State of California---Health and Human Services Agency California Department of Public Health



SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

Director

MARK B HORTON, MD, MSPH

2008 SEP 17 P 1: 19

ARNOLD SCHWARZENEGGER Governor

September 15, 2008

John Robertus, Executive Officer California Regional Water Quality Control Board - San Diego Region 9174 Sky Park Court, Suite 100 San Diego CA 92123

Dr. Mr. Robertus:

SKYLINE RANCH COUNTRY CLUB, RECYCLED WATER SYSTEM NO. 3790109 **TRACER STUDY RESULTS, PROJECT NO. 703**

The California Department of Public Health (CDPH) received from Invirotreat Inc. the Tracer Study Test Results Final Report (report) dated August 22, 2008 for the determination of Modal Contact Time (MCT) for the Skyline Ranch Country Club Wastewater Reclamation/Disposal System (SRCC). The report has been reviewed to determine that acceptable methods and procedures were used in evaluating the MCT. Flow conditions during testing have been reviewed to determine that they accurately describe the hydraulic characteristics of the chlorine contact basin and to ensure that the disinfection process can reliably produce a disinfected tertiary recycled water in accordance with Section 60301.230, Title 22, California Code of Regulations (CCR).

CDPH would like to offer the following comments:

- Recycled water used for surface irrigation, in accordance with Section 60301.230(a)(1), Title 22, CCR, shall be disinfected tertiary recycled water that has been disinfected by a chlorine disinfection process that provides a CT value, the product of total chlorine residual and modal contact time measured at the same point, of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow.
- 2. The permeate cycle for the Membrane Bioreactor shall not be greater than the maximum value of 20 minutes and the relax cycle shall not be less than the minimum value of 1 minute during peak dry weather flow.
- Peak dry weather flow at SRCC shall not exceed a total of 30.0 GPM through the chlorine contact basin.

- 4. The water level in the chlorine contact basin during peak dry weather flow shall be maintained at a minimum level of 9 feet 6 inches.
- 5. The chlorine contact basin effluent shall have a minimum chlorine residual of 5.0 mg/L at all times regardless of flow rate.
- 6. The baffle positions and over/under serpentine flow pattern present at the time of the tracer study shall, at all times, be maintained during the operation of the chlorine contact basin.

If you have any questions regarding this letter, please contact myself or Alan Tell at (619) 645-2573.

Sincerely,

Sean Sterch, P.E. District Engineer, San Diego District

cc: Alon Lebel Invirotreat Inc. P.O. Box 3970 Fullerton, CA 92834

> Billee Calabrese Manager of Operations 18218 Paradise Mountain Road Valley Center, CA 92082

Mark McPherson, Chief, Land & Water Quality Division County of San Diego, Department of Environmental Health