ITEM: 6

SUBJECT: Modification of Waste Discharge Requirements: City of Escondido, Hale Avenue Resource Recovery Facility, Expansion of the Ultraviolet Disinfection System (Tentative Addendum No. 1 to Order No. R9-2010-0032) (Fisayo Osibodu)

PURPOSE: To adopt tentative Addendum No. 1 to Order No. R9-2010-0032 updating the requirements for ultraviolet disinfection for the City of Escondido Hale Avenue Resource Recovery Facility (HARRF).

PUBLIC NOTICE: Notification of this action was sent to known interested persons on December 16, 2010 (Supporting Document No. 1). This action satisfies the public notification requirements of California Water Code, Division 7, section 13167.5 for a 30-day notice.

DISCUSSION: The HARRF is a wastewater treatment facility located in the Escondido (Supporting Document No. 2) that produces recycled water. The HARRF has a secondary treatment capacity of 18 million gallons per day (mgd), and a tertiary treatment capacity of 9 mgd. The HAARF receives residential, commercial, and industrial wastewater generated within the City of Escondido, and the community of Rancho Bernardo within the City of San Diego. The tertiary treatment facilities at the HAARF include an ultraviolet disinfection (UV) system and a chlorination disinfection system. Currently the treatment capacity of the UV disinfection system is limited to 4.0 mgd capacity, thus any flow exceeding 4.0 mgd is treated with the chlorination system.

The City of Escondido (City) has increased the capacity of the UV disinfection system from 4.0 mgd to 7.9 mgd. Consequently, tentative Addendum No. 1 to Order No. R9-2010-0032 (tentative Addendum; Supporting Document
No. 3) updates the requirements for UV disinfection for the HAARF to reflect the increased capacity.

The UV capacity at the HAARF was limited to 4.0 mgd due to hydraulic inefficiencies, but the City has installed mixers on the UV systems and performed an on-site bioassay that demonstrates the UV system complies with disinfection requirements at 7.9 mgd. As a result, the tentative Addendum modifies Order No. R9-2010-0032 by prescribing design and operation specifications for the operation of the UV disinfection system at a capacity of 7.9 mgd. The design and operation specifications in the tentative Addendum are based on recommendations provided by the California Department of Public Health.

The tentative Addendum also revises the monitoring and reporting program of Order No. R9-2010-0032 by requiring the City to monitor the operating parameters of the UV system to verify proper operation of the system.

No comments have been received on the tentative Addendum as of January 24, 2010.

KEY ISSUES: The tentative Addendum will enable the City increase the amount of wastewater treated using the upgraded UV disinfection system.

LEGAL CONCERNS: None.

SUPPORTING DOCUMENTS:
1. Notification Letter for Tentative Addendum No. 1 to Order No. R9-2010-0032.
2. Location Map
3. Tentative Addendum No. 1 to Order No. R9-2010-0032.

SIGNIFICANT CHANGES: The tentative Addendum establishes design and discharge specifications for the UV disinfection system, and establishes requirements for monitoring the operating parameters of the UV system.

COMPLIANCE RECORD: The City has been in compliance with the disinfection requirements specified in Order No. R9-2010-0032.

RECOMMENDATION: Adoption of tentative Addendum No. 1 to Order No. R9-2010-0032
Supporting Document 1
Notification Letter for Tentative Addendum
No. 1 to Order No. R9-2010-032
Supporting Document 2
Location Map
Supporting Document 3
Tentative Addendum No. 1 to Order No.
R9-2010-032