#2019029091

CALIFORNIA
Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

NOP
Clear
3/18/19
E

Colorado River Basin Regional Water Quality Control Board

March 13, 2019

Danny Friend
Director Engineering and Operations
Mission Springs Water District
66575 2nd Street
Desert Hot Springs, CA 92240

SUBJECT: NOTICE OF PREPARATION, DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT: MISSION SPRINGS WATER DISTRICT WEST VALLEY WATER RECLAMATION PROGRAM

Dear Mr. Friend:

Staff of the California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) have reviewed the Notice of Preparation (NOP) for a Draft Program Environmental Impact Report (PEIR) for the proposed West Valley Water Reclamation Program (Program) proposed to be developed within the boundaries of the Mission Spring Water District (District).

The Project includes three components: (1) Constructing a new municipal wastewater reclamation plant (WRP) in the southwestern portion of the Districts' service area; (2) constructing a new wastewater conveyance system to connect existing sewered areas to the new WRP; and (3) constructing a new wastewater conveyance system to areas not currently sewered. Total build-out is expected to take 3 to 10 years, depending on the availability of funding. Wastewater flow rates are estimated to total 0.29 million gallons per day (MGD) by the end of year 1, increasing to 1.0 MGD by year 7 and 1.2 MGD by year 9. These improvements are being implemented to protect groundwater throughout the basin from degradation by septic system discharges. In general, the Regional Water Board supports the Program.

We believe that the PEIR should incorporate the following comments in order for the Program to best protect water quality:

1. The WRP will be required to obtain Waste Discharge Requirements (WDRs) from the Regional Water Board as part of the permitting process. The WDRs will include effluent limitations for both volume and water quality, and will specify a monitoring and reporting program (MRP). The PEIR should include provisions for identifying and complying with the WDRs and MRP requirements.

2. Regional Water Board staff previously reviewed a separate report from the District entitled *Groundwater Model to Evaluate the Potential Impact from the Proposed West Valley Water Reclamation Facility Percolation Basins* prepared by EnviroLogic Resources Inc. dated May 4, 2018. That report modeled the vertical and lateral extent of nitrate-containing water under a range of recharge scenarios over a period of up to 100 years. Nitrate was used as the constituent of concern (COC) because it is ubiquitous in wastewater, persistent in the

environment, flows at the same velocity as groundwater (it is not retarded by interaction with the aquifer materials), and has a fairly low water quality limit. The focus of the study was to evaluate whether a groundwater production well (Well 33) located in the northern part of the WRP property would be adversely impacted by discharge to percolation ponds located in the southern portion of the WRP property. Note that groundwater naturally flows to the south in the vicinity of the WRP.

The modeling study found that Well 33 was impacted by nitrates from the recharge basins after recharge rates increased to 3.0 MGD, anticipated to occur in 50 years, but could occur sooner if the conductivity of the aquifer is lower than modeled or the discharge rates are higher. Under lower flow rates, the natural southerly groundwater flow was not sufficiently reversed to the north by the recharge at the WRP. The model indicated nitrate-affected groundwater would extend several miles to the south several miles and to a depth of several thousand feet. Regional Water Board staff found the methods and findings of the modeling study to be reasonable. We concur with the recommendations that the growth of the groundwater mound beneath the recharge basins be monitored to provide early warning of impending impacts to Well 33.

3. Other COCs associated with wastewater include salinity, generally measured as total dissolved solids (TDS). The Federal secondary maximum contaminant level (MCL) for TDS in drinking water is 500 milligrams per liter (mg/L). Wastewater commonly contains TDS in excess of 500 mg/L. The PEIR should address how the Project will affect TDS concentrations in the basin as a whole and the vicinity of the WRP in particular, and evaluate mitigation strategies for preserving the high quality of groundwater downgradient of the WRP, in conformance with the State Water Resources Control Board's Anti-degradation Policy (Resolution 68-16).

If you have any questions, please contact Doug Wylie at (760) 776-8960 or doug.wylie@waterboards.ca.gov, or Scot Stormo at (760) 776-8964 or scot.stormo@waterboards.ca.gov

Sincerely,

Doug Wylie

Doug Wylie, P.E.
Senior Water Resource Control Engineer
Colorado River Basin
Regional Water Quality Control Board

SAS/hv

cc: State Clearinghouse, SCH#2019029091, 1400 Tenth Street, PO Box 3044, Sacramento, CA 95812-3044

File: Working File