Western States Petroleum Association
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February 22, 2011

Ms. Thanloan Nguyen
California Regional Water Quality Control Board, Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Re: Comments for the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants Total Maximum Daily Loads Draft

Dear Ms. Nguyen,

The Western States Petroleum Association (WSPA) is a non-profit trade association representing twenty-six companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California, Arizona, Nevada, Oregon, Washington and Hawaii. WSPA appreciates the opportunity to comment upon the Draft version of the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants Total Maximum Daily Loads and the accompanying documents (Draft TMDL), released by the Los Angeles Regional Water Quality Control Board on December 17, 2010.

WSPA member organizations have facilities located adjacent to the Dominguez Channel or its tributaries (e.g., Torrance Lateral), and would be among those affected by the proposed Draft TMDL. Our comments center on specific scientific, implementation, and compliance issues of particular concern to WSPA members.

To facilitate your review, WSPA's conclusions and/or recommendations are shown in *italics*.

In evaluating the Draft TMDL and developing these comments, WSPA used Figure 2-1 (p. 12) of the Draft Staff Report to identify the various freshwater and salt water bodies discussed in the Draft TMDL. Consistent with Figure 2-1 of the Draft Staff Report, WSPA assumes that the water body called "Dominguez Channel (Freshwater)" is that part of the Dominguez Channel upstream of Vermont Avenue (where Vermont Avenue intersects the 91 Freeway, also approximately near the intersection of the 91 and 110 Freeways). In addition, consistent with Figure 2-1 of the Draft Staff Report, the remaining portion of the Dominguez Channel was assumed to comprise the Dominguez Channel Estuary. Thus, WSPA facilities may, from time to time, discharge either to the Dominguez Channel Estuary or to the Torrance Lateral (which, in turn, discharges to the Dominguez Channel Estuary) and <u>not</u> to the freshwater portion of the Dominguez Channel.

Freshwater Toxicity

The Draft TMDL assigns interim and final freshwater toxicity allocations to all point and non-point sources discharging into the water body segment "Dominguez Channel Freshwater" during wet weather conditions.

Because WSPA member facilities do not discharge to regions that would be regulated by the Dominguez Channel Freshwater allocations, it seems clear that these toxicity allocations do not apply to the WSPA member facilities.

Further, WSPA believes that the application of toxicity targets as numeric effluent limits in NPDES permits is inappropriate for the following reasons:

- As noted in recent comments to the State Water Board (attached), we believe that it is inappropriate to apply toxicity requirements as effluent limitations. Toxicity tests measure the responses of certain test organisms, and toxicity test results can be influenced by numerous factors other than and in addition to effluent toxicity. For this reason, failure of any single toxicity test should not automatically be considered a violation but rather should trigger further investigation to determine if the effluent is indeed toxic and/or to identify the toxicant(s).
- The Draft TMDL would apply toxicity limits for chronic toxicity to stormwater discharges. As detailed in the attached comment letter, this use of toxicity testing is inappropriate, as it is unsupported by appropriate studies and data collection, and because it is unclear that current chronic toxicity test methods could be applied to stormwater discharges. For example, most methods require the collection of new samples daily for eight (8) days, and most stormwater discharges persist for a much shorter time period. [1]
- The Draft TMDL calculates an interim limit for toxicity using "average values" from toxicity tests conducted by the Los Angeles County Department of Public Works. It is inappropriate to use the average of available test data as a measure of current performance that can be applied to a single sample.
- Toxicity testing should be conducted in the receiving water, but the interim and final toxicity allocations in the Draft TMDL appear to apply to individual effluent samples. This method of application is inappropriate.

Concentration-Based Water Column Allocations for Metals

The Draft TMDL assigns concentration-based wet-weather-only interim and final metals allocations to non-MS4 point sources that discharge to the Dominguez Channel Freshwater.

Because WSPA member facilities do not discharge to the Dominguez Channel Freshwater, it should be clear that these concentration-based allocations do not apply to the WSPA member facilities.

Torrance Lateral Freshwater and Sediment Allocations

The Draft TMDL assigns concentration-based allocations for metals in freshwater and sediments (discharges to the Torrance Lateral (see **Table 1**)), which, in turn, discharge to the Dominguez Channel Estuary. The impact of the proposed Draft TMDL can depend upon the unique requirements of each facility and the extent to which companies store the runoff from their facilities and discharge it to the sanitary sewer system. In general, only excess quantities, such as would occur

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[1] *If numeric toxicity limits were to apply, then, Cal EPA should consider use of acute toxicity (TUa) limits because of the short-term exposures involved. This approach would be consistent with using acute water column criteria, which is what the TMDL does for both fresh and marine waters.*

from very large storm events, and are discharged to local receiving waters. Thus, discharges from these facilities occur very rarely, and only under extremely large storm flow conditions. [2]

WSPA understands that the final freshwater allocations, including both mass-based and concentration-based allocations (summarized in **Tables 1** and **2)**, would be applied only after year 20 of the implementation period. This implementation period is necessary to allow WSPA member facilities to evaluate and implement additional treatment options to meet the allocations of the Draft TMDL.

Table 1: Concentration-Based Freshwater and Sediment Allocations for Discharges to Torrance Lateral

Taken from p. 12 of Attachment A to Resolution No. R11-XXX.

Media	**Copper**	**Lead**	**Zinc**
Water, unfiltered (ug/L)	9.2	39.3	67.6
Sediment (mg/kg dry)	31.6	35.8	121

Table 2: Mass-Based Freshwater Allocations for ExxonMobil Torrance Refinery Discharges to Torrance Lateral

Taken from p. 12 of Attachment A to Resolution No. R11-XXX.

Media	**Copper**	**Lead**	**Zinc**
Water, unfiltered (kg/yr)	0.9	3.8	6.6

WSPA requests that facilities that discharge to the Dominguez Channel Estuary and Greater Los Angeles/Long Beach Harbor have the option of using mass-based limits, similar to those applied to ExxonMobil, instead of the concentration-based limits currently assigned in the Draft TMDL.

For example, in the instance with ExxonMobil, the mass-based sediment allocation were developed using an average discharge frequency of once every seven (7) years. Using this approach, WSPA requests that the Draft TMDL state that facility-specific information may be used at the request of a point source discharger to derive alternative mass-based allocations, consistent with procedures and methods used by others in the region.

WSPA assumes that the Cities of Los Angeles and Long Beach (and the Ports of Los Angeles and Long Beach) and the State Lands Commission will be responsible for developing and implementing the Sediment Management Plans, and that WSPA's member facilities will <u>not</u> be responsible for these activities.

This seems appropriate because discharges from WSPA member facilities occur only infrequently, and the operation of these facilities has not contributed in any substantive way to pollutants present in the sediments of the water bodies regulated by this Draft TMDL.

Dominguez Channel Estuary Allocations

Interim Sediment Allocations. Interim concentration-based sediment allocations were based on the 95th percentile of sediment concentration data collected from 1998-2006 (see **Table 3**) and appear to apply to bedded sediments. Although the Draft TMDL and Staff Report are unclear regarding how these allocations may be implemented in NPDES permits, the Draft TMDL states (Attachment A to Resolution No. R11-XXX at p. 10), "Regardless of the allocation, permitted dischargers shall ensure that effluent concentrations and mass discharges do not exceed levels that can be attained by performance of the facility's treatment technologies existing at the time of permit issuance, reissuance or modification."

WSPA understands that interim sediment allocations would be implemented in members' NPDES permits as performance-based requirements through year 20 of the implementation period.

Table 3: Interim Concentration-Based Sediment Allocations for the Dominguez Channel Estuary.

Taken from p. 10 of Attachment A to Resolution No. R11-XXX.

Constituent	units	Allocation
Copper	mg/kg sediment	220
Lead		510
Zinc		789
DDT		1.27
PAH		31.60
PCB		1.490

WSPA has been unable to reproduce the values shown in Table 3 and requests that the Regional Board provide additional information on the interim sediment concentration estimates presented in the Draft TMDL, including the dataset upon which the calculation was based and the methods used to derive the values shown.

Final Salt Water Column Allocations. Final water column allocations are included in the Draft TMDL for discharges to Dominguez Channel Estuary. Concentration-based final waste load allocations (WLAs) were assigned to non-MS4 point sources in the Dominguez Channel Estuary and Inner Harbor, including refineries. These allocations were set equal to the saltwater targets for metals and human health targets for organic compounds (see **Table 4**), which were derived from the California Toxics Rule (CTR). Many of these concentrations are very low (many below current analytical capabilities) and thus may be exceeded in the Dominguez Channel Estuary under current conditions. Further, the Staff Report offers no evidence that the use of CTR targets would result in concentrations of these pollutants in sediments that are below the targets of the Draft TMDL. As noted below, the Draft TMDL does not appear to be based upon best available science, and the procedures of the SQO Policy should be used to establish the pollutants of concern for the Draft TMDL, and then to establish allocations.

In any case, as these are final WLAs, WSPA understands that they would be applied in NPDES permits only after year 20 of the Implementation Period.

Table 4: Receiving (Salt) Water Column Concentration-Based Final WLAs for the Dominguez Channel Estuary (applicable 20 years after TMDL adoption).

Taken from p. 12 of Attachment A to Resolution No. R11-XXX.

Constituent	Units	Allocation
Copper*	ug/L	3.73
Lead*		8.52
Zinc*		85.6
Total PAHs		0.049**
Chlordane		0.00059
4,4'-DDT		0.00059
Dieldrin		0.00014
Total PCBs		0.00017

* The Draft TMDL indicates that the concentration-based WLAs for metals were converted from the saltwater dissolved CTR criteria using default saltwater translators.
** The Draft TMDL indicates that since CTR human health criteria were not established for total PAHs, the lowest CTR criteria for an individual PAH compound (0.049 ug/L) was applied to the sum of benzo (a) anthracene, benzo (a) pyrene, chrysene, phenanthrene, pyrene, and 2-methylnaphthalene.

WSPA objects to the WLA for PAH compounds, as it results in a limit for PAHs that is far more stringent than intended by the CTR. The CTR criteria for these compounds for protection of human health from consumption of organisms at a level of 10^{-6} are as follows: benzo(a)anthracene 0.049 ug/L, benzo(a)pyrene 0.049 ug/L, chrysene 0.049 ug/L, phenanthrene (no CTR limit), pyrene 11,000 ug/L, and 2-methylnaphthalene (no CTR limit). Clearly, applying a limitation of 0.049 ug/L to the sum of these six PAH compounds is far more stringent than indicated by the CTR.

WSPA requests that the limits shown in Table 4 above be modified to be made consistent with the CTR.

Final Mass-based Allocations. The Draft TMDL assigns mass-based allocations for metals and/or organic pollutants from MS4s discharging to the Dominguez Channel Freshwater, Dominguez Channel Estuary, and Greater Harbor Waters.

WSPA understands that these mass-based allocations do not apply to the WSPA member facilities.

Scientific Basis of the Draft TMDL

The State's SQO Policy, which was approved by USEPA in August 2009, provides a quantitative process for determining whether or not sediment quality objectives are exceeded in enclosed bays and harbors. If sediment quality objectives are exceeded (which has not been established for these waterbodies or as part of the Draft TMDL), the SQO Policy then requires stressor identification to identify whether or not pollutant(s) are responsible for the observed sediment quality objective exceedances, and, if so, to identify which pollutant(s) are responsible for the exceedances.

By contrast, the SQG thresholds used in the Draft TMDL (i.e., ERLs and TECs) were developed for use only as screening tools and were never intended for use as standards or regulatory endpoints, and the use of SQGs has been supplanted by the SQO Policy in California. SQGs are frequently unrelated to actual toxicity or impact within the sediments. In fact, the use of SQGs has resulted in Draft TMDL targets that are likely to be unnecessarily and artificially low. A comparison of available sediment concentration data to the targets established for sediment by the Draft TMDL indicates that virtually the entire Harbor would be considered impaired. However, analyses performed by SCCWRP pursuant to the SQO Policy (and relied upon by Regional Board staff in developing the cost estimates of the Draft TMDL) indicates that a far smaller portion of the Harbor would exceed the objectives of the SQO Policy.

As noted in the SQO Policy (at p. 7):

> *"None of the individual LOE [line of evidence] is sufficiently reliable when used alone to assess sediment quality impacts due to toxic pollutants. Within a given site, the LOEs applied to assess exposure … may underestimate or overestimate the risk to benthic communities and do not indicate causality of specific chemicals. The LOEs applied to assess biological effects can respond to stresses associated with natural or physical factors, such as sediment grain size, physical disturbance, or organic enrichment.*
>
> *Each LOE produces specific information that, when integrated with the other LOEs, provides a more confident assessment of sediment quality relative to the narrative objective. When the exposure and effects tools are integrated, the approach can quantify protection through effects measures and provide predictive capability through the exposure assessment.* [SQO Policy at p. 7]"

Thus, it is wholly inappropriate to use SQGs (a single line of evidence) to develop TMDL targets or sediment cleanup requirements.

In addition, the failure of the RWQCB or USEPA to perform stressor identification means that there is no certainty that the pollutants regulated by the Draft TMDL are causing any supposed impairment. This means that any additional pollutant(s) that may be responsible for any supposed impairment have not been identified within and will not be addressed by the Draft TMDL.

Further, WSPA notes that although the SQO Policy provides tools (thresholds for three lines of evidence) that apply within enclosed Bays and Harbors, those tools are not applicable to estuaries such as the Dominguez Channel Estuary (see SQO Policy at p. 7). Thus, it does not appear that the targets and allocations of the Draft TMDL can be readily "replaced" or "supplanted" by an analysis performed pursuant to the State's SQO Policy.

WSPA requests that the Draft TMDL be amended to eliminate the use of SQGs and to require the application of the State's SQO Policy.

Additional Comments on TMDL Implementation

Monitoring Plan. The Draft TMDL indicates that "responsible parties" shall develop a Monitoring Plan, an Implementation Plan, and a Sediment Management Plan. WSPA member facilities would be among those entities that fall within the category of "Individual and General

Stormwater Permit Enrollees". Requiring the Monitoring Plan to be completed within six (6) months of the effective date of the TMDL is unreasonable.

WSPA suggests that the Draft TMDL be revised to require submittal of the Monitoring Plan at least twelve (12) months after TMDL adoption, and implementation of the Monitoring Plan at least twelve (12) months after that date.

ARARs. The Draft TMDL indicates that site-specific cleanup actions could be required at the two Superfund sites within the Dominguez Channel Watershed - the Montrose and the Del Amo Superfund Sites. The Draft TMDL indicates that the US EPA has not reached a final remedial decision on certain Operable Units (OUs) at the Montrose Superfund Site that remain contaminated with DDT. Moreover, the Draft TMDL states (pg. 27), "The TMDL, its waste load and load allocations, and other regulatory provisions of this TMDL may be applicable or relevant and appropriate requirements (ARARs) as set forth in Section 121(d) of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. §§ 9621(d)) for those OUs."

As noted above, the SQGs that are used within the Draft TMDL as TMDL targets were never intended to be used as ARARs and are inappropriate for that purpose.

WSPA objects to the use of the Draft TMDL targets as ARARs for cleanup actions under CERCLA or any other statute or regulation and requests that this language be deleted from the Draft TMDL.

WSPA appreciates the opportunity to comment upon the Draft TMDL. Please contact Mike Wang at 626-355-5129 or mwang@wspa.org if you have any questions regarding these comments.

Sincerely,

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Western States Petroleum Association
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