

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

INFORMATION SHEET

TENTATIVE ORDER NO. R9-2009-0147

**WASTE DISCHARGE REQUIREMENTS
FOR RITE TIME PHARMACEUTICALS INC.
ANZA COMMERCIAL CENTER ONSITE WASTEWATER TREATMENT SYSTEM**

BACKGROUND

Mr. Soji Akanwo of Rite Time Pharmaceuticals Inc. (Discharger) submitted a Report of Waste Discharge (ROWD) for the treatment and disposal of domestic wastewater from a proposed Onsite Wastewater Treatment System (OWTS) that will serve a commercial center development. The development will be located on the southwest corner of Highway 371 (Cahuilla Road) and Maze Stone Road in Anza, Riverside County. The proposed OWTS will serve a pharmacy, a medical clinic, a restaurant, and six retail stores all located at the Anza Commercial Center. The proposed OWTS consists of a grease interceptor, a primary equalization tank, a recirculation/blending tank, Advantex AX 100 trickling biofilter units, and a post anoxic dosing tank. The primary disposal system will be a subsurface drip irrigation system, while seepage pits will serve as an emergency back-up to the drip irrigation system.

Tentative Order No. R9-2009-0147 prescribes waste discharge requirements that apply specifically to the discharge of treated domestic wastewater from the proposed OWTS. Tentative Order No. R9-2009-0147 requires that the Discharger meet applicable water quality standards, as well as ensures proper and effective operation of the onsite wastewater treatment and disposal systems. This Information Sheet provides additional background information and technical details regarding the development of the requirements of Tentative Order No. R9-2009-0147.

BASIS FOR DISCHARGE SPECIFICATIONS

Tentative Order No. R9-2009-0147 establishes both technology based and water quality based discharge specifications. The technology based discharge specifications for Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) contained in Order No. R9-2009-0147 are based on minimum standards for removal of these constituents by secondary wastewater treatment technology (specified in Title 40 Code of Federal Regulations, section 133.102), and on the discharge specifications for BOD and TSS for OWTS with supplemental treatment components specified in the proposed State Water Resources Control Board (State Board) OWTS regulations.¹

Tentative Order No. R9-2007-0147 also contains water quality based discharge specifications which are derived from the water quality objectives for the Caverocks Hydrologic Area (HA) in

¹ The proposed State Board OWTS regulations can be found on the following webpage:
www.swrcb.ca.gov/water_issues/programs/septic_tanks/docs/appendix_b_proposed_owts_regulations.pdf

Table 3-3 of the *Water Quality Control Plan for the San Diego Basin* (Basin Plan). Twelve-month average discharge specifications for all constituents listed in Table 6 of Tentative Order No. R9-2007-0147 were set at the water quality objectives. As a result a discharge in compliance with the discharge specifications specified in Order No. R9-2007-0147 will be in compliance with the water quality objectives for the Caverocks HA.

The 12-month average discharge specification for total nitrogen was set at 12 milligrams per liter (mg/L) as Nitrogen (N) based on the expected concentration of total nitrogen in the discharge from the OWTS. Information presented in a technical report submitted by the Discharger titled *Report of Waste Discharge for Anza Commercial Center* (page 34) estimates that the concentration of total nitrogen in effluent discharged from the OWTS will be about 12 mg/L as N. The technical report also estimates that the concentration of nitrogen in leachate reaching the groundwater after disposal via subsurface drip irrigation will be between 3.8-6.0 mg/L as N due to assimilation by rainfall recharge within the site, nutrient uptake by vegetation being irrigated with the effluent, and denitrification in the soil. The ROWD concluded, however, that the groundwater flow volume and background water quality will be sufficient to dilute nitrate-nitrogen concentration in the leachate to comply with the water quality objective at the down gradient property boundary.

BASIS FOR OWTS DESIGN AND OPERATION SPECIFICATIONS

Tentative Order No. R9-2009-0147 includes design and operation specifications to ensure proper operation, monitoring, and maintenance of the onsite treatment and disposal systems. Effluent discharged from the OWTS will be disposed via a subsurface drip irrigation system. Proper operation of the drip irrigation system is essential because further removal of organic chemicals, nutrients, and bacteria occurs as wastewater percolates into the soil in the disposal areas, and poorly operated and designed drip irrigation systems can result in discharge of pollutants of groundwater. Proper operation of the onsite treatment and disposal systems is also required to protect public health. The OWTS design and operation specifications contained in Order No. R9-2009-0147 requires the Discharger to submit a design plan prior to installation of the onsite treatment and disposal system, which includes measures to ensure proper operation and adequate maintenance of the system. These measures are based on the State of Florida Department of Health (Florida DOH) standards for operation of onsite treatment and disposal systems. The Florida DOH standards were incorporated into Tentative Order No. R9-2009-0147 because the State of California has not yet adopted regulations for the operation and maintenance of onsite treatment and disposal systems.

Tentative Order No. R9-2009-0147 requires the Discharger to maintain an onsite operation and maintenance manual and maintain a service contract with a service provider to ensure adequate operation and monitoring of the OWTS. The Discharger is also required to submit a certification report signed by a professional civil engineer which certifies that the installed onsite treatment and disposal systems complies with the design plan. The certification report also serves as an acknowledgment by the Discharger that the onsite treatment and disposal systems have been designed and installed to meet the requirements of Tentative Order No. R9-2009-0147.

BASIS FOR THE MONITORING AND REPORTING REQUIREMENTS

Monitoring and Reporting Program No. R9-2009-0147 establishes effluent monitoring and reporting requirements pursuant to section 13267 of the California Water Code to verify compliance of the discharge with the discharge specifications. Monitoring and Reporting Program No. R9-2009-0147 also requires monitoring of groundwater in the vicinity of the disposal area to verify the impact of the discharge on groundwater quality, and verify compliance with the State Antidegradation Policy and Basin Plan water quality objectives. The cost to implement the Monitoring and Reporting Program is reasonable in relationship to the need for the reports and the benefits to be obtained from the reports.

LIST OF REFERENCE DOCUMENTS

The following documents provide the necessary references for the bases of Tentative Order No R9-2009-0147:

1. Porter Cologne Water Quality Control Act, January 1, 2006
2. Technical Memorandum titled *Wastewater Treatment and Disposal, Anza Commercial Center Project*, September 12, 2008
3. Technical Report titled *Report of Waste Discharge for Anza Commercial Center*, November 9, 2008.
4. Title 40 Code of Federal Regulations, section 133.102
5. State Water Resources Control Board Proposed Onsite Wastewater Treatment Systems Regulations
(www.swrcb.ca.gov/water_issues/programs/septic_tanks/docs/appendix_b_proposed_owts_regulations.pdf)
6. *Water Quality Control Plan for the San Diego Basin*, September 8, 1994