



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

MAR 16 2006

Ms. Celeste Cantú
Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Dear Ms. Cantú:

Thank you for submitting the Basin Plan amendment containing total maximum daily loads (TMDLs) for Marina del Rey Harbor. The TMDL submittal was dated January 24, 2006; supplemental documentation was submitted on March 15, 2006. The State adopted TMDLs to address chlordane, PCBs, copper, lead, zinc, and associated toxicity in Marina del Rey Harbor back basins, as listed on California's 2002 Clean Water Act Section 303(d) list.

Based on EPA's review of the TMDL submittal under Clean Water Act Section 303(d)(2), I have concluded the TMDLs adequately address the pollutants of concern and, upon implementation, will result in attainment of the water quality standards adopted by the State. These TMDLs include waste load and load allocations as needed, take into consideration seasonal variations and critical conditions, and provide an adequate margin of safety.

The State provided sufficient opportunities for public review and comment on the TMDLs and demonstrated how public comments were considered in the final TMDLs. All required elements are adequately addressed; therefore, the TMDLs are hereby approved pursuant to Clean Water Act Section 303(d)(2).

The State submittals also contain detailed plans for implementing these TMDLs. Current federal regulations do not define TMDLs as containing implementation plans; therefore, EPA is not taking action on the implementation plans provided with the TMDLs. However, EPA generally concurs with the State's proposed implementation approaches.

The enclosed review discusses the basis for these decisions in greater detail. I appreciate the State and Regional Board's work to adopt these TMDLs and look forward to our continuing partnership in TMDL development. If you have questions concerning this action, please call me at (415) 972-3572 or David Smith at (415) 972-3416.

Sincerely yours,

Alexis Strauss 16 March 2006

Alexis Strauss, Director
Water Division

enclosure

cc: Jonathan Bishop, LARWQCB

TMDL Checklist

State: California
Waterbodies: Marina del Rey Harbor
Pollutant(s): Chlordane, PCBs, Cu, Pb, Zn
Date of State Submissions: January 24, 2006, March 15, 2006
Date Received By EPA: March 15, 2006
EPA Reviewer: Peter Kozelka

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Review Criteria	Comments
<p>1. Submittal Letter: State submittal letter indicates final TMDL(s) for specific water(s)/pollutant(s) were adopted by state and submitted to EPA for approval under 303(d).</p>	<p>Letter dated January 24, 2006. The Los Angeles Regional Water Quality Control Board (Regional Board) adopted the TMDL on October 6, 2005 through Resolution No. R05-012. The State Water Resources Control Board (State Board) approved the Basin Plan Amendment through Resolution No. 2006-0006 on January 13, 2006. The State Office of Administrative Law approved the TMDL on March 15, 2006 as file No. 06-0126-01 S.</p> <p>These TMDLs address water body-pollutant combinations identified in Analytical Units # 54 and 56 of the <i>Heal the Bay</i> consent decree. TMDLs were adopted for following segments identified on the state's 2002 303d list:</p> <p>- chlordane, PCBs, copper, lead and zinc in Marina del Rey Harbor (back basins D, E, F).</p> <p>The State determined that these TMDLs would be sufficient to address the listing for toxicity in Marina del Rey; therefore, EPA concludes these TMDLs are sufficient to address that listing.</p> <p>The State determined Marina del Rey is not impaired due to several pollutants that were identified on the 2002 Section 303(d) list and addressed in the consent decree. Pursuant to the provisions of Section 303(d) and the consent decree, TMDLs were not developed for dieldrin and DDT. (Staff Report, pp. 19-20)</p> <p>EPA finds the State's analysis concerning water body impairments in the watershed is reasonable and consistent with the requirements of Section 303(d).</p>
<p>2. Water Quality Standards Attainment: TMDL and associated allocations are set at levels adequate to result in attainment of applicable water quality standards.</p>	<p>The October 6, 2005 Technical TMDL Report (Staff Report), pp. 9-11.</p> <p>The TMDL is designed to implement the existing numeric and narrative objectives for toxic substances that apply in Marina del Rey Harbor. The federal California Toxics Rule (CTR) specifies numeric water quality criteria for metals and organic toxicants that apply in Marina del Rey Harbor. The Basin Plan also includes four separate narrative objectives providing that chemicals, pesticides, bioaccumulatives and toxic substances shall not be present at levels to create adverse effects in aquatic life resources, nor at levels harmful to aquatic life or human health. The TMDLs implement the narrative objectives by ensuring that the levels of metals and organic toxicants in estuarine sediments are restored to safe levels. The TMDLs are also sufficient to ensure attainment of the numeric water quality standards because (1) available data did not indicate nonattainment of numeric water column criteria for metals or organic toxicants in the Harbor and (2) reductions in sediment-born pollutant loads will also reduce water column pollutant concentrations in the Harbor.</p>

	<p>The State reasonably concluded that implementation of the TMDLs and associated allocations will result in elimination of the adverse effects associated with high loads of metals and organics and will bring about attainment of the applicable standards.</p>
<p>3. Numeric Target(s): Submission describes applicable water quality standards, including beneficial uses, applicable numeric and/or narrative criteria. Numeric water quality target(s) for TMDL identified, and adequate basis for target(s) as interpretation of water quality standards is provided.</p>	<p>Staff Report, p. 21-23 and Basin Plan Amendment Resolution, p. 2.</p> <p>TMDL implements narrative water quality objectives by applying numeric targets for chemical concentrations in sediment. These numeric targets are based on the Effects Range Low (ERL) sediment quality guideline values for metal and organic concentrations in bulk sediments. The TMDL also includes numeric water quality and fish tissue targets for total PCBs, based on CTR human health criteria.</p> <p>The State's approach is a reasonable and environmentally protective approach for interpreting narrative water quality objectives by focusing on sediment associated toxicants. It is also reasonable to include targets for other media as they are consistent with human health criteria in CTR.</p>
<p>4. Source Analysis: Point, non-point, and background sources of pollutants of concern are described, including the magnitude and location of sources. Submittal demonstrates all significant sources have been considered.</p>	<p>Staff Report, pp. 24-29 and Basin Plan Amendment Resolution, pp. 3.</p> <p>The TMDL analysis describes considered existing data and information concerning the sources of metals and organic substances discharges into Marina del Rey Harbor. Urban runoff is the primary source of metals and organic compounds with the majority associated with total suspended solids (TSS) in stormwater (regulated under NPDES permits). Direct deposition of pollutants to the surface water are the only nonpoint sources identified and are considered a very small source (5 %) of pollutants in this watershed. Most pollutant loads of concern in the Harbor are associated with sediment-born toxicants, thus the largest loads occur in response to storm events that cause sediment runoff from the watershed.</p> <p>The TMDL report adequately considered all sources of metals and organic compounds to Marina del Rey Harbor. The TMDL sufficiently described all sources of impairments.</p>
<p>5. Allocations: Submittal identifies appropriate waste load allocations for point sources and load allocations for non-point sources. If no point sources are present, waste load allocations are zero. If no non-point sources are present, load allocations are zero.</p>	<p>Staff Report, pp. 31-34 and Basin Plan Amendment Resolution, pp. 3-5.</p> <p>The TMDLs include both waste load allocations for point sources and load allocations for non point sources. Mass-based allocations, expressed in kg/yr for total recoverable metals and in g/yr for total organics, are provided for the primary point sources (stormwater permittees) and one non-point source (direct deposition). The TMDL apportions the WLAs among stormwater dischargers (municipal, CalTrans, construction, and industrial) based on estimated percent land area covered under each permit.</p> <p>Concentration-based waste load allocations are provided for several minor point sources that discharge infrequently, and not in response to storm events.</p> <p>Based on the information in the Staff Report and the Basin Plan Amendment, EPA concludes the TMDLs include as appropriate waste load and load allocations that are consistent with federal requirements.</p>
<p>6. Link Between Numeric Target(s) and Pollutant(s) of Concern: Submittal describes relationship between numeric target(s) and identified pollutant sources. For each pollutant,</p>	<p>Staff Report, p. 30.</p> <p>The State's linkage analysis adequately describes the relationship between pollutant loads and receiving water effects in Marina del Rey Harbor. The focus in the TMDL analysis is appropriately on loading of sediment-born toxicants and the net deposition of sediments to the Harbor back basins over time. The analysis carefully evaluates available data on total suspended sediment yields from the local</p>

<p>describes analytical basis for conclusion that sum of waste load allocations, load allocations, and margin of safety does not exceed the loading capacity of the receiving water(s).</p>	<p>watershed and patterns of sediment deposition into the Harbor back basins. The loading capacity and allocations were determined using the average annual net deposition of total suspended sediment into the back basins of the Harbor and translated into pollutant specific numbers using sediment targets and bulk density of fine sediments, to which toxicants preferentially adhere. The TMDL and linkage analysis are based on the approach that by reducing the concentrations of toxicants in fine sediments deposited in the Harbor to safe levels, the overall concentration of toxicants in sediments will gradually decline to safe levels. Furthermore, the reduction of metal and organic toxicants will also alleviate sediment toxicity which had been observed in the back basins.</p> <p>The State's analysis sufficiently describes the link between numeric targets and the pollutant sources in the Harbor.</p>
<p>7. Margin of Safety: Submission describes explicit and/or implicit margin of safety for each pollutant.</p>	<p>Staff Report, p. 31 and Basin Plan Amendment Resolution, p. 5.</p> <p>The TMDL analysis includes an implicit margin of safety by selecting conservative numeric targets based on protective sediment quality guideline levels (ERLs) to interpret the narrative objectives.</p> <p>EPA considers this a permissible and appropriate way of dealing with uncertainty in the analysis.</p>
<p>8. Seasonal Variations and Critical Conditions: Submission describes method for accounting for seasonal variations and critical conditions in the TMDL(s)</p>	<p>Staff Report, p. 36 and Basin Plan Amendment Resolution, p. 7.</p> <p>The TMDLs identify substantial interannual variability in sediment deposition in Marina del Rey Harbor. The TMDL is based on long-term average deposition patterns for storm-related suspended sediments over a 52-yr period from 1948-2002. The average condition was used in the TMDL. The focus on average long term sediment loadings (and reductions in the loading of sediment-born toxicants) is appropriate for TMDL calculation since the principal environmental effect of concern is long term exposure of aquatic and benthic organisms to toxicants in sediment. For this reason, it was unnecessary to set TMDLs or allocations based on shorter time steps.</p> <p>The State's analysis adequately accounts for the seasonal variations and critical conditions by examining sediment deposition records spanning a decade and thereby assessing potential toxic levels over a long time period.</p>
<p>9. Public Participation: Submission documents provision of public notice and public comment opportunity; and explains how public comments were considered in the final TMDL(s).</p>	<p>The Regional and State Boards provided public notice and opportunities to comment on the TMDL through mailings, public meetings, and public hearings. Public comments were received in writing and in oral testimony. The State demonstrated how it considered these comments in its final decision by providing reasonably detailed responsiveness summaries, which include responses to each comment.</p> <p>The Regional Board held public meetings concerning the Marina del Rey Harbor TMDLs on June 12, 2003, August 3 and October 6, 2005. (See summary of responses to public comments by Regional Board, July 2005.) The State Board also held public workshops/hearings to receive comments on these TMDLs on January 13, 2006.</p>
<p>10. Technical Analysis: Submission provides appropriate level of technical analysis supporting TMDL elements.</p>	<p>The TMDL analysis provides a thorough review and summary of available information concerning metals and chlorinated organic toxicants impairing Marina del Rey Harbor.</p> <p>EPA concludes the State was reasonably diligent in its technical analysis of copper, lead, zinc, chlordane, and PCBs in Marina del Rey Harbor.</p>