CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

ADDENDUM NO. 1 TO ORDER NO. 93-07, WASTE DISCHARGE REQUIREMENTS FOR THE SAN LUIS REY WASTEWATER TREATMENT PLANT, CITY OF OCEANSIDE, SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region, (San Diego Water Board), finds that:

- 1. On December 20, 1993 the San Diego Water Board adopted Order No. 93-07, Waste Discharge Requirements for the San Luis Rey Wastewater Treatment Plant, City of Oceanside, San Diego County (Order No. 93-07).
- 2. San Luis Rey Wastewater Treatment Plant (San Luis Rey WWTP) is located at 3950 North River Road in Oceanside.
- 3. Order No. 93-07 identifies the City of Oceanside (City) as the owner and operator of the San Luis Rey WWTP.
- 4. The City submitted a report of waste discharge on July 2, 2018. The report of waste discharge requests Order No. 93-07 be amended to:
 - a. increase the tertiary recycled water maximum flow limitation from 0.7 million gallons per day (MGD) to 3.0 MGD, and
 - b. expand the recycled water distribution area into the Lower San Luis Rey Hydrologic Area (HA) and Loma Alta HA.
- 5. The City constructed a new tertiary treatment facility that was completed and began discharging in September 2018. The new treatment facility is rated for a maximum daily flowrate of 3.0 MGD and an annual average flowrate of 1.5 MGD. The new tertiary treatment facility includes a flocculation tank consisting of two cells in series each with a vertical shaft mixer, a cloth media disk filtration system, a chlorine contact basin, and a 2-million-gallon recycled water storage reservoir. The increase in the maximum flow limitation supports expansion of the recycled water distribution area as requested by the City.
- 6. The Water Quality Control Plan for the San Diego Basin (Basin Plan) establishes a water quality objective for nitrate, in all groundwater basins, at 45 milligrams per liter (mg/L).
- 7. While the San Luis Rey WWTP is currently meeting the 45 mg/L nitrate objective, total nitrogen concentrations in recycled water produced at the plant average 60 mg/L. Total nitrogen concentrations over 10 mg/L can lead to nitrate concentrations in groundwater that exceed the water quality objective due to

- nitrification during and after discharge. Additionally, this concentration of total nitrogen is above the average total nitrogen concentration of similar recycled water facilities in the San Diego region.
- 8. While the precise costs of preparing the technical report(s) required by this Addendum may not been estimated, the San Diego Water Board concludes that the burden of incurred costs under this Addendum are expected to be within reason. The assumed costs bear a reasonable relationship to the benefits to water quality and human health to be gained considering the significant sources of pollution and associated public health risks involved.
- Environmental impacts associated with the San Luis Rey WWTP expansion project were analyzed by the City in an Addendum to the North San Diego Water Reuse Coalition Regional Recycled Water Project Program Environmental Impact Report (PEIR).
- 10. As a responsible agency under CEQA, the San Diego Water Board considered the PEIR as amended, and the project's environmental effects as described in those documents. The Board concurs that, with the mitigation measures proposed in the environmental documents, the project will not have a significant impact on water quality or the environment.

IT IS HEREBY ORDERED that Order No. 93-07 is amended as follows:

FINDING 9

The discharger reports that the San Luis Rey WWTP has a design capacity of 10.7 million gallons per day (MGD) which includes capacity for secondary treatment of 10.7 MGD. The treatment facility has a sidestream discharging to a 3.0 MGD tertiary filtration facility which went online in September of 2018.

SECTION B.2 DISCHARGE SPECIFICATIONS

The daily flow from the secondary facilities shall not exceed 10.7 million gallons (MG) and from the tertiary facilities for reclaimed water reuse shall not exceed 3.0 MG at the San Luis Rey WWTP.

MONITORING AND REPORTING PROGRAM SECTION B.2 EFFLUENT MONITORING

Total nitrogen is added to the effluent monitoring and must be sampled monthly.

MONITORING AND REPORTING PROGRAM SECTION G - WORK PLAN FOR NITROGEN MONITORING

The City must submit a workplan to the San Diego Water Board that assess the effects of total nitrogen on groundwater and surface water quality in areas near the reuse sites. The workplan must include an analysis of the cost associated with implementation of the workplan and a discussion on how these costs will be funded by the City. The workplan must be submitted to the San Diego Water Board within 180 days of adoption of this addendum. Once the workplan has

been approved by the San Diego Water Board Executive Officer, the City must take immediate actions to implement the workplan.

I, David W. Gibson, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on December 11, 2019.

David W. Gibson, Executive Officer