California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2003-0066

Amending Order No. 99-5, NPDES No. CA8000188
Waste Discharge Requirements
for
Eastern Municipal Water District
Regional Water Reclamation System
Riverside County

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

1. On June 25, 1999, the Board adopted Order No. 99-5, NPDES No. CA8000188, renewing waste discharge requirements for Eastern Municipal Water District (hereinafter discharger or EMWD) for the discharge of excess tertiary treated wastewater that cannot be percolated/evaporated and/or recycled to a pipeline that links into a single regionwide water recycling system connecting the four Regional Water Reclamation Facilities operated by EMWD. This pipeline ultimately discharges into Temescal Creek.

2. On January 23, 2003, the Board adopted Order No. R8-2002-0009-A01, amending Order No. 99-5 to authorize the discharge of tertiary treated wastewater from EMWD's Regional Water Reclamation System to Lake Elsinore in coordination with Elsinore Valley Municipal Water District's (EVMWD) proposed implementation of a two-year pilot project. The pilot project is intended to address Lake Elsinore stabilization problems and to test the effects of the discharge of recycled water on the quality and beneficial uses of the Lake. EVMWD proposed to discharge recycled water from its Regional Water Reclamation Facility and to discharge groundwater from the three island wells located at the east end of the Lake. The volume of recycled water available from EVMWD for supplementing the Lake level is estimated to be 2.0 to 4.0 mgd (2,240 to 4,480 acre-feet per year). When EVMWD is unable to provide this volume of recycled water, the deficit could be filled by the discharge of recycled water by Eastern Municipal Water District (EMWD). The island wells have a production capacity sufficient to provide 3,000 to 5,000 acre-feet of water per year.

3. Order No. R8-2002-0009-A01 limited the discharge of recycled water by EMWD into Lake Elsinore to 1500 acre-feet per year and prohibited the discharge of recycled water to the Lake beyond February 1, 2004, when the pilot project will terminate.

4. On March 21, 2003, Eastern Municipal Water District requested that Order No. 99-5, as amended by Order No. R8-2002-0009-A01, be further amended to remove the upper limit of 1,500 acre-ft/year of recycled water that can be discharged into Lake Elsinore. EMWD also requested that the termination date for the pilot program be extended from February 2004 to December 2004. Finally, EMWD requested that the Order be amended to allow the discharge of recycled water with total dissolved solids (TDS) concentration not to exceed 800 mg/l into the lake. Although the total annual volume of recycled water allowed to be discharged into the lake would remain the same, removal of the 1500 acre-ft/year limit on recycled water discharges by EMWD would enhance the flexibility of the project. Extension of the termination date is appropriate in light of project delays and the temporary suspension of recycled water discharges, which resulted in a cumulative loss of six to eight months of the authorized pilot project study period. Extending the pilot program will allow the collection of necessary data required by the pilot program.

5. In accordance with Water Code Section 13389, the amendment of Order No. 99-5, NPDES No. CA8000188, 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.

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

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

IT IS HEREBY ORDERED that Order No. 99-5 as amended by Order No. R8-2002-0009-A01 be amended as follows:

1. Findings part of Order No. 99-5 as amended by Order No. R8-2002-0009-A01, revise Finding 21. as follows: (additions are underlined)

   21. The 1995 Basin Plan includes <u>a</u> wasteload allocation for discharges of total dissolved solids (TDS) to the Santa Ana River system. In conformance with the wasteload allocation, this Order specifies a TDS limit of 650 mg/l for discharges from all the treatment plants <u>into Temescal Creek. For recycled water discharges to Lake Elsinore as part of the lake replenishment pilot project (see Finding 7, above), the TDS limit is 800 mg/l.</u>

2. Discharge Specifications Section of Order No. 99-5 as amended by Order No. R8-2002-0009-A01, add new Discharge Specifications 7. as follows:(additions are underlined)

   <u>7. The total dissolved solids concentration of recycled water discharges into Lake Elsinore shall not exceed an average monthly concentration of 800 mg/l.</u>

3. Provisions Section of Order No. 99-5 as amended by Order No. R8-2002-0009-A01, revise Provision H.24. as follows:(additions are underlined, deletions are double struckthrough)

   24. The discharger shall coordinate with Elsinore Valley Municipal Water District regarding the implementation of the two-year pilot Lake Elsinore replenishment project that includes the discharge of up to 4,480 acre-feet per year of recycled water to the Lake. The discharge of recycled water by the discharger shall be limited to the flows necessary to supplement the recycled water discharge by EVMWD to meet the total planned recycled water discharge of 4480 acre-feet per year. ~~The discharge shall not exceed 1500 acre-feet per year.~~ No discharge of recycled water to Lake Elsinore shall occur after December~~February~~ 1, 2004, when the pilot project will terminate.

4. Monitoring and Reporting Program No. 99-5, Page 6 of 10, add Effluent Monitoring B.3. as follows: (additions are underlined)

   3. For recycled water discharges into Lake Elsinore, representative grabsamples of the discharge shall be collected and analyzed for total dissolved solids weekly.

5. All other conditions and requirements of Order No. 99-5 as amended by Order No. R8-2002-0009-A01 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 July 1, 2003.

Gerard J. Thibeault
Executive Officer

California Regional Water Quality Control Board
Santa Ana Region

July 1, 2003

ITEM: 8

SUBJECT: Amendment to Order No. 99-5, NPDES No. CA8000188, Waste Discharge Requirements, Eastern Municipal Water District, Regional Water Reclamation System, Riverside County, Order No. R8-2003-0066

DISCUSSION:

On June 25, 1999 the Regional Board adopted Order No. 99-5, NPDES No. CA8000188, prescribing waste discharge requirements for Eastern Municipal Water District's (EMWD's) Regional Water Reclamation System, for the discharge of tertiary treated recycled water to Temescal Creek.

On January 23, 2002, the Regional Board adopted Order No. R8-2002-0009-A01, amending Order No. 99-5 to authorize the discharge of tertiary treated recycled water from EMWD's Regional Water Reclamation System to Lake Elsinore in coordination with Elsinore Valley Municipal Water District's (EVMWD's) implementation of a two-year pilot project. The pilot project is intended to address lake level stabilization problems and to test the effects of recycled water discharges. The pilot project includes the discharge of up to 4480 acre-feet per year of recycled water provided by EVMWD and EMWD, and the discharge of up to 5000 acre-feet per year of groundwater from three wells located at the east end of the lake. Order No. R8-2002-0009-A01 amended Order No. 99-5 to authorize EMWD to discharge up to 1500 acre-feet of recycled water per year to the lake when it was necessary to supplement the recycled water discharged by EVMWD to meet the total planned recycled water discharge of 4480 acre-feet per year. Waste discharge requirements governing recycled water discharges by EVMWD were likewise amended by the Board to authorize implementation of the pilot project. Both EVMWD and EMWD were granted authorization for recycled water discharges to the lake for a two-year period, which expires on February 1, 2004.

Initiation of recycled water discharges was contingent on the Executive Officer's approval of an appropriate Lake monitoring and reporting program. That program was approved and is now being implemented.

Although, the Lake Elsinore replenishment pilot project implementation was approved by the Regional Board on January 23, 2002, recycled water discharges commenced approximately six months later, on June 12, 2002. The delay resulted, in part, from the need to develop and refine an acceptable Lake monitoring program. Per project decision criteria established prior to the commencement of the recycled water discharges, the discharges were suspended on August 2, 2002 due to the high chlorophyll levels measured in the lake. However, high chlorophyll levels were measured prior to the onset of the recycled water discharges and continued high despite the termination of the discharges. Since there was no evident correlation between chlorophyll levels and recycled water discharges, the discharges were resumed in late September 2002. Cumulatively, no recycled water discharges occurred during six to eight months of the authorized pilot project period.

Three quarterly monitoring reports on the pilot project have been submitted to the Regional Board to date. The reports conclude, in part, that continued monitoring will quantify the longer-term effects of recycled water addition on water quality in Lake Elsinore and assess the lake's ability to assimilate external inputs of nutrients.

EMWD and EVMWD have requested that their waste discharge requirements be amended further to extend authorization for the pilot project, including their recycled water discharges, to December 1, 2004 to allow collection of data necessary to complete the pilot project and assess the effects of the discharges on Lake Elsinore. EMWD has also requested that the 1500 acre-feet per year discharge limitation be revised to allow EMWD to discharge recycled water up to the 4480 acre-feet per year cap placed on discharges by both EMWD and EVMWD. The 4480 acre-feet per year cap would remain; modifying the amount of recycled water that could be discharged by EMWD would enhance the flexibility of the project.

Board staff believes that the discharger's request for extended authorization for recycled water discharges is reasonable. Additional data concerning the effects of recycled water discharges on Lake Elsinore should help to address questions related to long-term maintenance of stable lake levels.

RECOMMENDATION:

Adopt Order No. R8- R8-2003-0066 as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Terry Oda
U.S. Army Corps of Engineers, Los Angeles District, - 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 - James Kassel
State Water Resources Control Board, Division of Financial Assistance – Dianna Robles
State Department of Water Resources - Glendale
State Department of Fish and Game - Long Beach
State Department of Health Services, San Diego – Steve Williams
Riverside County Environmental Health Services – Sam Martinez
Riverside County Flood Control and Water Conservation District - Mark Wills
Riverside County, Board of Supervisors – Supervisor Bob Buster
Santa Ana River Discharger's Association (SARDA)
City of Lake Elsinore – City Manager
City of Canyon Lake – City Manager
Elsinore Valley Municipal Water District – Phillip Miller
Lee Lake Water District – John Pastore
Orange County Coastkeeper – Garry Brown
Lawyers for Clean Water C/c San Francisco Baykeeper
Montgomery Watson – Jeff Mohr
Best Best & Krieger, LLP – Arthur L. Littleworth

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.

July 3, 2003

Anthony J. Pack, General Manager
Eastern Municipal Water District
P.O. Box 8300
San Jacinto, CA 92581-8300

TRANSMITTAL OF ADOPTED ORDER NO. R8-2003-0066, NPDES NO. CA8000188

Dear Mr. Pack:

At the regular Board Meeting held on July 1, 2003, the Regional Board adopted Order No. R8-2003-0066, amending Order No. 99-5. A certified copy is enclosed for your records.

Sincerely,

Barbara Laffoon

BARBARA LAFFOON
Executive Assistant

Enclosure: Adopted Order No. R8-2003-0066

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