California Regional Water Quality Control Board
Santa Ana Region

December 20, 2004

STAFF REPORT

ITEM: 1

SUBJECT: Amendment of Order No. 00-1, NPDES No. CA8000027, Waste Discharge and Producer/User Water Reclamation Requirements for Elsinore Valley Municipal Water District – Regional Water Reclamation Facility, Order No. R8-2004-0099

DISCUSSION:

On February 25, 2000, the Regional Board adopted Order No. 00-1, NPDES No. CA8000027, prescribing waste discharge requirements (WDR) for Elsinore Valley Municipal Water District's (EVMWD) Regional Water Reclamation Facility, for the discharge of tertiary treated wastewater to Temescal Creek. Order No. 00-1 was amended by Order No. 01-70 to correct some inadvertent omissions.

On January 23, 2002, the Board adopted Order No. R8-2002-0008-A02, amending Order No. 00-1 to authorize the discharge of tertiary treated wastewater from EVMWD's Regional Water Reclamation Facility to Lake Elsinore as part of a two-year lake replenishment pilot project. The pilot project includes the discharge of up to 4480 acre-feet per year of recycled water provided by EVMWD and Eastern Municipal Water District (EMWD), and the discharge of up to 5,000 acre-feet per year of groundwater from three wells located at the east end of the lake. Both EVMWD and EMWD were granted authorization for recycled water discharges to the lake for a two-year period ending on February 1, 2004.

Although implementation of the Lake Elsinore replenishment pilot project was approved by the Regional Board on January 23, 2002, recycled water discharges did not commence until 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. In addition, 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. As the result of these circumstances, no recycled water discharges occurred during six to eight months of the authorized pilot project period.

On July 1, 2003, the Regional Board adopted Order No. R8-2003-0067, amending Order No.00-1 to extend authorization for discharges of recycled water to Lake Elsinore to December 1, 2004. In light of the need to provide a reliable source of water supply to replenish Lake Elsinore, and thereby contribute to long-term water quality and beneficial use improvement in the Lake, EVWMD has requested that authorization for these discharges be extended beyond December 1, 2004 by further amendment of Order No. 00-1. Amendment of Order No. 00-1 would be an interim measure to authorize continued recycled water discharges to Lake Elsinore until such

time as appropriate requirements for such discharges are considered for inclusion in the waste discharge requirements for the Regional Water Reclamation Facility, as described below.

Order No. 00-1 for EVMWD's Regional Water Reclamation Facility will expire on February 1, 2005. Renewal of these waste discharge requirements is expected to be considered at the Regional Board's January 28, 2005 meeting. Board staff will recommend that these requirements include appropriate limitations for discharges of recycled water to the Lake. With respect to the nutrients nitrogen and phosphorus, two constituents of principal concern given the eutrophic nature of the Lake, the proposed limitations will be based on the wasteload allocations and related provisions for recycled water discharges that are specified in the Lake Elsinore Nutrient TMDL. This TMDL establishes schedules for compliance with the wasteload allocations and allows for the implementation of suitable offset programs when compliance with strict numeric limitations based on those allocations is not reasonably feasible.

EVMWD has advised Board staff that compliance with the expected nutrient limitations for recycled water discharges to the Lake may not be feasible and is committed to the development and implementation of an acceptable offset program(s). This commitment will be reflected in the proposed renewed requirements for EVMWD's Regional Water Reclamation Facility. It is expected that implementation of the offset program(s) will be required in accordance with a compliance schedule consistent with the schedules specified in the Lake Elsinore Nutrient TMDL.

By letter dated November 3, 2004, EVMWD has indicated its commitment to offset nutrient inputs that would result from discharges of recycled water that may be authorized beyond December 1, 2004 by further amendment of Order No. 00-1, before the renewed Reclamation Facility requirements can be considered for adoption. The offsets would be based on the difference between actual recycled water quality and the discharge requirements established in the renewed waste discharge requirements as a mass load. The offset "indebtedness" would begin to accumulate upon resumption of recycled water discharges pursuant to extended permit authorization beyond December 1, 2004. This mass load would be offset by EVMWD via a future offset program that is anticipated to be part of a compliance schedule program requirement included in the renewed waste discharge requirements.

Board staff believes that it is appropriate to extend authorization for recycled water discharges to Lake Elsinore by EVMWD, in light of the need for recycled water for lake stabilization and water quality improvement purposes, and in view of EVMWD's commitment to provide an acceptable offset for nutrient inputs resulting from these recycled water discharges. The proposed Order No. R8-2004-0099 would amend Order No. 00-1 to extend authorization for recycled water discharges to Lake Elsinore by EVMWD until such time as the renewed waste discharge requirements for EVMWD's Regional Water Reclamation Facility are adopted. Again, these requirements are expected to be considered on January 28, 2005. The proposed Order also requires EVWMD to implement a program(s) to offset nutrient discharges to the Lake in excess of those that would be allowed pursuant to the wasteload allocations for recycled water specified in the Lake Elsinore Nutrient TMDL

The following show the proposed changes to the Order. Additions are bold and highlighted. Deletions are stricken-out.

1. Provisions Section of Order No. 00-1, modify Provision K. 29. as follows:

   29. This Replenishment Pilot Project terminates ~~December 1, 2004~~ **on January 28, 2005 or on the day an Order replacing Order No. 00-1 is adopted by the Regional Board.**

2. Provisions Section of Order No. 00-1, add Provision K. 30. as follows:

   30. EVWMD shall offset total nitrogen and total phosphorus mass discharges into Lake Elsinore in accordance with an offset program(s) and schedule approved by the Executive Officer. The program(s) shall assure the offset of all total nitrogen and total phosphorus mass loads discharged in excess of those allowed pursuant to the recycled water discharge wasteload allocations in the Lake Elsinore Nutrient TMDL. EVMWD shall submit the proposed offset program/schedule by December 6, 2004.

RECOMMENDATION:

Adopt Order No. R8-2004-0099, as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt
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- James Maughan
State Water Resources Control Board, Division of Financial assistance – Diana Robles
California Department of Health Services, Carpinteria - Jeff Stone
California Department of Health Services, San Diego – Steve Williams
State Department of Water Resources - Glendale
State Department of Fish and Game - Long Beach
Orange County Water District - Nira Yamachika
City of Lake Elsinore – City Manager
City of Canyon Lake – City Manager
Riverside County Flood Control and Water Conservation District – Jason Uhley
Riverside County Department of Environmental Health Services – Sandy Bunchek
Santa Ana River Dischargers Association
Santa Ana Watershed Project Authority – Joseph Grindstaff
Montgomery Watson – Jeff Mohr
Best Best & Krieger LLP - Arthur L. Littleworth
County of Riverside – Supervisor Bob Buster
Orange County Coastkeeper – Garry Brown
Lawyers for Clean Water C/c San Francisco Baykeeper

California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2004-0099
Amending Order No. 00-1, NPDES No. CA8000027
Waste Discharge and Producer/User Reclamation Requirements

for

Elsinore Valley Municipal Water District
Regional Water Reclamation Facility
Riverside County

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

TENTATIVE

1. On February 25, 2000, the Board adopted Order No. 00-1, NPDES No. CA8000027, prescribing Waste Discharge and Producer/User Reclamation Requirements for Elsinore Valley Municipal Water District's (EVMWD) Regional Water Reclamation Facility for the discharge of tertiary treated wastewater to Temescal Creek. Order No. 00-1 was amended by Order No. 01-70 on July 20, 2001 to correct some inadvertent omissions.

2. On January 23, 2002, the Board adopted Order No. R8-2002-0008-A02, amending Order No. 00-1 to authorize the implementation of a project that would include the discharge of tertiary treated wastewater from EVMWD's Regional Water Reclamation Facility (RWRF) to Lake Elsinore, and the discharge of groundwater to the Lake from three island wells located at the east end of the Lake. The intent of this project is to provide additional water to Lake Elsinore to increase and help stabilize water levels in 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. R8-2002-0008-A02 prohibited the discharge of recycled water to the Lake beyond February 1, 2004.

4. On March 21, 2003, EVMWD requested that Order No. 00-1 be amended to extend the termination date for the replenishment pilot project from February 2004 to December 2004. The replenishment pilot study was intended to acquire two years of data. However, it was recognized that due to the delayed start and non-discharge period of the project, two years of data would not be available by February 2004. EVMWD requested extension of the replenishment pilot project to allow the collection of data necessary to complete the pilot project and assess the effects of recycled water discharges on the lake.

5. On July 1, 2003, the Board adopted Order No. R8-2003-0067, amending Order No. 00-1 to extend authorization for discharges of recycled water to Lake Elsinore to December 1, 2004.

6. Order No. 00-1 will expire on February 1, 2005. In August 2004, EVMWD submitted a renewal application for waste discharge requirements for its Regional Water Reclamation Facility. The application includes the request that the renewed requirements include authorization for recycled water discharges to Lake Elsinore. Renewal of these waste discharge requirements is expected to be considered at the Regional Board's January 28, 2005 meeting, after the expiration on December 1, 2004 of authorization for discharges of recycled water to Lake Elsinore pursuant to Order No. R8-2003-0067.

7. On October 21, 2004, EVWMD requested that Order No. 00-1, NPDES No. CA8000027 be amended to extend the authorization to discharge recycled water to Lake Elsinore until such time that renewed waste discharge requirements for the Regional Water Reclamation Facility, including authorization for discharges to Lake Elsinore, can be considered.

8. It is expected that the renewed waste discharges requirements for EVMWD's Regional Water Reclamation Facility will include appropriate limitations for discharges of recycled water to the Lake. With respect to the nutrients nitrogen and phosphorus, two constituents of principal concern given the eutrophic nature of the Lake, the limitations are expected to be based on the wasteload allocations and related provisions for recycled water discharges that are specified in the Lake Elsinore Nutrient TMDL. This TMDL establishes schedules for compliance with the wasteload allocations and allows for the implementation of suitable offset programs when compliance with strict numeric limitations based on those allocations is not reasonably feasible.

9. EVMWD has advised Board staff that compliance with the expected nutrient limitations for recycled water discharges to the Lake may not be feasible and is committed to the development and implementation of an acceptable offset program(s). This offset commitment will be reflected in the renewed discharge requirements for EVMWD's Regional Water Reclamation Facility, if, as expected, recycled water discharges to Lake Elsinore are authorized by those requirements. It is expected that implementation of the offset program(s) will be required in accordance with a compliance schedule consistent with the schedules specified in the Lake Elsinore Nutrient TMDL.

10. By letter dated November 3, 2004, EVMWD indicated its commitment to offset nutrient inputs that would result from discharges of recycled water that may be authorized beyond December 1, 2004 by further amendment of Order No. 00-1, before the renewed Reclamation Facility requirements can be considered for adoption. The offsets would be based on the difference between actual recycled water quality and the discharge requirements established in the renewed waste discharge requirements as a mass load. The offset "indebtedness" would begin to accumulate upon resumption of recycled water discharges pursuant to extended permit authorization beyond December 1, 2004. This mass load would be offset by EVMWD via a future offset program that is anticipated to be part of a compliance schedule program requirement included in the renewed waste discharge requirements.

11. It is appropriate to extend authorization for recycled water discharges to Lake Elsinore by EVMWD, in light of the need for recycled water for lake stabilization and long-term water quality and beneficial use improvement purposes, and in view of EVMWD's commitment to provide an acceptable offset for nutrient inputs resulting from these recycled water discharges.

12. In accordance with Water Code Section 13389, amending the waste discharge requirements for this discharge 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.

13. The 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.

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

IT IS HEREBY ORDERED that Order No. 00-1 as amended by Orders No. 01-70, R8-2002-0008-A02, and R8-2003-0067 be amended as follows:

1. Provisions Section of Order No. 00-1, replace Provision K. 29. with the following:

    29. This Replenishment Pilot Project terminates on January 28, 2005 or on the day an Order replacing Order No. 00-1 is adopted by the Regional Board.

2. Provisions Section of Order No. 00-1, add Provision K. 30. as follows:

    30. EVWMD shall offset total nitrogen and total phosphorus mass discharges into Lake Elsinore in accordance with an offset program(s) and schedule approved by the Executive Officer. The program(s) shall assure the offset of all total nitrogen and total phosphorus mass loads discharged in excess of those allowed pursuant to the recycled water discharge wasteload allocations in the Lake Elsinore Nutrient TMDL. EVMWD shall submit the proposed offset program/schedule by December 6, 2004.

3. All other conditions and requirements of Order No. 00-1, as amended, shall remain unchanged.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the forgoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on December 20, 2004.

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Gerard J. Thibeault
Executive Officer