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ExxonMobil
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Via Certified Mail/Return Receipt Requested

February 22, 2011

Mr. Samuel Unger, P.E.
Executive Officer
California Regional Water Quality Control Board — Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013

Re: Comments on Draft Dominguez Channel and Greater Los Angeles and Long Beach Harbors TMDL and Related Documents

Dear Mr. Unger:

ExxonMobil Oil Corporation Torrance Refinery (ExxonMobil) is pleased to offer these comments on the draft total maximum daily load (TMDL) report and related documents for the Dominguez Channel and Greater Los Angeles and Long Beach Harbor. As you are aware, the ExxonMobil Torrance Refinery is authorized by an NPDES permit issued by the Regional Water Quality Control Board (RWQCB) to discharge storm water to the Torrance Lateral. Although such discharges are very infrequent (on average, once in seven years) and of short duration, it is essential for the refinery to have the ability to discharge storm water during periods of high rainfall and to comply with all of its NPDES permit limits and conditions. Therefore, ExxonMobil has a direct interest in the development and implementation of the TMDL and we have prepared these comments to recommend clarifications and some minor changes to the report and related documents.

ExxonMobil appreciates that the RWQCB held the stakeholders meeting on February 7, 2011 to answer questions regarding the draft TMDL (TMDL Report)[1] and proposed amendment to the Water Quality Control Plan (Amendment). Your staff was helpful in clarifying the TMDL provisions that are relevant to the Torrance Refinery and our comments make suggestions to incorporate the staff's clarifications in the draft TMDL report and proposed amendment.

These comments are organized into two sections: (1) general comments on the TMDL scope and approach to addressing the Clean Water Act (CWA) Section 303(d)-listed impairments of the Dominguez Channel, Dominguez Channel Estuary and the Greater Los Angeles (LA) and Long Beach (LB) Harbor; and (2) specific comments on the proposed Amendment to the Water Quality Control Plan and draft TMDL Report, including its attachments.

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[1] These comments will refer to the December 2010 staff draft TMDL report as the "TMDL Report" and the proposed amendment to the Water Quality Control Plan as "Amendment".

General Comments

ExxonMobil supports the phased implementation approach that the RWQCB has proposed in the draft TMDL. This approach uses interim limits to provide assurance that existing impaired water quality and sediments do not further degrade while the municipal and industrial dischargers have time to implement and test best management practices (BMP) and other methods for reducing the existing pollutant loadings. Furthermore, the phased approach allows the responsible parties time to conduct further monitoring and studies to better define the extent of impairment and track improvements in sediment and water quality and, as appropriate, revise water column and sediment pollutant targets.

The final TMDL waste load allocations (WLA) are very ambitious. Indeed, ExxonMobil believes that the final water quality concentration limits in the TMDL that may be applied to point source dischargers (including both MS4s and industrial sources) are currently not technologically achievable for intermittent storm water discharges. By allowing 20 years to implement BMPs and to "fine-tune" the TMDL targets, the draft TMDL will allow an orderly process for each affected party to investigate and determine the most technically feasible and cost-effective methods to reduce their discharges to achieve the final WLAs.

ExxonMobil supports the application of mass-based WLAs to the Torrance Refinery discharge, which the draft TMDL correctly describes as infrequent and limited in flow volume and pollutant loadings by the refinery's storm water storage and treatment procedures. The TMDL analysis performed by the RWQCB and the U.S. Environmental Protection Agency (EPA) correctly incorporates the refinery discharge into the Dominguez Channel watershed sources (by way of the Torrance Lateral) as an intermittent discharge that only occurs during the highest storm water runoff events; i.e., historically, one discharge in seven years (typically of several days duration).[2]

Specific Comments

The following comments address specific clarifications and/or questions in the TMDL Report and Amendment. The applicable page numbers in each of these documents are identified. Please note that because of the complexity and length of these documents, there may be other sections of the report where our comments/clarifications apply but which we have overlooked. If so, we request that these comments be applied to such sections also.

Numeric Targets — Water:Total metals

Pages 43 and 44 of the TMDL Report describe the basis for the TMDL wet weather concentration targets for total metals. ExxonMobil supports the use of the acute California Toxics Rule (CTR) criteria for dissolved metals as the basis for the water column targets in freshwater. We also support the use of site-specific conversion factors for converting the CTR dissolved copper, lead and zinc criteria to total metals targets. Because storm water events are episodic it is appropriate to use the acute criteria for

[2] The refinery has the capacity to store (and not discharge) runoff from a 24-hour, 50-year storm event or an equivalent volume over multiple days. Collected storm water is transferred to the Los Angeles County Sanitation District for treatment.

metals to account for the fact that particulates and dissolved and colloidal organic matter in storm water will react with dissolved metals and reduce the bioavailability of the metals to the extent that exposures that may cause chronic toxicity to aquatic life are substantially reduced.

Numeric Targets — Water:Toxicity

The discussion of applying a numeric toxicity target based on chronic toxicity units (TU_c) does not support application of this target to episodic events resulting from storm water runoff. The chronic whole effluent toxicity (WET) test, which is designed to protect against adverse effects on the reproduction and growth of aquatic life, is not an appropriate test for storm water discharges because the long-term exposures of aquatic life in the receiving water to pollutants in storm water is mitigated by the settling and natural chemical reactions (i.e, reactions with particulates and dissolved and colloidal organic matter) that reduce the bioavailability of metals and adsorptive organic pollutants. ExxonMobil recommends that the TMDL toxicity limits on point sources be based on use of the acute WET test and that the chronic WET test be used to evaluate toxicity in the receiving waters that actually contain water during both wet and dry weather (i.e., Dominguez Channel Estuary, Greater LA/LB Harbor area).

Description of Discharge Location

On page 59 of the TMDL Report the Torrance Refinery is listed as an NPDES permitted discharge to the Dominguez Channel. ExxonMobil requests that either a footnote or parenthetical be added to this page to clarify that the Torrance Refinery discharges to the Torrance Lateral and subsequently flows into the Dominguez Channel. The refinery has no direct discharges to the Dominguez Channel. This distinction is important to avoid confusion later in the report where WLAs are given for the Torrance Lateral, including mass-based WLAs for the refinery.

Interim Allocations for the Dominguez Channel and Torrance Lateral (Amendment pp. 9-10; TMDL Report pp. 86)

The Amendment presents a table of freshwater metals interim allocations for wet weather (p. 10), which is taken from Table 6-5 of the TMDL Report. However, both tables and the related text do not discuss the applicability of these interim allocations to the Torrance Lateral, although for the final WLAs it is clear that the RWQCB intends to apply the same point source limits to both the Dominguez Channel (fresh water) and Torrance Lateral sources (Amendment, p. 11).

At the February 7th stakeholders meeting RWQCB staff stated that the interim metals allocation for wet weather shown on p.10 of the Amendment and in Table 6-5 of the TMDL Report will apply to the Torrance Lateral discharges during the phased implementation of the TMDL. ExxonMobil requests that the Amendment (p. 10) and TMDL Report (pp. 87 and 88) be revised to clarify that the interim concentration-based water column limits developed for the fresh water segment of the Dominguez Channel are also applicable to discharges to the Torrance Lateral.

ExxonMobil requests that the RWQCB develop interim mass-based metals limits for the Torrance Refinery discharge using these fresh water interim concentration limits and the assumptions shown for this discharge on page 12 of the Amendment and in Table 6-7 of the TMDL Report (i.e., 3.7 million gallons per day for 7 days/year, occurring on an average discharge frequency of once every 7 years).

Final Waste Load Allocations for the Torrance Lateral

The final waste load allocations for the Torrance Lateral (TMDL Report pp. 87-88, Amendment, pp. 11-12) are only for three metals. Given that the Torrance Lateral is identified on the State's 2008/2010 CWA Section 303(d) list as impaired for water column copper and lead (TMDL Report, p. 39), these WLAs are consistent with the identified impairments. Because the Torrance Lateral flows into the Dominguez Channel and its flows and WLAs are incorporated into the Dominguez Channel Estuary model, it is ExxonMobil's interpretation that the concentration-based WLAs for the estuary and inner harbor (Amendment p. 12, TMDL Report pp. 90-92) do not apply to the Torrance Lateral and the Torrance Refinery. We believe that both the TMDL Report and Amendment are clear in this respect (i.e., it would make no sense to have final mass-based WLAs for the Torrance Refinery and then also apply the concentration-based WLAs for the Dominguez Channel Estuary), but it would be appropriate to clarify in both the Amendment and TMDL Report that the WLAs for Torrance Lateral apply to all discharges to the Lateral and that these WLAs satisfy the TMDL requirements for discharges from this source to the Dominguez Channel Estuary.[3]

ExxonMobil also believes it is appropriate to clarify that the final concentration-based sediment WLAs (Appendix, page 12) are not applicable to the Torrance Refinery discharge and that the mass-based WLAs shown in the following table of that page are the only applicable WLAs for the refinery. It is ExxonMobil's interpretation that because the final mass-based WLAs are based on unfiltered (e.g., total recoverable) metals these WLAs are considered to also meet the sediment WLAs for these metals. Because the Torrance Refinery stores wastewater before discharge, most settleable solids are removed and very small amounts of "sediment" would be in any discharge and these amounts will be measured by the total metals analysis. Also, because as stated elsewhere in the TMDL Report, reduction of metals loadings by reducing storm water flows and applying BMPs to remove settleable solids will also reduce PAH loadings sufficiently to achieve the WLAs for the latter pollutants, it is ExxonMobil's interpretation that the RWQCB's intent is that separate PAH mass limits are not required.

Monitoring Plan

The TMDL monitoring plan for the Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary is presented on pages 20-22 of the Amendment and pages 117-119 of the TMDL Report. In the description of water column monitoring (Amendment, page 21) it is stated that sampling shall be designed to collect sufficient

[3] ExxonMobil agrees that the RWQCB's assumption that compliance with the copper WLAs will likely assure compliance with the WLAs for the other metals and PAHs so no separate WLAs for PAHs in the Torrance Lateral are required.

amounts of suspended solids to allow for analysis of pollutants in the bulk sediment. This requirement may be impractical for discharges that have a low suspended solids concentration as a result of the BMPs applied to control solids in the discharges. For example, the Torrance Refinery's discharge, when it occurs, consists of storm water that has been collected in large holding basins where most sediment settles out. At an average effluent total suspended solids concentration of approximately 200 mg/L (based on monitoring data submitted to EPA and the RWQCB) it would require 1,000 litres of sample to obtain 200 grams[4] of solids, assuming that all of the solids in the sample are settleable. Collecting and managing this much sample is clearly impractical. ExxonMobil recommends that the RWQCB insert qualifying language in both the Amendment and TMDL Report that states that analysis of sediments included in water column samples is only required if sufficient amounts of sediment can be obtained from the volume of sample required for all of the aqueous phase analyses. The feasibility of analyzing a separate sediment sample will be determined on a case-by-case basis by the entity performing the sampling and documented in the sampling report.

Special Studies and Reconsiderations

ExxonMobil supports the inclusion of optional special studies as components of the TMDL and reconsideration of the TMDL targets as more information and data are collected during the phased TMDL. This is an appropriate recognition of the complexity of this TMDL and the fact that further studies during the course of the TMDL can add significant value in terms of meeting the ultimate goal of achieving the designated uses for all of the affected water bodies. All of the optional studies listed on pages 114-116 (Appendix, page 30) have potential value for providing a better understanding of the extent and nature of the water and sediment pollutant concentrations and their relationships to the aquatic ecosystems of the estuary and Greater Harbor.

ExxonMobil suggests that an additional optional study that should be listed in the TMDL Report is the development of water-body specific aquatic life numeric water quality criteria for metals using one or more of the approaches described in EPA's *Water Quality Standards Handbook: Second Edition* (EPA-823-B-94-005a). Many states have found that the EPA National Water Quality Criteria for copper, which are the copper criteria in the California Toxics Rule (CTR), are overly restrictive for marine waters in their jurisdiction because their site-specific chemistry is different from that of the Narragansett Bay water that EPA used to develop the criteria. For example, site-specific copper criteria (acute and chronic) that are greater than the CTR criteria have been developed for the New York-New Jersey Harbor, the Houston Ship Channel and San Jacinto River Estuary in Texas, and the Mississippi Sound. Thus, an optional study to evaluate possible site-specific metals criteria for aquatic life protection that could change the TMDL targets should be included in the TMDL Report. The RWQCB should emphasize that such studies are the water column equivalent of the optional stressor identification and sediment-fish tissue linkage studies described in the TMDL Report.

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[4] The minimum sample quantity recommended in EPA's SW-846 methods manual for analysis of solids for most metal analytes.

Implementation Schedule

The Implementation Schedule (Appendix, Table 7-40.2; TMDL Report, Table 7-2) is reasonable with one exception. ExxonMobil does not believe that six months is sufficient time to complete Task 2, submittal of the required Monitoring Plan to the RWQCB. Because the monitoring plans are intended to be group efforts among multiple responsible parties (which makes the most sense for a cost-effective, comprehensive, monitoring program), six months is not sufficient time for the responsible parties to organize into working groups, make any necessary contractual agreements, and prepare and submit the comprehensive plan required by the TMDL. ExxonMobil recommends that the TMDL allow twelve months for development and submittal of the Monitoring Plan.

ExxonMobil recognizes that the RWQCB and EPA have spent an enormous amount of effort developing this TMDL, and as an original member of the TMDL stakeholder group we have appreciated the opportunity to actively participate in the development process and offer our comments. ExxonMobil plans to continue its active participation during the implementation phase of the TMDL and will offer comments and data that we believe will be useful to achieve the TMDL objective of restoring the water and sediment quality in the Dominguez Channel, Dominguez Channel Estuary, and Greater LA and LB Harbor to the extent required to achieve all designated uses. If you have any questions about these comments or need more information on the Torrance Refinery, please contact Ms. Penny Wirsing at 310-212-4597 or Ms. Diane Lynch at 310-212-4743.

Sincerely,

David E. Socolofsky
Manager
Safety, Health and Environment