage collection systems.
• Assess locations near high density OWTS where future groundwater monitoring wells could be installed.
• Assess water quality trends, especially with respect to nitrate concentrations.
• Clarify procedures to exchange data with other agencies and improve collaboration between entities collecting data.
• Consider electronic mapping location of existing and new OWTS, focusing on areas with characteristics listed under OWTS Policy §9.1.
• Identify existing domestic or municipal supply and monitoring wells (private and public) and prioritize wells that can be used to assess water quality associated with OWTS over time.

B. Performance Regulatory Program for supplemental treatment systems (STS) and non-conventional dispersal systems – please address the following items:

1. The City defines STS in LAMP Chapter 2, and the definition is identical to the definition in the OWTS Policy. However, in LAMP Chapter 5, the City states that pressurized drip dispersal system are allowed. Please clarify whether pressurized drip dispersal systems are regulated in your performance regulatory program.

2. Please list the types of STS and non-conventional dispersal systems that are within the scope of your STS performance regulatory program. Please include the maximum flow rate, design standards, and performance objectives for each type of system. This information could be placed in a LAMP design manual that is made part of the LAMP.

3. Please provide detailed requirements of your performance regulatory program. Please include the following items:
   a. The performance regulatory program effective date.
   b. An organization chart for the City showing the responsible individuals or departments for administering the program.
   c. Program description, including:
      i. Permit application, review, approval, and renewal process
      ii. OWTS owner service provider requirements
      iii. Methods of specifying, receiving, and storing monitoring data from OWTS owners or OWTS service providers
      iv. OWTS inspection program, including your inspection form and the number of OWTS inspections each year
      v. Enforcement program, including evaluation of monitoring data and inspection results, issuing corrective action notices, and assuring that OWTS owners complete necessary repairs.

4. Please provide ordinance or other evidence of authorities that defines the procedures for administering the program, including enforcement.
C. **OWTS Discharge Density** – Generally, the City proposes to continue with the past Memorandum (MOU) density standards, which include a minimum ½ acre lot size for individual residences and a maximum of 500 gallons per acre per day for non-residential or mix occupancy development (Chapter 3, Maximum Flow and Land Use Density). Please address the following comments:

1. It is generally understood that OWTS discharges pollute groundwater over time, primarily with respect to pathogens and nitrate, under various soil type, climatic, hydrogeological, and density conditions. We believe that in arid regions with closed groundwater basins, high density OWTS discharges will have long-term adverse groundwater impacts. As such, in areas where the City continues with ½ acre minimum lot size for development using OWTS, we request that the WQAP address these areas to verify that OWTS are not polluting groundwater quality.

2. Staff also encourages the City to consider that certain areas of high density OWTS should be considered for municipal sewage collection and treatment systems:
   a. Area bounded by Vintage on the north, Bellflower on the east, Crippen on the south, and New Hampshire on the west.
   b. The mobile home park along the west side of Bellflower about 110 yards north of Vintage.
   c. Area bounded by White on the north, Perimeter on the east, Bartlett on the south, and Jonathan on the west.
   d. Area bounded by Bartlett on the north, Hermosa on the east, Lawson on the south, and Verbena on the west.
   e. Areas with OWTS discharges within municipal production well capture zones.

   The City should endeavor to identify areas with high density OWTS and develop plans to connect these areas to municipal or regional sewage collection systems. Treatment alternatives should include both centralized and decentralized treatment.

3. Please clarify LAMP section 3 (Maximum flow and Land Use Density), the second bullet regarding the 15,000 square feet limit. This implies that future lots may be subdivided down to 15,000 square feet with OWTS for sewage disposal. The Basin Plan previously allowed OWTS on lots of less than ½ acre, no smaller than 15,000 square feet net, when that lot was subdivided before June 16, 1988. However, the OWTS Policy supersedes the Basin Plan density requirements and no longer supports new OWTS discharges in new subdivisions on lot sizes smaller than 2 - 2.5 acres.

4. OWTS Policy §9.6 allows a regional water board, in reviewing a LAMP, to consider the past performance of the local agency program to adequately protect water quality. For density, you propose to continue with the MOU as a past performance method. However, the MOU did not include findings that the
density standards are protective of water quality. Therefore, please provide technical justification as to why the existing MOU density standards are protective of water quality.

D. Referrals to the Water Board – The LAMP does not discuss referrals of proposed OWTS to the Water Board for approval. Referrals may also include systems with STS and systems with dispersal systems other than leach fields or seepage pits. The referral process should be clearly identified in the LAMP and City staff (not the discharger) should make the initial referral to the Water Board. A City contact should be provided to which Water Board staff may direct questions.

In draft LAMP Chapter 5, the City states that systems with a STS must be approved by both the City and the Water Board. The City with an appropriate regulatory program can be the sole permitter of STS’s. However, Water Code section 13360 restricts the Water Board from approving the manner or method of wastewater treatment system design of any kind. The Water Board can, however, offer suggestions in the design of systems referred to the Water Board. Therefore, the City needs to explain in the LAMP that the Water Board will review the design of referred systems and provide recommendations to the City for their use in their approval of these systems. The Water Board may consider issuance of waste discharge requirements when needed to ensure water quality protection and adequate regulation if the City does not issue operating permits.

E. Items not allowed for authorization in a LAMP (OWTS Policy § 9.4) – Water Board has reviewed Chapter 8 of the draft LAMP and finds that it meets LAMP OWTS Policy §9.4 of items not allowed in a LAMP.

F. Future OWTS – The LAMP section 1 (City of Adelanto General Information), third paragraph second sentence should be clarified. It states: “All areas on Figure 1-2 that are not highlighted either currently utilize OWTS and will be allowed to remain on OWTS; or are vacant properties that will be allowed to utilize OWTS as they develop.” Water Board staff believes that, given the size of the City Limits, that there may be areas of future concentrated growth that should be connected to the City’s sewer system.

Closing

Please submit a revised draft LAMP that addresses the above comments. This revised draft LAMP must include, as an appendix or attachment, an objective-based process for establishing and conducting the WQAP. In addition, please provide the draft ordinance, as another appendix, for the annual operating permit for STS.

The OWTS Policy requires the Water Boards to review and approve LAMPs by May 2017. To that end, the City’s LAMP will need to be finalized by **early 2017** in order to meet the OWTS Policy schedule.
Please send all future correspondence regarding this Project to the Water Board’s email address at Lahontan@waterboards.ca.gov.

If you have any questions, please call Mike Coony at (760) 241-7353 (mike.coony@waterboards.ca.gov), or Jehiel Cass, P.E., Senior Engineer, at (760) 241-2434 (jehiel.cass@waterboards.ca.gov). We are also available to hold a meeting to discuss these comments with you.

Lauri Kemper, P.E.
Assistant Executive Officer