November 13, 2012 Item No. 8 Supporting Document No. 1

### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

### TENTATIVE ADDENDUM NO. 1 TO ORDER NO. 97-49 AN ADDENDUM MODIFYING WASTE DISCHARGE REQUIREMENTS AND WATER RECYCLING REQUIREMENTS FOR THE PRODUCTION AND PURVEYANCE OF RECYCLED WATER FOR PADRE DAM MUNICIPAL WATER DISTRICT SAN DIEGO COUNTY

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

- Order No. 97-49 establishes requirements for the Padre Dam Municipal Water District (hereinafter Discharger or District) for the discharge of up to 2.0 million gallons per day (MGD) of tertiary treated recycled water from the Padre Dam Ray Stoyer Water Reclamation Facility, formerly the Padre Dam Water Reclamation Facility (hereinafter facility).
- 2. The facility consists of primary, secondary, and tertiary treatment processes which produce tertiary treated recycled water. The primary treatment processes consist of a communitor and primary settling basins. The secondary treatment processes consist of secondary clarifiers and biological nutrient removal basins (Bardenpho process). The tertiary treatment processes consist of flocculation basins, settling and filtration via gravity sand filters, a chlorine contact basin for disinfection, and dechlorination facilities. Solids generated at the facility are discharged for processing at the Point Loma Wastewater Treatment Plant.
- 3. On August 9, 2011, the Discharger submitted a Report of Waste Discharge and a Title 22 Engineering Report to the Regional Board requesting use of tertiary treated recycled water produced from the facility for street sweeping and sewer flushing in the Cities of Santee, El Cajon, and the County of San Diego.
- 4. Section 60307(b)(7), Chapter 3, Title 22 of the California Code of Regulations provides that recycled water used for cleaning roads, sidewalks and outdoor work areas shall be at least disinfected secondary-23 recycled water. Disinfected secondary-23 recycled water is oxidized wastewater that has been disinfected so that the 7-day median of total coliform bacteria does not exceed 23 Most Probable Number (MPN) per 100 milliliters (mL). The facility produces tertiary treated recycled water that has been filtered and disinfected such that the 7-day median of total coliform bacteria does not exceed 2.2 MPN per 100 mL, which is better quality than the minimum standards specified in the California Code of Regulations.
- 5. Addendum No. 1 to Order No. 97-49 (Addendum) modifies Order No. 97-49 by authorizing the use of tertiary treated recycled water from the facility for street sweeping and sewer flushing. In addition, the Order also approves additional uses of disinfected tertiary recycled water allowed under California Code of Regulations, Title 22,

Chapter 3, Water Recycling Criteria, after the Discharger has obtained approval for such uses from the California Department of Public Health.

- 6. Street sweeping is a management measure used to reduce the amount of trash, debris, and particulates washed off with urban runoff. Street sweeping vehicles are typically equipped with dust suppression systems which spray small amounts of water on the ground to prevent generation of dust during sweeping. Most of the applied recycled water will be vacuumed up by the street sweeping vehicle's vacuum system, while the remaining residual will evaporate from the ground. It is estimated that the street sweeping vehicle water.<sup>1</sup> The sweeping vehicle tank holds 220 gallons of water, and each sweeping vehicle fills on average about 3 times a day.
- 7. This Addendum includes requirements to ensure that the use of recycled water for street sweeping or sewer flushing does not adversely affect human health or water quality and is consistent with the State Water Resources Control Board Recycled Water Policy (Recycled Water Policy). The requirements are based on comments on the project offered by the California Department of Public Health, technical guidance<sup>2</sup> developed by the San Diego County Water Authority for agencies interested in using recycled water for street sweeping, and on requirements prescribed by other Regional Boards.
- 8. Recycled water will be used for street sweeping only within the City of Santee. Recycled water will also be used for flushing of the Discharger's sanitary sewer system which extends to the Cities of Santee and El Cajon, and parts of the County of San Diego. The use of recycled water for street sweeping will occur within the Santee Hydrologic Area (907.12) and the El Cajon Hydrologic Area (907.13), which are hydrologic areas covered by Order No. 97-49.
- 9. The Recycled Water Policy states that the appropriate way to address salt and nutrient issues is through the development of regional or sub-regional salt and nutrient management plans. The development of the salt and nutrient management plans is expected to be a cooperative effort among local water and wastewater entities and local salt/nutrient contributing stakeholders. Consequently, this Addendum requires the Discharger to develop and implement a salt and nutrient management plan for the Santee/El Monte groundwater basin.
- 10. The Regional Board adopted Resolution No. R9-2010-0125 on November 10, 2010 which endorsed the Guidelines for Salinity/Nutrient Management Planning in the San Diego Region (salt and nutrient management plan guidelines).<sup>3</sup> This Addendum also requires the Discharger to submit a workplan identifying proposed tasks and a schedule

<sup>&</sup>lt;sup>1</sup> Street sweeping takes place four days a week on the first, second, third, and fourth week of each month. The Discharger's billing records show an average of 52,000 gallons per year of potable water were used for street sweeping by the City of Santee in the last five years.

<sup>&</sup>lt;sup>2</sup> San Diego County Water Authority Technical Information Street Sweeping Guide

<sup>&</sup>lt;sup>3</sup> The salt and nutrient management plan guidelines can be found at

http://www.waterboards.ca.gov/sandiego/board\_decisions/adopted\_orders/2010/R9-2010-0125\_SNMP-Guidelines.pdf

for development of a salt and nutrient management plan for the Santee/El Monte groundwater basin. The proposed tasks and measures to be included in the Salt and Nutrient Management Plan must be based on the salt and nutrient management plan guidelines. The salt and nutrient management plan for the Santee/El Monte groundwater basin must be completed by May 14, 2014.

- 11. The Regional Board was notified by the California Department of Public Health via letter dated August 25, 2011 that the Title 22 Engineering Report submitted by the Discharger for the use of recycled water for street sweeping and sewer flushing had been reviewed and approved.
- 12. The project is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 2100 et seq.) in accordance with California Code of Regulations, Title 14, Chapter 3, section 15301, because it entails permitting of an existing facility and does not involve expansion beyond that existing at the time of adoption of the Order. In addition, an Environmental Impact Report was certified by the District in February 1995 for the upgrade of the wastewater treatment facilities and installation of the recycled water distribution system.
- 13. The Regional Board has notified the Discharger and all known interested parties of the intent to modify Order No. 97-49.
- 14. The Regional Board in a public meeting has heard and considered all comments pertaining to the proposed modifications to Order No. 97-49.

# IT IS HEREBY ORDERED, that:

Except as modified or superseded by Addendum No. 1 to Order No. 97-49 as set forth below, all of the findings, prohibitions, provisions, specifications, and other requirements of Order No. 97-49 remain in full force and effect. The following modifications to Order No. 97-49 are hereby incorporated and immediately effective:

# 1. Requirements Pertaining to Use of Recycled Water for Street Sweeping and Sewer Flushing.

The Discharger must comply with the following requirements, unless the California Department of Public Health determines that alternative criteria provide equivalent or better protection of public health and the environment:

- a. Each vehicle shall have two risers, one for potable and one for recycled water. An air gap separation between the riser outlet and water tank shall be provided.
- b. The risers, hoses and fittings for each supply shall be color coded (painted), blue for potable and purple for recycled water.

- c. The hoses, hydrants and risers for each supply shall have separate and unique fittings (e.g., 2-1/2 inch diameter on the potable system and 2 inch diameter on the recycled water system) such that the potable system cannot accidentally be used on the recycled system and vice versa.
- d. Signage shall be placed on each vehicle identifying it as carrying nonpotable/recycled water and incorporate the wording "RECYCLED WATER – DO NOT DRINK". Each sign shall display an international symbol similar to that shown in Section No. 3 below (Recycled Water Signage).
- e. The Discharger shall conduct annual inspections of the trucks to assure that all requirements in this Order are being met and that recycled water is being used in compliance with the requirements of this Order.
- f. Each vehicle shall be completely cleaned and disinfected prior to delivery of potable water for human consumption.
- g. Each customer must assign a Recycled Water Site Supervisor that will receive training prior to receiving a permit.
- h. The Recycled Water Site Supervisor shall be responsible for ensuring that all employees working with recycled water are trained on its proper use and that adequate signage is maintained to make employees aware that recycled water is being used.
- i. Records of training must be maintained by the recycled water purveyor.
- j. Street cleaning vehicles must be equipped with an air gap to ensure backflow protection.
- k. Vehicles used for transportation and distribution of recycled water must have water-tight valves and fittings, and must not leak.
- I. The Recycled Water Use Permit must be available for inspection at all times.
- m. Truck drivers must be equipped with an adequate first aid kit. Cuts or abrasions should be promptly washed, disinfected, and bandaged.
- n. Recycled water must not be introduced into any potable water piping system and no connection shall be made between the tank and any part of a potable water system.
- o. Recycled water shall not be applied where it could spray on external drinking water fountains, passing vehicles, buildings, or areas where food is handled or eaten.

- p. Recycled water users should wash their hands with soap and potable water or apply hand sanitizer after working with recycled water, especially before eating or smoking.
- q. Precautions must be taken to avoid food coming in contact with recycled water while the use site is wet.
- r. Recycled water must be obtained from an approved recycled water filling station or from a potable source. When the vehicle is filled from a potable water source, a water agency or municipality provided meter or other acceptable tracking system must be used. There must also be a reduced pressure principle backflow device protecting the potable system or the vehicle must be equipped with two risers, one for potable water and one for recycled water.
- s. Vehicles used to transport recycled water shall not be used to carry water for potable purposes, regardless of the source water. The use of recycled water for street sweeping shall comply with the appropriate municipality's storm water ordinance. Typical compliance measures include preventing overspray, ponding, or runoff of recycled water from the use area.
- t. Street sweepers shall have no hose bibs.

#### 2. Salt and Nutrient Management Plans.

The Discharger shall submit a workplan within 180 days which will identify proposed tasks, measures, and a schedule it will implement for the development of a salt and nutrient management plan for the Santee/EI Monte groundwater basin. Proposed tasks and measures to be incorporated into the plan must be based on the salt and nutrient management plan guidelines.<sup>4</sup> The Discharger must complete the salt and nutrient management plan and begin implementation of that plan in the Santee/EI Monte groundwater basin by May 14, 2014.

<sup>&</sup>lt;sup>4</sup> Recommended tasks for development of salt and nutrient management plans can be found in Chapter 5 and Appendix A of the salt and nutrient management plan guidelines.

## 3. Recycled Water Signage

The signage below or similar signage shall be placed on each vehicle identifying it as carrying recycled water:



*I, David W. Gibson, Executive Officer, do hereby certify that this Order is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on November 13, 2012.* 

TENTATIVE

David W. Gibson Executive Officer