

EXECUTIVE OFFICER SUMMARY REPORT  
August 16, 2006

- ITEM: 5
- SUBJECT: Update of Waste Discharge Requirements: Waste Discharge Requirements for the Fallbrook Public Utility District, Treatment Plant No. 1 Reclamation Project, San Diego County. (Tentative Order No. R9-2006-0064) (*Victor Vasquez*)
- PURPOSE: To adopt updated waste discharge requirements with water recycling requirements for the production and distribution of up to 2.7 million gallons per day (MGD, calendar monthly average) of recycled water from the Fallbrook Public Utility District's Wastewater Treatment Plant No. 1. If adopted this Order would update and replace Order No. 91-039.
- PUBLIC NOTICE: The August 16, 2006 Regional Board meeting agenda notice that was mailed on July 21, 2006 served as the required official public notification for this action. Tentative drafts of the Order, with a proposed monitoring and reporting program (M&RP), and a supplemental Fact Sheet were mailed on May 4, 2006 to Fallbrook Public Utility District (FPUD) and all known interested parties and agencies for review and comment. Copies of the tentative Order and supplemental Fact Sheet were made available for public review at the San Diego Regional Water Quality Control Board office on May 4, 2006. The tentative Order was also posted on the Regional Board's website on May 5, 2006. FPUD and all known interested parties and agencies were notified via correspondence dated July 6, 2006 that consideration of adoption of the tentative Order by the Regional Board had been rescheduled to the August 16, 2006 Regional Board meeting.
- DISCUSSION: The Fallbrook Public Utility District (FPUD) provides treatment and disposal of municipal wastewater for the community of Fallbrook in north San Diego County.

FPUD owns and operates Wastewater Treatment Plant No. 1 (WTP1), the FPUD land outfall pipeline, and the FPUD wastewater collection system. Wastewater treatment unit operations and processes at WTP1 consist of preliminary treatment by screening and grit removal; primary sedimentation; secondary treatment by activated sludge biological treatment followed by secondary clarification; tertiary treatment by coagulation and flocculation followed by sand filtration; and chlorine disinfection. WTP1 has a secondary treatment design capacity of 2.7 million gallons per day (MGD) and a tertiary treatment design capacity of 3.1 MGD.

Typically, all wastewater entering WTP1 undergoes full tertiary treatment with disinfection. Properly treated disinfected tertiary effluent from WTP1 meets water recycling criteria for disinfected tertiary recycled water established in Title 22 of the California Code of Regulations (CCR). FPUD distributes disinfected tertiary effluent from WTP1 as recycled water to recycled water users in Fallbrook and Oceanside for irrigation use. Recycled water users in Fallbrook are supplied with disinfected tertiary effluent directly from WTP1 via a distribution pumping station and pipeline to the south of WTP1. Disinfected tertiary effluent in excess of recycled water use demand in Fallbrook is conveyed via the FPUD Land Outfall (LO) to Oceanside without further treatment, and additional recycled water users, such as Caltrans, are or can be supplied from the FPUD LO within the City of Oceanside.

During the period 1999-2005, approximately 15 to 32 percent of the disinfected tertiary effluent from WTP1 was distributed as recycled water, and the remainder was discharged to the City of Oceanside's Oceanside Ocean Outfall in Oceanside and ultimately discharged to the Pacific Ocean. The discharge of treated effluent from WTP1 to the Pacific Ocean is regulated by separate waste discharge requirements (Order No. R9-2006-002, NPDES No. CA0108031).

FPUD's current requirements for its water recycling project, Order No. 91-039, were established as waste discharge requirements with water recycling requirements. In lieu of requiring the individual use sites to obtain water recycling requirements from the Regional Board, Order

No. 91-039 allowed FPUD to distribute recycled water to multiple use sites provided that FPUD established and enforced *Rules and Regulations for Reclaimed Water Users* to protect public health. Tentative Order No. R9-2006-0064 is a renewal of Order No. 91-039 and follows the same regulatory arrangement that allows FPUD to distribute recycled water to multiple use sites while protecting waters of the State and public health. The issuance of combined waste discharge requirements and water recycling requirements is an efficient use of Regional Board resources.

The waste discharge requirements and water recycling requirements contained in tentative Order No. R9-2006-0064 for the production and distribution of disinfected tertiary recycled water to recycled water use sites are in accordance with the 1994 *Water Quality Control Plan for the San Diego Basin* (Basin Plan) and the California Department of Health Services' (DHS) Water Recycling Criteria contained in CCR Title 22.

The Regional Board has long supported and encouraged the use of recycled water to supplement scarce potable water supplies. The Regional Board also recognizes that recycled water conveys pollutants not removed during the treatment process that can affect the quality of waters of the State. Effluent limitations contained in the tentative Order implement groundwater water quality objectives for Hydrologic Subareas (HSA) 2.13, 3.11 and 3.12 of the San Luis Rey Hydrologic Unit, where the majority of FPUD's recycled water users are located. Effluent limitations contained in the tentative Order also implement CCR Title 22 water recycling criteria for the protection of public health, safety, and welfare. Water recycling requirements are issued by the Regional Board in consultation with DHS in accordance with the 1996 Memorandum of Agreement between DHS and the Regional Board.

To date, comments on the tentative Order have been received from FPUD (see Supporting Document 5). Staff will provide copies of any additional written comments received, Regional Board staff responses to comments, and an Errata Sheet to the Regional Board prior to the August 16, 2006 meeting.

**SIGNIFICANT CHANGES:** The following areas in tentative Order No. R9-2006-0064 differ from the FPUD's current Order No. 91-039:

1. The Findings have been updated and expanded.
2. The effluent limitations under Discharge Specifications have been reorganized to indicate more clearly which effluent limitations apply to the various recycled water use site hydrologic subareas.
3. The daily maximum effluent limitations for carbonaceous biochemical oxygen demand and total suspended solids have been replaced with weekly average effluent limitations.
4. Effluent limitations have been included for constituents with groundwater water quality objectives based on drinking water maximum contamination levels (MCL) when these constituents have demonstrated reasonable potential to be present in the effluent.
5. A provision requiring a minimum CT value (the product of total chlorine residual and modal contact time measured at the same point) or alternate demonstration of proper disinfection has been added to the Discharge Specifications.
6. Discharge specifications for total coliform bacteria and turbidity have been updated.
7. A provision has been added requiring signage at recycled water use sites to warn against drinking of recycled water.
8. The Monitoring and Reporting Program has been updated to require effluent monitoring for constituents with drinking water MCL-based groundwater water quality objectives, groundwater monitoring, and surface water monitoring.

**COMPLIANCE:** FPUD has generally complied with the current requirements for its water recycling project, Order No. 91-039. There have been occasional exceedances of a turbidity effluent limitation in 2002 and 2003.

**KEY ISSUES:** FPUD has raised a number of issues concerning the appropriateness and legality of regulating recycled water with waste discharge requirements. It is unclear whether FPUD will continue to raise these issues following review of the Regional Board's response to comments and Errata

Sheet, which will be mailed out at the same time as the second agenda packet.

SUPPORTING DOCS:

1. Site Map
2. Transmittal letter for tentative Order No. R9-2006-0064.
3. Tentative Order No. R9-2006-0064 and Supplemental Fact Sheet.
4. Regional Board correspondence dated July 6, 2006.
5. Comment letter from FPUD dated May 26, 2006.

RECOMMENDATION:

Adoption of Tentative Order No. R9-2006-0064 is recommended.