California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2003-0083

Amending Order No. R8-2002-0093, NPDES No. CA8000390
Waste Discharge Requirements
for
Transportation Corridor Agencies/California Department of Transportation – District 12
Eastern Transportation Corridor, Section 14 - Denitrification Facility
Irvine, Orange County

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter, Regional Board), finds that:

1. On December 3, 2002, the Board adopted Order No. R8-2002-0093, NPDES No. CA8000390, governing the discharge of wastes from the Eastern Transportation Corridor, Section 14 - Denitrification Facility, operated by Transportation Corridor Agencies and California Department of Transportation – District 12 (hereinafter dischargers).

2. Order No. R8-2002-0093 contains stringent limitations on the discharge of selenium that are consistent with the waste load allocations specified in the selenium TMDL promulgated by U.S EPA.

3. There is no technology currently available that can feasibly be used to meet the effluent limits contained in the order. In light of this, the Board included a schedule for compliance with the selenium effluent limits in the order. However, recognizing the potential impact of the high selenium in the discharge on the biota, the Board also directed the dischargers to investigate and report on the measures that could be implemented rapidly, at least on a short-term basis, to reduce or eliminate selenium discharges.

4. In response to this directive, the dischargers have eliminated the discharge to Peters Canyon Wash by directing all of the intercepted groundwater into the sanitary sewer under a contract with the Orange County Sanitation District.

5. Orange County Sanitation District's contract requires the dischargers to eliminate the discharge into the sewer when the capacity of the sewer is limited, such as during severe storm events. During these infrequent periods, the dischargers will need to resume their discharge to Peters Canyon Wash.

6. The wastewater treatment facility operated by the dischargers utilizes a biological treatment process to reduce the total nitrogen concentration of the wastewater to achieve compliance with the limits contained in Order No. R8-2002-0093. The reestablishment of the biological community to sufficient levels to adequately treat the intercepted groundwater to permitted levels may take two weeks, or more. During these startup periods, discharges may exceed permitted levels for total nitrogen by approximately 18 mg/l and 195 lbs/day.

7. The dischargers are removing approximately 5,700 pounds per month of nitrogen from the San Diego Creek/Newport Bay watershed by diverting the intercepted groundwater to the sewer.[1]

8. It is not appropriate to require compliance with the total nitrogen contained in Order No. R8-2002-0093 during treatment plant restart periods, as described above, provided the dischargers have offset any exceedance of the limits by removing at least an equivalent amount of nitrogen from the watershed prior to the discharge.

9. In accordance with Water Code Section 13389, the amendment of Order No. R8-2002-0093, is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.

10. The Regional Board has notified the discharger and other interested agencies and persons of its intent to amend waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.

11. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. R8-2002-0093 be amended as follows:

1. Provision C. 23. is added, which states:

   23. The Total Nitrogen concentration and mass emission rate limitations specified in Discharge Specifications A. 2. a. are not applicable during treatment plant restart periods, provided the amount of total nitrogen discharged is offset as described in Findings 6, 7 and 8 of Order No. R8-2003-0083.

2. All other conditions and requirements of Order No. R8-2002-0093 shall remain unchanged.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on August 22, 2003.

For Gerard J. Thibeault
Executive Officer

[1] Wastewater discharged into the sewer is treated by Orange County Sanitation District and ultimately discharged to the Pacific Ocean.

California Regional Water Quality Control Board
Santa Ana Region

August 22, 2003

ITEM: 10

SUBJECT: AMENDMENT TO ORDER NO. R8-2002-0093, NPDES NO. CA8000390, GOVERNING THE DISCHARGE OF WASTES FROM THE EASTERN TRANSPORTATION CORRIDOR, SECTION 14 - DENITRIFICATION FACILITY OPERATED BY TRANSPORTATION CORRIDOR AGENCIES AND CALIFORNIA DEPARTMENT OF TRANSPORTATION – DISTRICT 12, ORDER NO. R8-2003-0083

DISCUSSION:

On December 3, 2002, the Board adopted Order No. R8-2002-0093, NPDES No. CA8000390, governing the discharge of wastes from the Eastern Transportation Corridor, Section 14 - Denitrification Facility, operated by Transportation Corridor Agencies and California Department of Transportation – District 12.

Order No. R8-2002-0093 contains stringent limitations on the discharge of selenium that are consistent with the waste load allocations specified in the selenium TMDL promulgated by U.S. EPA. There is no technology currently available that can feasibly be used to meet the effluent limits contained in the order. In light of this, the Board included a schedule for compliance with the selenium effluent limits in the order. Nevertheless, recognizing the potential impact of the high selenium in the discharge on the biota, the Board also directed the dischargers to investigate and report on the measures that could be implemented rapidly, at least on a short-term basis, to reduce or eliminate selenium discharges.

In response to this directive, the dischargers have eliminated the discharge to Peters Canyon Wash by directing all of the intercepted groundwater into the sanitary sewer under a contract with the Orange County Sanitation District. Orange County Sanitation District's contract requires the dischargers to eliminate the discharge into the sewer when the capacity of the sewer is limited, such as during severe storm events. During these infrequent periods, the dischargers will need to resume their discharge to Peters Canyon Wash via the denitrification facility.

The wastewater treatment facility utilizes a biological treatment process to reduce the total nitrogen concentration of the wastewater to achieve compliance with the limits contained in Order No. R8-2002-0093. The reestablishment of the biological community to sufficient levels to adequately treat the intercepted groundwater to permitted levels may take two weeks, or more. Therefore, the dischargers will be unable to immediately comply with the total nitrogen permit limits during these startup periods. During these periods the discharges may exceed permitted levels for total nitrogen by approximately 18 mg/l and up to 195 lbs/day. This would result in up to 2,730 pounds of nitrogen in excess of permit limits being discharged to Peters Canyon Wash during a two-week startup period.

The dischargers are removing approximately 5,700 pounds of nitrogen from the San Diego Creek/Newport Bay watershed each month by diverting the intercepted groundwater to the sewer.[1] Consequently, each month the dischargers are removing more than twice the amount of nitrogen from the watershed than the amount that they may need to discharge during times that they may need to restart their nitrogen removal facility.

Because the amount of nitrogen removed from the watershed far exceeds the amount that may be discharged in excess of limits, it is not appropriate to require compliance with the total nitrogen contained in Order No. R8-2002-0093 during treatment plant restart periods. The proposed order, therefore, amends Order No. R8-2002-0093 by adding Provision C. 23., which states:

> "The Total Nitrogen concentration and mass emission rate limitations specified in Discharge Specifications A. 2. a. are not applicable during treatment plant restart periods, provided the amount of total nitrogen discharged is offset as described in Findings 6, 7 and 8 of Order No. R8-2003-0083."

All other conditions and requirements of Order No. R8-2002-0093 will remain unchanged.

RECOMMENDATION:

Adopt Order No. R8-2003-0083 as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) - Terry Oda
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch
U.S. Fish and Wildlife Service - Carlsbad
State Water Resources Control Board, Office of the Chief Counsel - Jorge Leon
State Water Resources Control Board, Division of Water Quality – Jim Maughan
State Department of Water Resources - Glendale
State Department of Fish and Game - Long Beach
Orange County Health Care Agency – Larry Honeybourne
Orange County Flood Control – Herb Nakasone
Orange County PF&RD – Harbours, Beaches, and Parks – Chris Crompton
Irvine Ranch Water District - John Hills
Orange County Sanitation District – Blake Anderson
Orange County Water District - Nira Yamachika
City of Newport Beach – City Manager
City of Irvine – City Manager
Harbor Quality Committee – Dr. John Skinner
Defend the Bay – Robert Caustin
Orange County Coastkeeper - Garry Brown
Lawyers for Clean Water c/o San Francisco Baykeeper

[1] Wastewater discharged into the sewer is treated by Orange County Sanitation District and ultimately discharged to the Pacific Ocean.

California Regional Water Quality Control Board
Santa Ana Region

Winston H. Hickox
Secretary for Environmental Protection

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Gray Davis
Governor

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.swrcb.ca.gov/rwqcb8.

September 3, 2003

Ms. Grace Pina-Garrett
Department of Transportation
District 12
3337 Michelson Drive, Suite 380
Irvine, California 92612-8894

TRANSMITTAL OF ADOPTED ORDER NO. R8-2003-0083

Dear Ms. Pina-Garrett:

At the regular Board Meeting held on August 22, 2003, the Regional Board adopted Order No. R8-2003-0083, amending Order No. 2002-0093. A certified copy is enclosed for your records.

Sincerely,

BARBARA LAFFOON
Executive Assistant

Enclosure: Adopted Order No. R8-2003-0083

c. State Water Resources Control Board, Division of Water Quality, James Maughan
United States Environmental Protection Agency, WTR 5, Permits Section, Terry Oda

/bjl