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STATE OF CALIFORNIA

WATER RESOURCES CONTROL BOARD

In the Matter of Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit (Order No. R4-2013-0157, NPDES No. CA0059153) and Time Schedule Order (Order No. R4-2013-0158) Adopted by the Los Angeles Regional Water Quality Control Board; The Petition of TESORO REFINING & MARKETING COMPANY LLC, Petitioner	**SWRCB FILE NO._____** **VERIFIED PETITION FOR REVIEW** [Request To Hold Petition In Abeyance]

Pursuant to California Water Code section 13320 and California Code of Regulations ("CCR") Title 23, sections 2050 *et seq.*, Tesoro Refining & Marketing Company LLC ("Petitioner") respectfully petitions the State Water Resources Control Board ("State Board") for review of Petitioner's National Pollutant Discharge Elimination System ("NPDES") Permit and Waste Discharge Requirements ("WDRs") and the associated Time Schedule Order ("TSO"), which were

adopted on October 3, 2013 as Order Nos. R4-2013-0157 ("WDR Order") and R4-2013-0158 ("TSO Order"), respectively. The WDR and TSO Orders were issued to Petitioner by the Los Angeles Regional Water Quality Control Board ("Regional Board") with regard to Petitioner's Wilmington Calciner located at 1175 Carrack Avenue in Wilmington, California ("Facility"). The Facility is equipped with a 900,000-gallon pond structure where the Calciner takes in storm water and combines it with Facility process water in the pond for re-use on site. As a result, Petitioner is an infrequent discharger who estimates a discharge once every 50 years.

PRELIMINARY BACKGOUND

The WDR and TSO Orders involve the Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters ("Harbor Toxics TMDL" or "TMDL"), which was adopted on May 5, 2011 as a Basin Plan Amendment, Resolution No. R11-008 Attachment A ("Basin Plan Amendment"). The TMDL targets Harbor waters and sediment that are contaminated with primarily legacy sources, including 4,4'-dichlorodiphenyltrichloroethane ("DDT") and total polychlorinated biphenyls ("PCBs"). These pollutants were discharged long ago and now linger in air and then bounce around from land surfaces to water surfaces like grasshoppers.[1] In fact, the Harbor waters themselves are a source of PCBs to the atmosphere. (Basin Plan Amendment at 18-19, III-46.)[2] If all point sources eliminated their discharges to zero, the amount of DDT from the air to the Inner Harbor waters alone exceeds the TMDL for the water.[3]

To address the legacy pollution, the TMDL provided "interim" and "final" waste load allocations ("WLAs"), phased in from 2012 through 2032. The TMDL established WLAs for the

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[1] *See* May 5, 2011 Harbor Toxics TMDL Staff Report at 44, 52, 57, 103 (identifying the primary sources as nonpoint source from legacy sources); EPA Guidance, "Frequently Asked Questions About Atmospheric Deposition," (EPA No. 453, September 2001) at 5. According to EPA, grasshopper pollutants are emitted from the original source, transported some distance, and deposited. From there, a portion is re-emitted, transported further, and re-deposited. As it rains, the runoff picks up the chemicals.

[2] *See* Basin Plan Amendment at 18 (stating that "Direct [air] deposition allocations for PCBs are not included since air deposition has been measured to be less than water-to-air fluxes," indicating that the waters of the Harbor are a source of PCBs to the atmosphere; this conclusion is reflected in the absence of load allocations for PCBs to Harbor waters (*see, e.g.*, load allocations (LAs) for Inner Harbor in Basin Plan Amendment at 19). *See also* Appendix III to the TMDL Staff Report at III-50, which states, "Water column is a source of PCB to the atmosphere through gas exchange" and shows a flux of approximately 15 ng/m^2/day for the Los Angeles Harbor ("LAH").

[3] Page 19 of Basin Plan Amendment shows that the amount of DDT from the air to the Inner Harbor waters is 129 grams per year. This alone exceeds the 3.56-gram-per year total allocated for DDT in the Inner Harbor.

municipal separate storm sewer system ("MS4") based on data, but there were not enough data to establish load-based WLAs for industrial point sources. (*See* **Exh. 1, Petitioner's Oct. 4, 2013 hearing presentation** at slide 22.) Instead the TMDL borrowed the limits of the California Toxics Rule, 40 C.F.R. § 131.38 ("CTR"), and adopted them as the final WLAs for industrial point sources. The CTR-based WLAs for industrial point sources are not based on data from industrial sources in the Harbor area.

INTRODUCTION

The WDR Order imposes monitoring duties and the CTR-based WLAs as water-quality based effluent limits for lead, DDT, and PCBs ("New WQBELs"). The Facility's operations do not discharge DDT or PCBs at all or lead at actionable levels. No DDT or PCBs have been detected in the Calciner process waters, and any actionable levels of lead detected so far are not believed to originate from the Facility.[4] (*Id.* at 30-31.) The lead, DDT, and PCBs are from legacy pollutants, not Facility operations. (*Id.* at 18-25.) In absence of data showing lead, DDT, and PCBs from the Facility, these monitoring duties and limits are improper and inappropriate. Further, Petitioner knows of no legal authority under the NPDES program that would impose on one discharger the duty to address, treat, and, if needed, reduce legacy pollutants of other dischargers. Treating atmospheric deposition of lead, DDT, and PCBs would appear futile given that the grasshopper-like pollutants would merely redeposit from the air (in the case of lead and DDT) or from the Harbor waters (in the case of PCBs). The New WQBELs and related monitoring duties should be removed because no data or legal authority supports them.

The lack of data to support the New WQBELs is contrary to NPDES regulation. Among other things, to impose a WQBEL, federal regulation requires in subdivision (d)(1) of 40 C.F.R. section 122.44(d)(1) that the permitting agency determine based on data whether a facility "causes or

[4] If all the suspended solids in storm water from the Facility originated from coke (the materials processed at the facility), concentrations of metals (including lead) would be below the effluent limitations for these constituents. Based on these calculations and the fact that PCBs and DDT have not been present at the Facility, atmospheric deposition is the only viable source that could raise the concentrations of these constituents in the storm water that could in the future be discharged through Facility conveyances. Further, PCBs, DDT, and lead sorb strongly to particles, and the particulates would likely settle in the pond water and be dredged and removed at the Facility. It, therefore, is highly unlikely that any DDT, PCB, or lead that lands on the Facility and is carried to the pond could reach the Cerritos Channel. (*See also* Exh. 4 at 3-4.)

has reasonable potential to cause" an exceedance of water quality objectives in receiving waters. The Regional Board skipped the "reasonable potential analysis," resulting in WQBELs without supporting data to show a reasonable potential of discharge from the Facility. This is particularly problematic because CTR-based WLAs also lack supporting data to show waste loads from the Facility. Thus, there are no data from the Facility and no data from industrial sources in the Harbor area to support either the New WQBELs or the underlying WLAs upon which they are based.

If the New WQBELs remain in the WDR Order (despite the lack of data), they must be consistent with the TMDL. But, the limits are not. The TMDL imposed no final WLAs until 2032 based on a 20-year schedule. (*See* **Exhibit 2, Key TMDL Records.**[5]) Contrary to the TMDL, the New WQBELs imposed final WLAs in 2013, 19 years earlier.

The Regional Board imposed the New WQBELs 19 years earlier because EPA Region IX did not approve the 20-year implementation schedule. After EPA's non-approval, and without notice to stakeholders, the Regional Board and EPA exchanged letters about the TMDL and effectively eliminated the 20-year implementation schedule and in doing so changed all of the WLAs associated with that schedule. (*See* **Exhibit 3, Post-TMDL Communications.)** The 20-year schedule in Table 7 of the Basin Plan Amendment established either "interim" WLAs or no WLAs until 2032, and then final WLAs for all pollutants in 2032. Notably, the TMDL had *no* interim WLA for lead, DDT, or PCBs in the water column. (Exh. 1 at 30.) Thus, by eliminating the 20-year implementation

[5] Records related to TMDL development consistently reflect a 2032 final compliance date. For example, a Memorandum from the Regional Board to the State Board, dated January 27, 2012 (Exh. 2) specifies at page 10 that "Compliance with the final waste load and load allocations is not required until 2032." Similarly, Attachment E to the January 27, 2012 memo specifies that "Greater LA/LB Harbor Waters Responsible Parties" must "comply with final WLAs and LAs [load allocations]," including "water WLAs for non MS4 point sources ... (BPA pages 13 and 15)" "by 20 years." During the adoption process for the Harbor TMDL, the Regional Board received several comment letters that also indicated that commenters believed it was the Regional Board's intent to apply the final WLAs of the Harbor TMDL in NPDES permits only after 20 years. For example, the comment letter submitted by the Western States Petroleum Association (WSPA; see Exh. 2) stated with regard to the Final Salt Water Column 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."* (Italics in original) The Regional Board's response to comments document restated this comment in its entirety, never mentioning it was in any way incorrect. In other words, ample evidence demonstrates that both the Regional Board and State Board intended that the final WLAs of the Harbor TMDL, including the final WLAs for saltwater at page 13 of the Harbor TMDL, would apply at year 20 (i.e., in March 2032 or later). And yet the Regional Board inserted the New WQBELs for the Facility that would be effective immediately, and that are derived directly from the final salt water column WLAs at page 13 of the Harbor TMDL. This entirely reinterprets the requirements of the Harbor TMDL in a manner that was never addressed – as it should have been – during the TMDL rulemaking process.

schedule, the Regional Board and EPA changed the TMDL WLAs for lead, PCBs, and DDT from no interim WLA to a numeric interim WLA equal to the final 2032 WLA. This change in the WLAs required rulemaking and notice to stakeholders. (*See* **Exhibit 4, September 9, 2013 Comment Letter,** at II-1 – II-2.)

Lastly, the WDR Order is improper because it entirely disregards the Facility's ability to retain a 50-year, 24-hour storm. Petitioner requested, but the Regional Board did not grant, a design storm provision that would have required compliance with permit limits and duties at all times except storm events greater than a 50-year, 24-hour storm. A design storm provision was supported by ample data that Petitioner provided to the Regional Board and summarized in its September 9, 2013 comment letter. (*See* Exh. 4 at App. III.) The WDR Order also omits other provisions that should be incorporated, such as revisions to the Average Monthly Effluent Limitations ("AMELs") provision in the permit to address the infrequency of discharge from the Facility. (*Id.*)

The TSO Order provides Petitioner some relief from immediate application of the New WQBELs for five years while Petitioner studies the origins of the pollution. The TSO Order, however, omits lead, an airborne pollutant over which Petitioner has no control. The omission of lead from the TSO Order is not supported by data. The TSO Order should also incorporate the concept of a design storm.

Copies of the WDR and TSO Orders are attached hereto as **Exhibits 5 and 6**, respectively.

Due to the lack of reasonable potential of discharge from the Facility, Petitioner requests that the State Board strike from the WDR Order the New WQBELs and associated monitoring duties and remand the WDR Order to the Regional Board to add a design storm provision and other related provisions. Petitioner also requests that the State Board strike from the WDR Order a new limit for bacteria and a new limit for total petroleum hydrocarbons.

Alternatively, if the Regional Board can show reasonable potential and legal authority under the NPDES, which we do not believe it can, Petitioner suggests that the State Board direct the Regional Board to evaluate and adopt one of the compliance options listed in paragraph 6, below. One compliance option may be to explore the use of intake credits for the atmospheric pollutants. Such credits would recognize and address the source of the pollution and hopefully eliminate the

futility of the Facility treating pollutants that come from the waterbody or the air and that continually re-deposit themselves at the Site.

1. NAME AND ADDRESS OF PETITIONER

Petitioner may be contacted through its counsel of record: Viviana L. Heger, Tropio & Morlan, 21700 Oxnard Street, Los Angeles, California 91367 and Deborah P. Felt, 2350 E. 223rd Street, 416D, Carson, California 90810.

2. THE ACTION OR INACTION FOR WHICH PETITIONER SEEKS REVIEW

This petition for review concerns the Regional Board's actions and inactions in issuing (a) the WDR Order, entitled "Waste Discharge Requirements for Tesoro Refining & Marketing Company LLC (Former BP West Coast Products LLC) Tesoro Wilmington Calciner (Former BP Wilmington Calciner);" and (b) the TSO Order, entitled "Time Schedule Order (TSO) for Tesoro Refining & Marketing Company LLC, Tesoro Wilmington Calciner, NPDES No. CA0059153."

a. The WDR Order

The Regional Board acted improperly and unreasonably in issuing the WDR Order. That Order requires that by about January 1, 2014, Petitioner, either by itself or as part of a group monitoring effort, prepare and implement a monitoring plan that will include water column sampling, sediment monitoring, and fish tissue monitoring within the Long Beach Inner Harbor Area. (Exh. 5, WDR Order at p. 23-25.) The water column and fish tissue monitoring duties apply at designated times (three times a year for water column and once every two years for fish tissue) even if Petitioner does not discharge any water during the permit term. (*Id.* at 24-25.) Although a site-specific plan is available (*id.*) and might reduce monitoring frequency, it nonetheless remains unreasonable for the Facility to undertake extensive monitoring either by itself or as part of a group for pollutants that have no reasonable potential of discharge from the Facility and that arise from the legacy pollution caused by others, not Petitioner. [6]

[6] Reduced sampling frequency might be an option for the Facility, according to the Regional Board's September 24, 2013 response to Petitioner's September 9, 2013 comments (at pp. 4, 71, and 77); however, costly monitoring to assess pollution caused by others is unreasonable.

At times of discharge, the WDR Order also imposes the New WQBELs.[7] (*Id.* at 15 and F-25.) Failure to meet the limits or monitoring duties carries the risk of penalties of up to $37,500 per day per violation. (33 U.S.C. § 1319(d) (adjusted from $25,000 to $37,500 pursuant to 74 Fed. Reg. 626, 627 (2009).) For a facility that discharges once every 50 years on average, these monitoring duties, New WQBELs, and potential penalties are wholly unreasonable.

The Regional Board acted improperly by imposing the New WQBELs and associated monitoring duties for the reasons described in paragraph 4. The Regional Board also acted improperly by imposing new bacteria limits without performing a reasonable potential analysis for these pollutants. (Exh. 5 at J-1.) Petitioner believes that these limitations are not required to be included in NPDES permits solely because of the Los Angeles Harbor Bacteria TMDL. (Exh. 4 at III-4.)

The Regional Board acted improperly by imposing an effluent limitation for total petroleum hydrocarbons (TPH). The limitation for TPH is duplicative of existing effluent limitations for oil and grease. Further there is no reasonable potential for TPH in discharges. Staff's visit to the Facility on April 2, 2013 did not detect TPH and assumed, without data or other reliable information, that sheen on the pond water could be TPH. Instead that sheen was associated with fine coke dust particles floating on top of the water in the pond, and was not a TPH-based sheen. (Exh. 1 at 11.)

The Regional Board also failed to act properly and reasonably in its issuance of the WDR Order because, among other things, the WDR Order fails to include provisions to address the infrequency of discharge from the Facility. Petitioner's predecessor, BP West Coast Products LLC, conducted extensive hydrologic analyses, which were submitted to the Regional Board on March 21, 2013, to establish that the Facility has the capacity to retain water from a 50-year, 24-hour storm,

[7] The WDR Order imposes the following limits in micrograms per liter (µg/L) or pounds per day (lbs/day):

	Average Monthly	Maximum Daily
Lead	7 µg/L	14 µg/L
	0.1 lbs/day	0.1 lbs/day
DDT	0.0006 µg/L	0.001 µg/L
	5.4E-06 lbs/day	1.1E-05 lbs/day
PCB	0.0002 µg/L	0.0003 µg/L
	1.6E-06 lbs/day	3.1E-06 lbs/day

and would discharge to receiving waters only for storm volumes larger than would be generated by this size storm. In light of the study, Petitioner requested three new or revised permit provisions:

- Design Storm for Treatment Control Measures: All treatment systems shall be sized and designed to treat the discharge resulting from a 50-year, 24-hour storm event based on historical daily rainfall information for the location where the regulated facility is located. An analytical result from flows exceeding a design storm shall not be used in determining any exceedances of effluent limits or other permit violations and shall not be used in calculations leading to revised effluent limits.
- [VII.6] If the average (or when applicable, the median determined by subsection E above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month, quarter, or semi-annual or annual period, and the ~~analytical result for that sample exceeds~~ discharge was shorter than four (4) days in duration, the AMEL~~, the Discharger will be considered out of compliance for that calendar month~~ shall not apply.
- Average Monthly Effluent Limitations (AMELs) shall not apply to discharges that consist of storm water only. If discharges consist of storm water only, only Maximum Daily Effluent Limits (MDELs) shall apply for all the constituents except bacteria, for which geometric mean limits shall apply, and acute toxicity, for which average monthly survival shall apply. The Discharger shall demonstrate discharges are storm water only in accordance with best management practices specified in an approved storm water segregation plan, which shall be submitted by the Facility for EO approval. The MDEL limits are included in Table XX. (Exh. 4 at App. III.)

The Regional Board failed to act on Petitioner's requests.

b. The TSO Order

The TSO Order imposes interim WQBELs for PCBs and DDT, but not lead. (*See* Exh 6 at 6.) Existing data suggest lead should be included because it is an airborne pollutant that may remain suspended during a storm event that requires the Facility to discharge. Lead levels associated with Facility operations alone would not cause non-compliance. (Exh. 1 at 31-32.) Further, the limits in the TSO are improper because they were developed by the Regional Board without reference to the TMDL (since the TMDL had no interim WLAs for lead, DDT, and PCBs in water column). All of the limits are based on unrepresentative samples from the Facility's retention pond, rather than water that would be discharged from the Facility. Lastly, the TSO did not include a design storm provision that Petitioner requested to address on site retention for up to a 50-year, 24-hour storm.

3. DATE THE REGIONAL BOARD ACTED OR FAILED TO ACT

The date of the Regional Board's action that is subject to review is October 3, 2013, when the Regional Board members voted to adopt the WDR and TSO Orders and when they were signed by the Executive Officer of the Regional Board. Petitioner first received a copy of the Order, via electronic mail, on October 9, 2013.

4. STATEMENT OF REASONS THE ACTION IS INAPPROPRIATE AND IMPROPER

The issuance of the WDR and TSO Orders was beyond the authority of the Regional Board for the reasons enumerated below.

a. The WDR Order's Departure from NPDES and TMDL Programs

1) The WDR Order is based on the federal Clean Water Act, which prohibits "the discharge of any pollutant *by any person* [.]" (33 U.S.C. § 1311(a) (emphasis added).) To impose an NPDES permit, there must first be a "discharge" "by a person" and that discharge must be from a "point source" to receiving waters.

- A discharge "by a person" does not include "constituents occurring naturally in the waterways or occurring as a result of *other industrial discharges*[.]" (*Appalachian Power Co. v. Train*, 545 F.2d 1351, 1377 (4th Cir. 1976) (emphasis added).) Here, the pollutants are the result of "other industrial discharges," not Petitioner's discharges. The PCBs originate from the waters and the DDT and lead originate from the air. (Exh. 1 at 18-25) The pollutants are from legacy pollution and not associated with the Site.
- A "discharge of pollutant" exists where there is active addition of pollutants. Here, however, Petitioner is not actively adding pollutants, particularly not the PCBs that come from the water body and arrive to the Facility by air. The Regional Board contends that ownership of a point source sometimes will trigger liability. This is true on the theory that "if you own the leaky 'faucet,' you are responsible for its 'drips.'" *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133, 1145 (10th Cir. 2005). But, in this case, Petitioner's ownership of the Facility is not sufficient to trigger NPDES liability. Petitioner has no control over atmospheric deposition, does not own the source of that deposition, and is neither responsible for or able to stop the pollution from reaching its Facility.
- A point source exists where there is *both* (a) a conveyance – or starting point – "from" which a pollutant discharges, and (b) either an actual discharge or a reasonable likelihood that the conveyance will deposit pollutants to navigable waters. (33 U.S.C. § 1362(14); *Peconic Baykeeper v. Suffolk City*, 600 F 3d 180, 188-189 (2d Cir. 2010); *Envtl. Prot. Info. Ctr. v. Pac. Lumber Co.*, 469 F. Supp. 2d 803, 827 (N.D. Cal. 2007).) The Facility is not a point source. The water body and the air, not the Facility, are the starting points for these contaminants. The Facility has no record of ever handling, managing, or discharging DDT or PCB chemicals. Data shows no

actual discharge; pond data show it is reasonably unlikely pollutants would reach navigable water so long as solids settle in the pond. (*See* Exh. 4 at App. I for further discussion.)

The law is clear: "In absence of an actual addition of any pollutant to navigable waters, there is no point source discharge. . . no statutory obligation of point sources to comply with EPA regulations . . . and no statutory obligation of point sources to seek or obtain any NPDES permit in the first instance." (*Envtl. Prot. Info. Ctr.*, 469 F. Supp. 2d at 827 .) Here, there is (a) no discharge of pollutants, (b) "by" Petitioner (c) from a point source (d) to navigable waters. There is no statutory obligation for Petitioner to be subject to any NPDES permit for DDT, PCB, or lead.

2) The Regional Board did not follow applicable procedure in developing the New WQBELs. To impose a WQBEL, federal regulation requires in subdivision (d)(1) of 40 C.F.R. section 122.44(d)(1) that the permitting agency determine whether a facility "causes or has reasonable potential to cause" an exceedance of water quality objectives in receiving waters. The pattern and practice of the Regional Board, and possibly EPA Region IX, has been to skip this "reasonable potential analysis" and rely on a later subsection – (d)(1)(vii)(B) – to impose the TMDL directly without any evaluation of reasonable potential. This misinterprets and misapplies the regulation.

Further, a proper reasonable potential analysis must exclude pollution from atmospheric deposition. There is little or no legal basis to hold industrial dischargers under individual permits responsible for monitoring, treating, and reducing pollutants from aerial deposition, especially not where, as here, the water body itself is a source of at least one of the primary pollutants, PCBs. Regional Board staff appear to take the position that industrial dischargers are just like a Municipal Separate Storm Sewer System ("MS4"), which by design must treat the pollution of others. Petitioner knows of no legal authority that establishes this position and existing NPDES case law supports the opposite view. (*See* Exh 4 at App. I.)

The Regional Board's reliance on the TMDL WLAs without a reasonable potential analysis is particularly problematic because of the way the WLAs were developed. The WLAs are not based on data gathered from the Facility or industrial sources in the Harbor area; they are based on the

CTR but, at the same time, inconsistent with the CTR.[8] The only load-based WLA developed was for the MS4; the WLAs for industrial point sources, therefore, do not represent loads or allocations at all. Had the WLAs for industrial point sources been based on actual data of loads from point source facilities, then a reasonable potential analysis might be duplicative of the load-based analysis during the TMDL process. But where, as here, the TMDL performed no load analysis to develop the WLAs for the industrial point sources, the WQBELs equal to the WLAs represent departures from both the NPDES and TMDL programs.

3) Further, even if the TMDL is a basis for the New WQBELs, the New WQBELs must be "consistent with" the WLAs. But the New WQBELS are not consistent with the TDML. The TMDL had *no WLA for lead, DDT, and PCBs until 2032*; therefore, the TMDLWLAs cannot serve as a basis for immediate applicability of the New WQBELs. The TMDLs applied a final WLA for lead, DDT, and PCBs in 2032 and had no WLA until then. Further, EPA has recognized "consistent with" does not mean "identical to" the WLA and can be best management practices instead. (65 Fed. Reg. 64746, 64791 (October 30, 2000); *see also* 40 C.F.R. §122.44(k)(3).)

4) The inconsistency between the New WQBELs and the TMDL arose when the Regional Board and EPA eliminated the 20-year implementation schedule without notice to stakeholders. Specifically, the Regional Board and EPA communicated about the schedule with each other from about February 2012 through August 2012. EPA did not approve the 20-year implementation schedule, and on November 8, 2012, the Regional Board and EPA effectively eliminated that schedule and replaced it with compliance schedules subject to federal regulation. (*See* Exh. 3.) The compliance schedules are available to dischargers who can show they "cannot immediately comply with the WQBEL[.]" (*Id.* at page 2 of the May 10, 2007 EPA Memorandum.) But, Petitioner was unable to show it cannot comply because it has no recent representative data. (*See* Exh. 4 at 2.)

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[8] EPA has established an exceedance frequency of once every three years for CTR, stating that the CTR "acute criterion for a pollutant [may] be exceeded no more than once in three years on average" and that "the chronic criterion for a pollutant be exceeded no more than once in three years on the average." (65 Fed. Reg. 31682, 31702 (May 18, 2000).) The Facility discharges only during a 50-year, 24-hour (or larger) storm event. Thus, discharges from the Facility are expected to occur far less frequently than once in a three-year period.

The changes the Regional Board and EPA made to the TMDL were improper. The elimination of the 20-year implementation schedule changed all loads associated with that schedule. Federal regulation, 40 C.F.R. § 130.7(d)(2), requires public notice and comment whenever the Regional Administrator changes a TMDL loading. Here, EPA's non-approval of the 20-year schedule had the direct effect of disapproving those instances where, as here, the TMDL set no specific interim WLA for certain pollutants, including lead, DDT, and PCB in the water column. (*See* Exh. 1 at 29.) To fill that gap, the Regional Board is using the final WLAs instead. But, the Regional Board and EPA may not, without rulemaking, disregard the prior decision by the agency and EPA to adopt a TMDL that imposed no interim WLAs for certain pollutants. This approach differs from the Basin Plan Amendment, and 40 C.F.R. § 130.7 requires a plan amendment to reflect the revised TMDL approach.

For the foregoing reasons, the WDR Order departs from applicable NPDES and TMDL standards. NPDES standards are detailed and require a discharge of a pollutant by a point source to navigable waters; none of these are met. The NPDES regulations require a reasonable potential analysis, but the Regional Board did not conduct one. Similarly, the TMDL regulations envision a load-based analysis for WLAs, but the TMDL WLA for industrial dischargers are CTR-based, not load-based and supported by data gathered from industrial point sources. These NPDES regulations require WQBELs consistent with a TMDL WLA, but New WQBELs are inconsistent with the TMDL WLA. The TMDL had no WLA for lead, DDT and PCBs until 2032. The New WQBELs impose immediate limits for lead, DDT, and PCBs 19 years earlier that stakeholders were told. Finally, the revised approach to the TMDL changed all the WLAs associated with the 20-year implementation schedule and required rulemaking.

b. <u>Other Reasons</u>

The WDR Order is unreasonable also because it is inappropriate to impose numeric limits applicable to the storm water portion of Petitioner's discharge. This portion of Petitioner's discharge is impacted by atmospheric deposition, not Facility process water. Segregating all storm water from process water would make no difference to the legacy pollution that is carried to the Facility by the air. It is the storm water-only portion of the retained water that would potentially cause non-

compliance. For storm-water only discharges, the State Board's 2006 "Blue Ribbon" panel of experts found that numeric limits are infeasible until adequate data are assembled. (Exh. 1 at 32.) Until data exist, numeric limits applied to storm water are improper.

Lastly, the WDR Order is unreasonable in that the Regional Board has failed to provide Petitioner with a meaningful opportunity to address or refute the Order's alleged findings and directives with existing information and data. This was particularly true at the October 4, 2013 hearing when the Regional Board denied proportionate time for each of the parties' case presentations. The Order was issued despite data showing the lack of discharge from the Facility. As such, Petitioner has been denied its rights to procedural due process, resulting in substantial harm through the imposition of unjustified and inappropriate regulation requirements, costs, and potential for imposition of civil liability penalties for failure to comply with the Order.

c. The TSO Order

The Regional Board acted improperly by issuing New WQBELs that include lead and then issuing a TSO that did not include lead. There is no adequate reason to exclude lead from the TSO. On the one hand, if significant removal of settleable solids has occurred in the Facility pond, there is little basis to believe that particulates discharged from the Facility would reach the sediment bed of the receiving water because settleable solids are removed at the Facility prior to discharge and any non-settleable solids that could be discharged would likely be carried through the receiving waters without settling to the sediment bed. However, the opposite could occur: storm water may carry more pollutants because they have not had time to settle in the pond. As a result, lead should be added to the TSO to allow time to study the origin and existing treatment of lead at the Facility.

5. PETITIONER IS AGGRIEVED

Petitioner is aggrieved for the reasons set forth in the sections above. The WDR and TSO Order are not tailored in a manner that will provide any benefit to regional water quality, the environment or human health. Even if Petitioner and other point sources curtailed all discharges, the amount of DDT from the air would violate the TMDL loads, and the water body itself would continue to emit PCBs into the air. Despite a lack of data showing Petitioner is a point source for the legacy pollution, Petitioner is subject to substantial regulatory requirements pursuant to WDR and

TSO Orders. This is contrary to law and is resulting in substantial compliance duties on Petitioner to investigate and pay for monitoring associated with legacy pollution of other dischargers.

6. PETITIONER'S REQUEST TO THE STATE BOARD

Petitioner requests that the State Board strike from the WDR Order the New WQBELs and associated monitoring duties, the bacteria limit, and the limit for total petroleum hydrocarbons and remand the WDR Order to the Regional Board to add a design storm provision and the other provisions discussed in paragraph 2b.

Alternatively, if TMDL-related monitoring duties and the New WQBELs remain, Petitioner seeks a determination from the State Board that the Regional Board's issuance of the WDR and TSO Orders, in part, was inappropriate and improper and that, as a result, the State Board remand the WDR Order to the Regional Board with instructions to revise in the WDR and TSO Orders so that:

(i) any TMDL-related obligation for Petitioner to sample water-column, sediment, and fish tissue of fish in Harbor waters be eliminated; or, if the Regional Board shows reasonable potential from Facility operations exists, any obligation for Petitioner to sample water-column, sediment, and fish tissue of fish in Harbor waters be limited to the years the Facility discharges;

(ii) one of the following compliance options:

  (a) the New WQBELs be revised to be monitoring thresholds only, which is consistent with the interim TMDL WLAs in the 20-year implementation schedule in the Basin Plan; or

  (b) the New WQBELs be revised into narrative limits in the form of waste minimization plans, like other TMDL-based NPDES permits that involve atmospheric deposition (*see* Exh. 4 at I-1 - I-2); or

  (c) the Regional Board explore the use of intake credits as a compliance mechanism to meet the New WQBELs for the levels of PCBs, DDT, and lead that originate from the waters or air;

(iii) the TSO include lead and a design storm provision; and

(iv) no regulatory obstacle prevent Petitioner from obtaining a compliance schedule following the TSO, if needed.

7. STATEMENT OF POINTS & AUTHORITIES AND ADMINISTRATIVE RECORD

Petitioner may supplement this petition with a statement of points and authorities and a complete administrative record at such time this matter is set for hearing.

8. STATEMENT OF TRANSMITTAL OF PETITION TO THE REGIONAL BOARD

A true and correct copy of this petition for review was transmitted to Samuel Unger, Executive Officer of the Los Angeles Regional Board, on October 31, 2013.

9. SUBSTANTIVE ISSUES RAISED BEFORE THE REGIONAL BOARD

Petitioner has not yet been afforded a meaningful opportunity to be heard on the substantive issues set forth in the WDR and TSO Order. Pending efforts to resolve disputed issues with Regional Board staff, Petitioner may be without an adequate remedy unless the State Board grants this petition for review and a hearing with respect to the issues presented here.

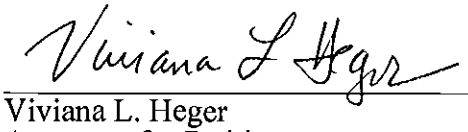
10. REQUEST FOR HEARING

Petitioner requests this petition be placed in abeyance. In the event Petitioner determines that it is necessary to activate this petition, Petitioner will request that the State Board schedule a hearing at the earliest feasible date. In connection with any such hearing, Petitioner reserves the right to present additional evidence or testimony to the State Board and will submit to the State Board, if appropriate, statements regarding evidence pursuant to Code of California Regulations, title 23, section 2050(b).

DATED: October 31, 2013

VIVIANA L. HEGER
TROPIO & MORLAN

DEBORAH P. FELT
TESORO REFINING & MARKETING COMPANY LLC.



Viviana L. Heger
Attorneys for Petitioner
TESORO REFINING & MARKETING COMPANY LLC.

VERIFICATION

I, Adrian Rosu, am employed by Tesoro Refining & Marketing Company LLC and am the Environmental Engineer primarily responsible for overseeing Tesoro's compliance with the October 3, 2013 Waste Discharge Requirements and Time Schedule Order from the Los Angeles Regional Water Quality Control Board related to the Wilmington Calciner at 1175 Carrack Avenue in Wilmington, California. I have read the foregoing Verified Petition for Review and believe that the statements therein are true and correct. If called as a witness to testify with respect to the matters stated therein, I could and would competently do so under oath.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this verification was executed in Wilmington, California on October 31, 2013.

Adrian Rosu

Tesoro Refining & Marketing Company LLC

In the Matter of Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit (Order No. R4-2013-0157, NPDES No. CA0059153) and Time Schedule Order (Order No. R4-2013-0158) Adopted by the Los Angeles Regional Water Quality Control Board

Exhibit 1

Petitioner's 10/3/13 Hearing Presentation

Tesoro Refining & Marketing Company LLC

August 9, 2013 Revised Tentative Waste Discharge Requirements ("Proposed WDRs") and Tentative Time Schedule Order ("TSO")

Relating to (a) waste load allocations ("WLAs") of Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters ("Harbor Toxics TMDL" or "TMDL") and (b) use of numeric effluent limitations (NELs) for stormwater

October 3, 2013

1

Presenting for Tesoro:

- Introduction and Closing Legal Points - Viviana L. Heger, Esq.
- Factual Facility-Specific Information - Adrian Rosu, Tesoro Calciner
- Expert Technical and TMDL-Related Information - Dr. Susan Paulsen, Flow Science Incorporated

2

New Limits and Monitoring

- Tesoro opposes ***new immediately applicable WQBELs*** (water-quality based effluent limits) for lead, DDT, and PCBs. These are ***based on WLAs that required final compliance in 2032*** (at the end of the 20-year implementation schedule).
- A 2006 Blue Ribbon Panel found that the use of NELs is infeasible for stormwater.
- Comment letters from WSPA (Western States Petroleum Association) and CCEEB (California Council for Env'l and Economic Balance) support Tesoro's request.
- Tesoro also opposes any monitoring duties because it is not a source of these pollutants.

3

Facility Retains Water; Has No Data of Non-Compliance

- The Calciner can retain a 50-year, 24-hour storm and last discharged in 2005.
- Pond water sampled in 2007-2011 showed no DDT or PCBs and compliant levels of lead – *but data are not representative of a discharge.*
- At this time, this lack of data, uncertainty related to data, and the NDs in existing data support striking limits, but if they remain Tesoro proposes a TSO to evaluate whether a discharge will likely exceed limits.
- Then, the Facility may need approval for compliance schedule, if necessary.

4

Core Facts We Are Presenting are Simple

- The Harbor waters and sediment are contaminated with historical sources of DDT, PCBs, and lead.
- The Calciner is not one of the sources.
- The pollutants are from others and move like grasshoppers from water or land to air and back.
- Calciner sweeps and removes sediment.

Notably, no data show a reasonable likelihood of discharge yet the Proposed WDRs assume that there will be such a discharge and should not

5

Key Concerns

- We know of no legal authority that assigns to industrial dischargers the responsibility to monitor, treat, and reduce another discharger's pollutant.
  - The pollutants at issue are those of other dischargers whose pollutants are carried to the Calciner by air.
  - The aerial deposition is non-point source (NPS) pollution; NPS pollution cannot be shifted to point sources using the NPDES program.
  - Recent Congressional studies draw similar conclusions.

6

Key Concerns, Continued

- Also, the new WQBELs are NELs being applied to NPS pollution in stormwater.
- 2006 Blue Ribbon experts concluded NELs are infeasible for stormwater unless data are gathered and achievable limits are established. Neither has occurred.
  - It is premature to apply NELs to the stormwater component of discharges until Blue Ribbon expert panel findings are addressed.
  - There are no means to control aerial deposition to the stormwater component of a discharge, particularly where the waterbody itself is emitting PCBs; street sweeping alone is not known to be sufficient.

7

Facility-Specific Information

Mr. Adrian Rosu

Tesoro Refining & Marketing Company, LLC, Wilmington Calciner

8

Management practices:

- On-site recycling – process and storm water in pond – for cooling tower
- Zero discharge facility except a 50-year, 24-hour storm; POTW permit
- Secondary containment TPH sources

9

Facility Reduces Storm Water Discharges

- Industrial activity occurs inside buildings
- TPH sources are secondarily contained
- Facility is like a bowl with berms
  - Water would flow to storm sewer if berms were not present
- Facility's primary role is to retain – rather than allow – runoff
- Facility sweeps surfaces and removes sediment from pond; discharges to POTW

10

The April 2013 Facility Visit

- Staff 9/24/13 Comments (pp. 48 and 76):
  - pond water was "white with residue"
  - "sheen . . . potentially petroleum hydrocarbons"
  - "[wastewater] discharge routinely allowed to mix"
- The only waters onsite on 4/2/13 were wash down and process waters; white residue would be expected. It is non-haz.
- Sheen was not TPH; no TPH sources.
- The basin is designed to combine waters for recycling, allowing the facility to minimize discharges to the channel.

11

Facility Has No Recent Sample Data

- Samples show ND for DDT and PCBs 2007-2011.
- No representative samples of lead exist but so far lead levels in pond are compliant.
- Lead concentrations from industrial activities are not high enough to cause an exceedance as Dr. Paulsen will highlight.

12

Lack of Data / Sources Are Airborne

- There is ***not a single data point that shows the Facility even discharges PCBs, DDT, or lead from its processes*** to receiving waters.
- The only source that could cause non-compliance is the air.
  - TMDL report confirms that for DDT and PCBs.
  - Lead is also an airborne pollutant.
  - Lead level in pond water will vary based on lead present in the air and how fast it settles in the basin during a storm; this is why TSO is needed for lead.

13

Facility Storm Water Study

- Facility conducted a storm water evaluation in 2012 and provided to staff on 3/21/13
  - The Facility has the capacity to retain water from a 50-year, 24-hour storm.
  - The Facility's retention capacity equates to 5.45 inches of rainfall and about 2,227,000 gallons of stormwater.
  - The Facility has implemented innovative and extensive water management practices, including on-site recycling of most process and storm waters and the ability to discharge to a POTW, in order to minimize discharges to receiving waters.

14

Facility Would be Forced to Treat Pollution of Others

- Treatment at the site is now gravity separation, retention of a 50-year-storm, 24-hour storm, and other practices.
- Imposing the lead, DDT, and PCB limits would likely force the facility to build ***a treatment system exclusively to handle pollution by others that lands on the facility. Or else, the Calciner faces significant potential penalties***.
  - $37,500 per day per violation. [NOTE: This large fine is further justification for "Compliance/Design Storm" provision.]

15

Status of Facility Requests

- ❑ (a) Strike the new WQBELs for lead, PCBs, and DDT and associated monitoring duties; or (b) if they remain, revise them to the 20-year schedule as monitoring thresholds that apply only when the facility discharges; and
- ❑ Add a design storm provision;
- ✓ Revise facility description to reflect ability to retain a 50-year, 24-hour storm;
- ✓ Revise facility monitoring to occur only during discharge;
- ❑ Revise Special Studies to express same;
- ❑ Confirm no regulatory obstacle prevents a compliance schedule following any TSO; and
- ❑ Add lead to TSO.

16

TMDL and other Technical Information

Dr. Susan Paulsen

Flow Science Incorporated

17

Overview

- TMDL calculations and loads
- TMDL implementation schedule
- DDT and PCBs are from atmospheric deposition – also most important potential source of lead.
- Lead concentrations from the industrial process are too low to cause exceedances.
- Regulating these compounds in discharges from Calciner will have no impact on receiving waters or TMDL compliance.

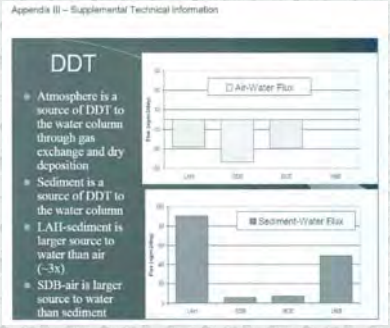
18

Harbor TMDL calculations and loads

- Draft permit incorporates TMDL final WLAs for DDT, PCBs, and lead.
- TMDL focuses on legacy pollutants.
- Atmospheric deposition is main source.
- Numeric effluent limits (NELs) are not feasible for stormwater impacted by atmospheric deposition.

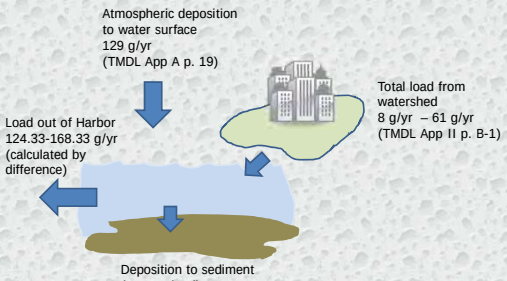
19

Atmospheric deposition is a significant source of DDT



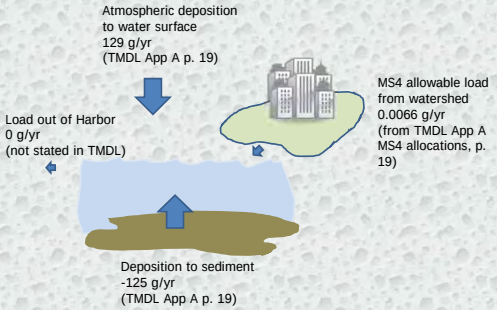
20

TMDL existing loadings (DDT, Inner Harbor)



21

TMDL allowable loadings (DDT, Inner Harbor)



22

Eliminating Calciner load would have no impact on DDT in Harbor sediments

Current loads | No watershed loads | Change in sed. conc.

Table 6. Sediment DDT concentrations for the base and no upland sources scenarios

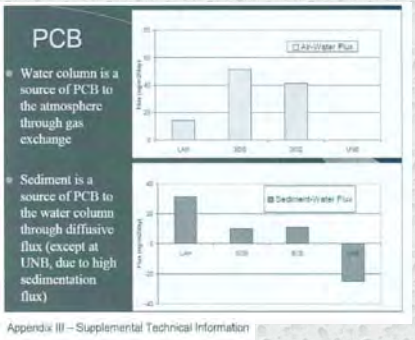
Zone	Waterbody Name	DDT (total) in top 5 cm of sediment (ug/kg) Criteria: 1.58 ug/kg					
		Base Scenario Avg	Base Scenario Max	No Upland Sources Scenario Avg	No Upland Sources Scenario Max	% Diff Avg	% Diff Max
01	Dominguez Channel Estuary	21.85	66.16	20.28	66.16	6.70	0.00
02	Consolidated Slip	137.74	472.59	135.59	472.59	1.56	0.00
03	Inner Harbor – POLA	10.62	31.27	10.32	31.27	2.84	0.00
04	Fish Harbor	5.49	16.87	5.45	16.87	0.63	0.00
05	Cabrillo Marina	42.70	160.14	42.72	160.14	-0.05	0.00
06	Inner Cabrillo Beach Area	36.19	107.98	36.13	107.98	0.17	0.00
07	Outer Harbor – POLA	16.66	59.53	16.64	59.53	0.11	0.00
08	Inner Harbor – POLB	7.23	20.98	7.17	20.98	0.89	0.00
09	Outer Harbor – POLB	11.02	33.82	10.98	33.82	0.34	0.00
10	Los Angeles River Estuary	10.72	35.41	10.34	35.41	3.46	0.00
11	San Pedro Bay	10.77	34.30	10.63	34.30	1.36	0.00

LA/LB Harbors TMDL Scenario Development Technical Memorandum

Even eliminating discharges from Calciner completely would have no impact on DDT loads in sediment

23

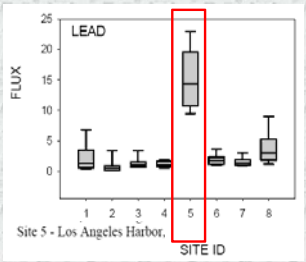
By contrast, Harbor waters are a *source* of PCBs to the air



Appendix III – Supplemental Technical Information

24

Atmospheric deposition of lead in Harbor area is significant



METAL DRY DEPOSITION RATES ALONG A COASTAL TRANSECT IN SOUTHERN CALIFORNIA

Lisa Sabin
Kenneth Schiff

Figure 2. Metal dry deposition flux (μg/m²/day) at eight sites on a north-south transect along the southern California coast. Box plots represent medians and interquartile ranges. Error bars indicate the 10th and 90th percentiles.

Samples collected August-November 2006

25

TMDL implementation schedule

California Regional Water Quality Control Board
Los Angeles Region

TO: Charles Hoppin, Chair
Frances Spivy-Weber, Vice Chair
Tam Doduc

FROM: Samuel Unger
Executive Officer

DATE: January 27, 2012

SUBJECT: DOMINGUEZ CHANNEL AND GREATER LOS ANGELES AND LONG BEACH HARBOR WATERS TOXIC POLLUTANTS TMDL (HARBORS TOXICS TMDL)

26

TMDL had 20-yr schedule, in part to allow revisions if needed

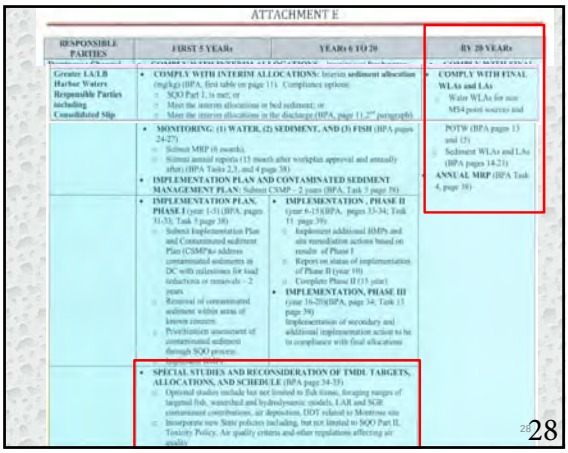
Compliance with the indirect effects TMDLs is not required until the end of the 20-year implementation schedule. Prior to final compliance, the TMDL identifies several studies that are to be undertaken (BPA, p. 33) and policies that may be further developed, including but not limited to:

- A site-specific study to determine resident species and foraging ranges of targeted fish;
- Studies to further refine the site specific link between sediment pollutant concentrations and fish tissue concentrations, which may lead to site-specific sediment quality values;
- Stressor identifications (BPA, p. 33; Staff Report, figure 7-1); and
- A methodology for applying the narrative sediment quality objective for protection of human health (indirect effects) contained in the State's SQOs similar to the MLOE approach applied to the narrative SQO for protection of aquatic life (direct effects).

Additional studies may also be conducted, including a seafood consumption study focused on Harbor-specific fish consumption patterns.

The TMDL anticipates that the results of these studies will be used to evaluate changes in TMDL targets, WLAs and LAs at the scheduled reconsideration of the TMDL in Year 6. For example, studies on the linkage between pollutant concentrations and fish tissue concentrations may lead to revisions in the fish tissue-associated sediment targets (i.e. development of site-specific sediment quality values, SQVs). Studies of seafood consumption patterns within Harbor Waters may also lead to revisions in the fish tissue targets to protect human health.

27



ATTACHMENT E

RESPONSIBLE PARTIES	FIRST 5 YEARs	YEARs 6 TO 20	BY 20 YEARs
Greater LA/LB Harbor Waters Responsible Parties including Consolidated Slip	• COMPLY WITH INTERIM ALLOCATIONS: Interim sediment allocation (mg/kg) (BPA, first table on page 11). Compliance options: ○ SQO Part 1, is met; or ○ Meet the interim allocations in bed sediment; or ○ Meet the interim allocations in the discharge (BPA, page 11, 2nd paragraph).		• COMPLY WITH FINAL WLAs and LAs ○ Water WLAs for non-MS4 point sources and POTW (BPA pages 13 and 15) ○ Sediment WLAs and LAs (BPA pages 14-21) • ANNUAL MRP (BPA Task 4, page 38).
	• MONITORING: (1) WATER, (2) SEDIMENT, AND (3) FISH (BPA pages 24-27) ○ Submit MRP (6 months). ○ Submit annual reports (15 march after workplan approval and annually after) (BPA Tasks 2,3, and 4 page 38) • IMPLEMENTATION PLAN AND CONTAMINATED SEDIMENT MANAGEMENT PLAN: Submit CSMP – 2 years (BPA, Task 5 page 38).		
	• IMPLEMENTATION PLAN, PHASE I (year 1-5) (BPA, pages 31-33; Task 5 page 38) ○ Submit Implementation Plan and Contaminated sediment Plan (CSMP)to address contaminated sediments in DC with milestones for load reductions or remo-als – 2 years ○ Removal of contaminated sediment within areas of known concern. ○ Prioritization assessment of contaminated sediment through SQO process.	• IMPLEMENTATION , PHASE II (year 6-15 (BPA, pages 33-34; Task 11 page 39) ○ Implement additional BMPs and site remediation actions based on results of Phase I ○ Report on status of implementation of Phase II (year 10) ○ Complete Phase II (15 year) • IMPLEMENTATION, PHASE III (year 16-20)(BPA, page 34; Task 13 page 39) Implementation of secondary and additional implementation action to be in compliance with final allocations	
	• SPECIAL STUDIES AND RECONSIDERATION OF TMDL TARGETS, ALLOCATIONS, AND SCHEDULE (BPA page 34-35) ○ Optional studies include but not limited to fish tissue, foraging ranges of targeted fish, watershed and hydrodynamic models, LAH and SGR contaminant contributions, air deposition, DOT related to Montrose site ○ Incorporate new State policies including, but not limited to SQO Part II, Toxicity Policy, Air quality criteria and other regulations affecting air quality		

28

There were *no interim WLA s* for the salt water column for DDT, PCBs, or lead

INTERIM ALLOCATIONS

1. Dominguez Channel Freshwater Interim Allocations

A. Freshwater Toxicity Interim Allocation wet weather

An interim allocation of 2 TUc applies to each source, including all point sources assigned a WLA and all nonpoint sources assigned a LA. The freshwater toxicity interim allocation is set at 2 TUc based on current monitoring results performed by the Los Angeles County Department of Public Works, which have shown average values of less than 2 TUc. . . .

B. Freshwater Metals Interim Allocations - wet weather only

Interim water allocations are assigned to stormwater dischargers (MS4, Caltrans, general construction and general industrial stormwater dischargers) and other NPDES dischargers. Interim water allocations are based on the 95th percentile of total metals data collected from January 2006 to January 2010 using a log-normal distribution. . . .

2. Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters:

Interim sediment allocations are assigned to stormwater dischargers (MS4, Caltrans, general construction and general industrial stormwater dischargers) and other NPDES dischargers. Interim sediment allocations are based on the 95th percentile of sediment data collected from 1998-2006. The use of 95th percentile values to develop interim allocations is consistent with NPDES permitting methodology. . . .

FINAL ALLOCATIONS

. . .

Pages 10-11 of Basin Plan Amendment, Att. A to Resolution R11-008

29

Calciner is not a source of DDT or PCBs

- Facility has not used or stored DDT or PCBs.
- DDT and PCBs are not associated with industrial process.
- DDT and PCBs have not been detected (but detection limits were above proposed limits, and were from ponded water).

→ Atmospheric deposition is only known source

30

Calciner lead loads are small

Pollutant Effluent Limit (average monthly)	Calciner Estimated Level
Lead 7.0 µg/L	0.2 µg/L

Calciner contribution was calculated by assuming all particles (TSS) in discharge were comprised of coke particles

31

2006 NEL Feasibility "Blue Ribbon" Panel

- Panel found that application of NELs was infeasible (the equivalent of WQBELs).
- Recommended that before NELs are applied to NPDES permits, a database be established for industrial sources.
- No such database has been established.
- Key reason that IGP (Industrial General Permit) has NALs (numeric action levels) vs. NELs.
- For Calciner, stormwater impacted by atmosphere is only viable source of lead, DDT, and PCBs.
- Therefore, NELs remain infeasible and inappropriate at this time for these pollutants.

32

Requiring treatment of atmospheric pollutants will have negligible impact on receiving waters

- MS4 and IGP permittees are not required to meet limits immediately.
- Calciner discharges once in a 50-year period, on average; impact even of eliminating this discharge will not be discernible and will not affect TMDL compliance.

33

Closing Legal Points

We have four primary legal points relating to:

A. Waste load allocations
B. NPDES Law
C. The California Toxics Rule
D. TMDL 20-Year Implementation Schedule

34

A. TMDL Waste Load Allocation Does Not Compel new WQBELs

- Staff believes the new TMDL WLA must be included in the Proposed WDRs without a Reasonable Potential Analysis. But, the regulation requires a RPA first and then a WQBEL "consistent with" – not identical to – the WLA. (40 C.F.R. § 122.44(d))
- EPA has recognized "consistent with" can be no NELs and best management practices instead. And, an effluent limit can be greater than the WLA. 65 Fed. Reg. 64746, 64791 (October 30, 2000); *State of Louisiana v. Joint Pipeline Group*, 2010 Ark. 374.

35

B. NPDES Is Not A Basis

CWA Criteria	Not Met Because:
The CWA prohibits "the discharge of any pollutant ***by any person*** [.]" There must be discharge "by a person" to require an NPDES permit. (33 U.S.C. § 1311(a) (emphasis added).)	Here, there is ***no discharge by Tesoro*** of DDT, PCBs, or lead in actionable levels. There is no legal responsibility to treat and reduce or to monitor or manage the pollutants of others. *See National Wildlife Federation v. Gorsuch,* 693 F.2d 156, 182 (D.C. Cir. 1982) (citing *Appalachian Power Co. v. Train,* 545 F.2d 1351, 1377 (4th Cir. 1976)

36

"Point Source" Criteria:	Not Met Because:
A point source exists where there is (a)a conveyance – or ***starting point*** – "from" which a pollutant discharges; and either (b) or (c) an actual ***discharge or a reasonable likelihood*** that the conveyance will deposit pollutants to navigable waters 33 U.S.C. § 1362(14); *Peconic Baykeeper v. Suffolk City*, 600 F 3d 180, 188-189 (2d Cir. 2010); *Envtl. Prot. Info. Ctr. v. Pac. Lumber Co.*, 469 F. Supp. 2d 803, 827 (N.D. Cal. 2007)	Calciner is not a point source ***(a)The air, not the Calciner, is the starting point*** for these contaminants. The Facility has no record of ever handling, managing, or discharging DDT or PCB chemicals. (b)-(c) Data shows ***no actual discharge***; pond data shows ***it's reasonably unlikely*** pollutants would reach navigable water.

37

"Discharge of Pollutant" Criteria:	Not Met Because:
A "discharge of pollutant" exists where there is ***active addition of pollutants.*** Ownership of a point source will trigger liability on the theory that "if you own the leaky 'faucet,' you are responsible for its 'drips.'" *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133, 1145 (10th Cir. 2005)	The Calciner is not actively adding. The leaks come from the air, not the Calciner.

There is (a) no discharge of pollutants, (b) "by" Tesoro (c) from a point source (d) to navigable waters. There is no statutory obligation for Tesoro to be subject to any NPDES permit for DDT, PCB, or lead.

38

C. CTR is not a Basis for New Limits

- EPA has established an exceedance frequency of once every three years for CTR for aquatic life criteria. Calciner discharges less frequently.

65 Fed. Reg. 31682, 31702 (May 18, 2000) (the CTR "acute criterion for a pollutant [may] be exceeded no more than once in three years on average" and that "the chronic criterion for a pollutant be exceeded no more than once in three years on the average.")

- TMDL's WLAs are identical to CTR. If TMDL WLA is based on CTR, all CTR requirements must apply:
  - CTR requires reasonable potential
  - 9/24/13 Response to Comments agrees (at p. 22)
  - No reasonable potential conducted

39

D. WLA Changes

- **2/14/12**: ***Regional Board requested that EPA approve 20-year implementation*** schedule that had "interim" and then "final" WLAs. TMDL had no salt water column-based WLAs for DDT, PCBs, lead until year 20.
- **3/23/12**: ***EPA did not approve implementation*** plan that included 20-year schedule.
- **5/30/12**: EPA asked Regional Board to "clarify" request.
- **8/31/12**: ***Regional Board said it sought compliance schedule**** "based on . . . implementation schedule."
- **11/8/12**: ***EPA approved***. The Year 20 WLAs are final.
- **12/10/12**: ***Compliance schedule disclosed*** during a meeting. We understand 303(c) approval was needed to preserve 20-yr. schedule but this changed the TMDL loads from interim (*i.e.,* no loads) to final.

*under CWA 303(c)

40 40

D. WLA (continued)

- 40 C.F.R. § 130.7(d)(2) and other authorities do not allow a change in load without rulemaking that includes stakeholders.
- The Regional Board and EPA changed WLAs for water-column without rulemaking for lead, DDT, and PCBs.
- For these pollutants, the change is significant:

No water-column based interim WLAs years 1-20 ⟵ CHANGE ⟶ ***Numeric water-column based WLAs final in year 1***

- This creates a new load that was not there before.

41 41

Tesoro's Requests

1. (a) Strike the new WQBELs for lead, PCBs, and DDT and associated monitoring duties; or (b) if they remain, revise them to the 20-year schedule as monitoring thresholds that apply only when the facility discharges;
2. Add a design storm provision and address other permit changes related to the facility's ability to retain a 50-year, 24-hour storm (CCEEB and WSPA support use of a design storm) (App. III)
3. Ensure remaining revisions to TMDL monitoring are made (App. IV); and
4. Confirm no regulatory obstacle prevents a compliance schedule following the TSO, if needed.
5. Add lead to TSO.

42 42

Tesoro Refining & Marketing Company LLC

In the Matter of Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit (Order No. R4-2013-0157, NPDES No. CA0059153) and Time Schedule Order (Order No. R4-2013-0158) Adopted by the Los Angeles Regional Water Quality Control Board

Exhibit 2

Key Harbor Toxics TMDL Documents

California Regional Water Quality Control Board
Los Angeles Region

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TO: Charles Hoppin, Chair
Frances Spivy-Weber, Vice Chair
Tam Doduc

FROM: Samuel Unger
Executive Officer

DATE: January 27, 2012

SUBJECT: DOMINGUEZ CHANNEL AND GREATER LOS ANGELES AND LONG BEACH HARBOR WATERS TOXIC POLLUTANTS TMDL (HARBORS TOXICS TMDL)

At the December 6, 2011 meeting of the State Water Resources Control Board (State Water Board) regarding the Harbors Toxics TMDL, Board Chair Hoppin, Vice Chair Spivy-Weber, and Board Member Doduc requested clarification on five issues regarding the Harbors Toxics TMDL:

(1) The use of ERL sediment values as TMDL numeric targets vis-à-vis the State Water Board's sediment quality objectives (SQOs);
(2) The selection and application of fish tissue goals in deriving TMDL allocations;
(3) Whether the TMDL numeric targets will require dredging of the entire harbors;
(4) Municipal requirements for TMDL compliance; and
(5) Opportunities to refine the TMDL in the future to respond to results of special studies and new policies.

The Los Angeles Water Board appreciates the opportunity to clarify these issues, and show that the TMDL complies with all state and federal requirements, including the State Water Board's SQOs contained in the *Enclosed Bays and Estuary Plan – Part 1 Sediment Quality*, and provides a reasonable implementation plan of twenty years to meet the TMDL. This memorandum addresses these issues in detail.

Briefly as background, the most significant impairments addressed by the TMDL are related to pollutant loads associated with sediment; these pollutant loads both directly impact aquatic life and indirectly impact human health through consumption of contaminated fish. Therefore, the TMDL is designed to achieve both the narrative SQOs to protect aquatic life and the narrative SQOs to protect human health that are contained in the State Water Board's *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality* (hereafter EB&E Plan). To achieve these objectives, numeric sediment targets are set forth in the TMDL for each narrative SQO and allocations are based on the more stringent of the sediment targets for a

particular pollutant. In establishing the TMDL and its implementation plan, the Los Angeles Water Board employed the approaches and processes set forth in Part 1 of the EB&E Plan, while fulfilling the federal requirements for a TMDL.

The schedule and nature of the TMDL implementation plan recognize the challenges and complexities of addressing the impairments in the Dominguez Channel and Greater Harbor Waters. The implementation plan provides 20 years to achieve the final wasteload and load allocations, and provides multiple avenues to enhance the scientific foundation, prioritize implementation, and refine the TMDL targets and allocations based on the results of special studies prior to the final implementation deadline. Further, the TMDL allows compliance to be demonstrated in multiple ways, imparting flexibility when the TMDL is incorporated into relevant permits.

ISSUE 1: SELECTION OF SEDIMENT TARGETS TO PROTECT AQUATIC LIFE AND CONSISTENCY WITH STATE WATER BOARD SQOs

The TMDL fully complies with State Water Board SQOs for protection of aquatic life ('direct effects') and federal requirements for establishing TMDLs.

In 2009, the State Water Board established SQOs for protection of aquatic life using a multiple line of evidence (MLOE) approach. The MLOE approach requires that three lines of evidence – sediment chemistry, sediment toxicity, and benthic community condition – are all considered when assessing sediment condition. Data for each line of evidence are distilled into numeric ranges called 'categorization values', which are then integrated to arrive at a qualitative categorical assessment.

Both TMDLs and the State Water Board's SQOs require the use of numeric criteria. Federal requirements stipulate that TMDLs include numeric targets and numeric allocations. The SQOs require that one line of evidence of the MLOE is based on sediment chemistry concentrations as compared to numeric screening ranges.[1] However, the SQOs also rely upon additional lines of evidence, which are ultimately integrated to derive a non-numeric categorical assessment of

[1] The ERL values generally compare well with the SQO sediment chemistry "Low" disturbance category concentration ranges found in Table 6 of the EB&E Plan.

Metals	Concentration Range (mg/kg) (Low Disturbance Category)	Marine Sediment ERL (mg/kg)
Cadmium	NA	1.2
Copper	52.8-96.5	34
Lead	26.4-60.8	46.7
Mercury	0.09-0.45	0.15
Zinc	112-200	150
Chlordane, total	Chlordane, -alpha 0.50-1.23 Chlordane, -gamma 0.54-1.45	0.50
Total PCBs	11.9-24.7	22.7
Hi MW PAHs	312-1325	1700
Lo MW PAHs	85.4-312	552
Total DDT	0.50-1.52	1.58

the waterbody. It is not possible to calculate numeric TMDLs or allocations from a categorical assessment such as the SQOs provide. To fully comply with both sets of requirements, the Los Angeles Water Board included numeric targets for sediment quality to protect aquatic life, and established that compliance with these sediment targets and allocations may be demonstrated using the multiple lines of evidence in the State's Aquatic Life ('Direct Effects') SQOs.

More specifically:

- The multiple lines of evidence (MLOE) approach in the SQOs was used to perform individual waterbody assessments to confirm impairment during TMDL development. (TMDL Staff Report, sections 2.6-2.8, pp. 27-32)
- Initial sediment numeric targets to protect aquatic life and corresponding allocations were determined by the narrative Direct Effects Aquatic Life SQO (EB&E Plan – Part 1 Sediment Quality, Section IV.A.), and the widely used sediment quality guidelines of Long et al. (1998) and MacDonald et al. (2000). ERL values, that representing the levels below which adverse biological effects are not expected to occur, are set as the initial sediment quality thresholds for the calculation of loading capacity and allocations.[2] The use of ERLs as numeric targets is consistent with existing TMDLs in the Los Angeles Region that were adopted by the Los Angeles Water Board and approved by the State Water Board. This TMDL includes additional reliance upon the State's SQOs for compliance determination and other aspects of implementation (described below)[3].
- The Basin Plan amendment language clearly states that while ERLs are used as the initial numeric targets, they are not intended to be used as 'clean-up standards'.[4] (BPA, pp. 4-5)
- The TMDL anticipates that site-specific sediment quality values (SQVs) may be developed and replace the ERL values as numeric targets (BPA, pp. 2-4).
- The Harbor Toxics TMDL embraces the use of the Direct Effects Aquatic Life SQOs (categorical assessment based on MLOE approach) as a means of demonstrating compliance with the TMDLs for direct effects. That is, if monitoring demonstrates that a location falls within the *Unimpacted* or *Likely Unimpacted* category, the location is conclusively determined to be in compliance with the TMDL, even if the sediment targets are exceeded. (BPA, pp. 17-21).
- The Harbor Toxics TMDL specifies the use of the Direct Effects Aquatic Life SQOs (categorical assessment based on MLOE approach and stressor identification process)

[2] Relative to ERM values, which indicate levels that are expected to be toxic to a large percentage of aquatic organisms, ERL values are the appropriate metrics for TMDL targets, which are intended to support the goal of eliminating waterbody impairments.

[3] At its most fundamental level, a TMDL is a mathematical equation; as such, it is necessary to translate the narrative SQOs into numeric targets and to calculate numeric allocations for each source. While the MLOE categorical assessment approach used in the EB&E Plan is useful for compliance determination, it is not conducive to use in a mathematical equation. The State Water Board's EB&E Plan recognizes that it may not be possible to strictly follow the approach therein in calculating a TMDL, stating that "[n]othing in this section [Section VII.] shall limit a Water Board's authority to develop and implement waste load allocations for Total Maximum Daily Loads" (p. 14).

[4] The BPA explicitly sets forth that, "[t]hese sediment targets [*referring to the sediment targets table on p. 4*] are not intended to be used as 'clean-up standards' for navigational, capital or maintenance dredging or capping activities; rather they are long-term sediment concentrations that should be attained after reduction of external loads, targeted actions addressing internal reservoirs of contaminants, and environmental decay of contaminants in sediment" (BPA, p. 5).

to perform prioritization assessment for contaminated sediment management. (BPA, p. 31; Staff Report, figure 7-1)

- The Harbor Toxics TMDL anticipates that the stressor identification process set forth in Section VII.F. will be undertaken (BPA, p. 33; Staff Report figure 7-1). The results of this process may be evaluated during the reconsideration of the TMDL, or at any time to prioritize implementation actions.

Attachment A provides a schematic of the TMDL's approach to address protection of aquatic life using the State Water Board's Direct Effects SQO and accompanying assessment methodology.

ISSUE 2: SELECTION OF SEDIMENT TARGETS TO ADDRESS FISH TISSUE IMPAIRMENTS AND CONSISTENCY WITH STATE WATER BOARD SQOs

The TMDL fully complies with the existing narrative State Water Board SQOs for protection of human health ('indirect effects') and federal requirements for establishing TMDLs. The TMDL allows several methods to assess compliance with the indirect effects TMDLs, including the use of the quantitative assessment methodology to be established as part of Phase 2 of the State Water Board SQOs.

As described above, the Harbor Toxics TMDL is comprised of two categories of TMDLs, those that address direct effects, i.e. impairments that directly impact aquatic life beneficial uses, and those that address indirect effects, i.e. impairments of sediment and fish tissue due to organic compounds that bioaccumulate in fish and then impact human health through consumption of the contaminated fish. We refer to the latter as 'Indirect Effects' TMDLs.

The Harbor Indirect Effects TMDLs are fully consistent with the *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality* (EB&E Plan) (Section IV.B. Sediment Quality Objectives – Human Health; Section VI. Human Health; Section VII.H. Development of Site-Specific Sediment Management Guidelines).

The Harbor Toxics TMDLs for indirect effects address fish tissue impairments due to primarily DDT and PCBs. These fish tissue impairments pose risks to human health when fish contaminated with carcinogens such as DDT and PCBs are consumed. The Greater Harbor Waters are designated with Commercial and Sport Fishing (COMM) beneficial use, and fishing takes place within the Harbor from piers and boats. The State Office of Environmental Health Hazard Assessment (OEHHA) has issued "do not eat" advisories for five fish species and advisories to restrict consumption for 14 other fish species in the Greater Harbor waters. Federal regulations require that these impairments are addressed in this TMDL, to the extent that they are caused by conditions in the Harbors.

Summary of Sediment Quality Objective for Protection of Human Health and Its Implementation

The State Water Board's SQOs include, at this time, a narrative SQO for protection of human health:

> "Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health."

This narrative objective is to be implemented as specified in Section VI of the EB&E Plan. The EB&E Plan requires that on a case-by-case basis, based upon a human health risk assessment, considering any applicable and relevant information, including OEHHA policies for fish consumption and risk assessment and USEPA human health risk assessment policies. Further guidance is provided in Section VII.H. of the EB&E Plan, which states that Regional Water Boards may develop site-specific sediment management guidelines where toxic stressors have been identified and controllable sources exist and/or remedial goals are desired. These site-specific sediment management guidelines may be established based on scientifically credible values from other studies combined with mechanistic or empirical models of bioavailability or toxic potency.

Implementation of State's Sediment Quality Objective for Protection of Human Health in the Harbors Toxics TMDL

The narrative SQO for protection of human health is implemented in the Harbor Toxics TMDL consistent with the approach set forth in the State Water Board's EB&E Plan (described above) by:

- Establishing numeric targets for pollutants bound to sediment based on biota-sediment accumulation factors (BSAFs). The BSAFs account for the sediment concentration, the associated food web, and the targeted fish tissue level to protect human health. The use of BSAFs is consistent with the current direction being taken for Phase II of the State Water Board's SQOs (i.e., development of a methodology for applying the narrative SQO for bioaccumulatives and human health) and USEPA guidance (USEPA 1995). The BSAFs used in the Harbor Toxics TMDL are taken from studies conducted on the West Coast.

- The targeted fish tissue levels to protect human health are based on OEHHA's Fish Contaminant Goals (FCGs). This is consistent with the direction in the EB&E Plan to consider OEHHA policies for fish consumption and risk assessment and USEPA human health risk assessment policies[5].

  FCGs are estimates of contaminant levels in fish that pose no significant health risk to individuals consuming fish. OEHHA developed FCGs for agencies needing to use criteria values for management decisions. These values *can provide a starting point* to develop fish tissue-based criteria with a goal toward pollution mitigation or elimination[6]. FCGs are based purely on public health considerations and were set using a maximum risk level of $1x10^{-6}$ at the standard consumption rate of 32 g/day[7]. The 10^{-6} risk level is used by USEPA in

[5] The use of FCGs is also consistent with other approved TMDLs in California, including Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs and Metals TMDL (in effect June 2011) and Machado Lake Pesticides and PCBs TMDL (approved by the State Water Board on December 6, 2011).

[6] Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish, OEHHA, June 2008.

[7] FCGs prevent consumers from being exposed to a risk level greater than $1x10^{-6}$ for carcinogens (not more than one additional cancer case in a population of 1,000,000 people consuming fish at the given consumption rate over a lifetime). Similar to national water quality criteria, FCGs are based solely on public health considerations (OEHHA

regulatory criteria pursuant to CWA section 304(a) and is provided as an example of an acceptable risk level in USEPA's Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories – Volume 2 (USEPA 2000). The use of FCGs is consistent with the purpose of the TMDL -- to eliminate the impairment in the listed waterbody.

Whereas there is not, at this time, a method equivalent to the MLOE approach for human health-related bioaccumulative sediment targets, the technical direction being taken by State Board staff in the development of Phase II of the State Water Board's SQOs is using a foodweb spreadsheet model to determine sediment concentrations (derived from BSAFs) that correspond to required fish tissue levels. The Harbor Toxics TMDL anticipates the completion of Phase II and includes a compliance pathway for the Indirect Effects TMDLs using the State Water Board's SQO for indirect effects with any associated assessment methodology that is incorporated into the EB&E Plan. (BPA p. 21).

Until the EB&E Plan is revised to incorporate a quantitative methodology for assessing indirect effects, the Harbor Toxics TMDL allows compliance to be demonstrated via several ways (BPA p. 21):

1. Final sediment allocations are met;
2. Sediment numeric targets to protect fish tissue are met in bed sediments over a three-year averaging period; or
3. Fish tissue targets are met ***in species resident to the TMDL waterbodies***.

Compliance with the indirect effects TMDLs is not required until the end of the 20-year implementation schedule. Prior to final compliance, the TMDL identifies several studies that are to be undertaken (BPA, p. 33) and policies that may be further developed, including but not limited to:

- A site-specific study to determine resident species and foraging ranges of targeted fish;
- Studies to further refine the site specific link between sediment pollutant concentrations and fish tissue concentrations, which may lead to site-specific sediment quality values;

2008). It should be noted, however, that a seafood consumption study conducted in 1991-92 documented an average consumption rate of 49.6 g/day (and a 90th percentile consumption rate of 107.1 g/day) among anglers in adjacent Santa Monica Bay. This is significantly higher than the standard 32 g/day consumption rate used by OEHHA. Advisory Tissue Levels (ATLs) on the other hand are derived to prevent consumers from being exposed to a risk level greater than $1x10^{-4}$ for carcinogens (not more than one additional cancer case in a population of 10,000 people consuming fish at the given consumption rate over a lifetime) (OEHHA 2008). A risk level of 10^{-4} represents a significant health risk and is only used in the ATLs in an effort to balance the risk of consuming contaminated fish with the benefits derived from consumption of omega-3 fatty acids contained in fish. In this balancing, restrictions are imposed on the number of meals per week that can be consumed. While ATLs may be appropriate for issuing fish consumption advisories, in order to encourage some consumption of fish in the context of balancing risks and benefits, FCGs are the appropriate goal to reduce the risk of consumption to acceptable levels. OEHHA states that, "[t]here are key differences between fish consumption advisories and other environmental risk criteria; advisories consider the significant benefits of fish consumption, while criteria may be strictly risk-based and may not take into account other factors" (p. 3). The significant health risk and resulting restriction on consumption associated with ATLs is not consistent with fully supporting the COMM beneficial use. Full support of the COMM beneficial use would not require consumers to either incur significant risk to their health from anthropogenic pollutants, in order to reap other benefits, or limit their consumption of fish due to anthropogenic pollutants. In developing its recommended national human health criteria pursuant to CWA section 304(a), the USEPA routinely uses a 10^{-6} risk factor for carcinogens (USEPA 2002).

- Stressor identifications (BPA, p. 33; Staff Report, figure 7-1); and
- A methodology for applying the narrative sediment quality objective for protection of human health (indirect effects) contained in the State's SQOs similar to the MLOE approach applied to the narrative SQO for protection of aquatic life (direct effects).

Additional studies may also be conducted, including a seafood consumption study focused on Harbor-specific fish consumption patterns.

The TMDL anticipates that the results of these studies will be used to evaluate changes in TMDL targets, WLAs and LAs at the scheduled reconsideration of the TMDL in Year 6. For example, studies on the linkage between pollutant concentrations and fish tissue concentrations may lead to revisions in the fish tissue-associated sediment targets (i.e. development of site-specific sediment quality values, SQVs). Studies of seafood consumption patterns within Harbor Waters may also lead to revisions in the fish tissue targets to protect human health.

Los Angeles Water Board staff will reconsider TMDL allocations once sufficient progress toward attaining allocations is made and data on resident species, foraging ranges of targeted fish, and the site-specific linkage between sediment pollutant concentrations and the desired fish tissue concentrations to protect human health are available from these special studies.

Attachment B provides a schematic of the TMDL's approach to address protection of human health using the State Water Board's Indirect Effects SQO and accompanying guidance.

At the Los Angeles Water Board hearing, concerns were raised in public comments and reiterated during board discussion that there needed to be a process to re-evaluate the TMDL if evidence showed that fish tissue targets to protect human health were not being achieved though the wasteload and load allocations were met (hearing transcript, pp. 56, 141-155, 221, 234-244). The following language was added to the BPA to address the concern:

"If at any point during the implementation plan, monitoring data or special studies indicate that load and waste load allocations will be attained, but fish tissue targets may not be achieved, the Regional Board shall reconsider the TMDL to modify the waste load and load allocations to ensure that the fish tissue targets are attained."

This language does not result in a substantive change to the TMDL.[8] Whether or not explicitly stated in the amendment language, a regional water board may at any time choose to reconsider a TMDL through the basin plan amendment process. However, in the case of the

[8] The Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters were listed on the CWA Section 303(d) List for impairments in the water column, bed sediments and fish tissue. Therefore, to address the fish tissue impairments, the publicly noticed TMDL included:

- FCGs as numeric targets for fish tissue,
- BSAF derived sediment targets to achieve fish tissue targets, and
- Sediment-based allocations based on *the lower of* the direct effects sediment targets (ERLs) or BSAF derived sediment targets. For PCBs, the allocations are based on the BSAF derived sediment target, while for DDT, the allocations are based on the ERL value (the ERL value of 1.58 µg/kg is slightly lower than the BSAF derived value of 1.9 µg/kg).

Harbor Toxics TMDL, any decision to reconsider the TMDL prior to the scheduled reconsideration in Year 6 would only be made after significant progress toward attaining the allocations was made and only once sufficient new information based on the above-mentioned special studies was available. Los Angeles Water Board staff recognizes the complexities surrounding the selection of resident fish species to track implementation of the Harbor Toxics TMDL and the value of additional Harbor-specific information on the linkage between tissue concentrations and sediment concentrations, and would not recommend reconsideration of the allocations to achieve fish tissue targets absent sufficient information in these areas.

Further, when the TMDL is reconsidered based on new monitoring data and the results of special studies, the Los Angeles Water Board can also consider at that time whether more time would be necessary to achieve the Indirect Effects TMDLs.

ISSUE 3: CLARIFICATION REGARDING WHETHER THE TMDL NUMERIC TARGETS WILL COMPEL DREDGING OF THE ENTIRE HARBORS

The TMDL will not require dredging of the entire Harbors. The TMDL is focused on known toxic "hot spots."

At the State Water Board meeting, several responsible parties testified that the TMDL mandates dredging of the entire Los Angeles/Long Beach Harbor complex. This section addresses the misconceptions associated with this testimony and provides several reasons why this TMDL does not mandate dredging the entire harbor complex.

First, the Water Code prohibits Regional Water Boards from specifying the manner of compliance with permits and orders (Water Code § 13360(a)). Although stakeholders have testified that the TMDL compels dredging as the only means of compliance, the Ports have discussed in meetings at the Los Angeles Water Board, or presented materials in comment letters, several additional approaches to remediating contaminated sediment, including capping and monitored natural attenuation.

Second, given that compliance can be demonstrated using the SQOs and prioritization for contaminated sediment management is to be determined based on the MLOE approach and stressor identification, there will be no compelling reason to dredge to ERL levels. At the December 6, 2011 State Water Board meeting, some stakeholders showed maps of the harbors illustrating an interpretation of the distribution of contaminants in the bed sediment and alleged that the TMDL will require dredging of the entire harbors' footprint. However, there are very sparse sediment quality data in large in areas of the Harbors that the stakeholders alleged would need to be dredged. In order to construct the maps, stakeholders extrapolated the sparse data set over large areas that have not yet been sampled.

Attachment C, Figure 1 depicts *sediment condition as assessed using the MLOE approach of the SQOs for protection of aquatic life*. This map clearly shows that the Harbors are characterized by discrete hot spots that probably need to be remediated, while indicating that the majority of the harbors currently supports aquatic life beneficial uses.

Regarding indirect effects, Attachment C, Figures 2 and 3[9] show the distribution of PCBs and DDT in the Harbors. These figures represent the most current sediment data available (2002-2008) and show the distribution of these contaminants in the Harbors is highly variable. Again, there are hot spots with some overlapping areas of highly elevated DDT and PCB levels. Attachment C, Figures 2 and 3 also show that a significant number of sites throughout the harbors are currently below or near the BSAF levels for PCBs and DDT to protect fish tissue. These data show that other remedial technologies (e.g. natural attenuation) can be considered to address contaminants in larger areas, such as Outer Harbor. In concert with fish tracking studies to characterize the feeding habits and locations of resident fish species, this means that removal of all greater Harbor sediments, especially given a 20 year implementation schedule, will not be necessary.

Finally, as described in Issue 2, an assessment methodology for protection of human health, i.e. indirect effects (SQO Phase 2), is expected to be available from the State Water Board in the near future. As discussed, the Harbors Toxics TMDL anticipates the completion of Phase 2 and includes a compliance pathway for the Indirect Effects TMDLs using the State Water Board's SQO for indirect effects (BPA p. 21). To clarify the Los Angeles Water Board's intent, it is suggested that language is included in the State Water Board's approving resolution to make clear that compliance with the indirect effects TMDL may be demonstrated using the assessment methodology that will be adopted as Phase 2 of the SQOs or, alternatively, using site-specific sediment quality values to address the fish tissue impairment.

ISSUE 4A: TMDL REQUIREMENTS OVER 20-YEAR IMPLEMENTATION SCHEDULE AND ASSOCIATED RESPONSIBLE AGENCIES

Requirements for upstream cities (i.e., those that do not directly discharge to waterbodies covered by the Harbor Toxics TMDL) are limited. Upstream cities that are already covered under metals TMDLs are only required to monitor to demonstrate that they do not discharge contaminated sediments that may settle in the LA and LB Harbors. During the 20 year implementation plan, municipalities are only required to comply with interim wasteload allocations which are set at the 95th percentile of current pollutant concentrations.

Clarification on municipal requirements for TMDL compliance is provided in Attachments D and E. Attachment D identifies, for each responsible agency, whether it is assigned a wasteload allocation, a load allocation, and/or monitoring and reporting requirements. Attachment E provides an overview of implementation requirements for three time periods – the first five years, years 5-20, and by the end of the 20-year schedule – for groupings of responsible agencies (generally, subwatershed-based).

Generally:

[9] Figures 2 and 3 of Attachment C were generated using data provided by the Ports. The data were also used by the Ports for Figure 1 and other figures presented at the State Board hearing.

- Compliance with the final wasteload and load allocations is not required until 2032. This will afford responsible agencies the time to conduct studies to support refinement of the TMDL and to put in place implementation measures/BMPs to achieve final allocations, taking into consideration natural attenuation that will also occur over the 20-year time period.
- The TMDL only requires compliance with interim allocations – set at the 95th percentile of existing pollutant concentrations – in the next 20 years.
- The Harbor Toxics TMDL does not assign any wasteload allocations to municipalities within the Los Angeles River and San Gabriel River watersheds. Only limited monitoring and reporting are required of these municipalities, consistent with their obligations under separate approved TMDLs.
- The Harbor Toxics TMDL assigns bed sediment load allocations to four groups of responsible agencies:
    - Greater Harbor Waters load allocations: cities of Los Angeles (POLA) and Long Beach (POLB) and the State Lands Commission
    - Los Angeles River Estuary load allocations: cities of Los Angeles, Long Beach and Signal Hill, Los Angeles County, Los Angeles County Flood Control District and Caltrans
    - Dominguez Channel Estuary load allocations: cities of Los Angeles, Long Beach, Carson, Compton, Gardena and Torrance, Los Angeles County, Los Angeles County Flood Control District, and Caltrans
    - Consolidated Slip load allocations: City of Los Angeles, Los Angeles County and Los Angeles County Flood Control District
- The TMDL requires implementation of actions at prioritized hot spots according to an approved Sediment Management Plan as early as possible[10].
- Beginning three years after the effective date, the TMDL requires submission of annual monitoring and implementation progress reports.
- The TMDL recommends special studies be undertaken in support of reconsideration at Year 6.

ISSUE 4B: IMPLEMENTATION OF ALLOCATIONS IN PERMITS

The TMDL provides several options for municipalities to demonstrate compliance with interim and final wasteload allocations.

- Compliance with the interim concentration-based sediment allocations may be demonstrated via any one of three different means in permits (consistent with Section VII.B. of the EB&E Plan):

[10] See BPA, p. 31, which states that "[p]rioritized sites shall include known hot spots, including but not limited to Consolidated Slip and Fish Harbor. For these prioritized sites, the sediment management plan shall include concrete actions and milestones, including numeric estimates of load reductions or removal, to remediate these priority areas and shall demonstrate that actions to address prioritized hot spots will be initiated and completed as early as possible during the 20-year TMDL implementation period."

1. Demonstrate that the sediment quality condition of *Unimpacted* or *Likely Unimpacted* via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1 (Direct Effects SQOs), is met in the receiving water; or
2. Meet the interim allocations in bed sediment over a three-year averaging period; or
3. Meet the interim allocations in the discharge over a three-year averaging period.

- Where the Implementation Plan(s) demonstrates a reasonable assurance that the interim allocations will be met, and progress will be made toward achieving final allocations, the Los Angeles Water Board may specify an action-based/BMP compliance path in permits.
- Compliance with permit effluent and/or receiving water limitations based on the final mass-based allocations is not required until 2032. Final mass-based allocations may be expressed in permits in a variety of ways based on the permit's administrative record. These may include any one or a combination of the following:
    - As receiving water limitations consistent with the SQO Part 1 (for direct effects, and when available, indirect effects);
    - As receiving water limitations expressed as three-year average bed sediment concentrations (using site-specific sediment quality guidelines (SQVs), once developed);
    - As effluent limitations based on sediment quality values and applying a factor to account for the fraction of the load deposited in the bed sediments of the receiving water (as determined based on special studies and/or modeling);

ISSUE 5: IDENTIFICATION OF TMDL PROVISIONS AND OPPORTUNITIES TO RESPOND TO NEW DATA AND INFORMATION AND REVISE TMDL TARGETS, ALLOCATIONS, AND RELATED REQUIREMENTS

The Regional Board will reconsider the TMDL in light of special studies that inform our current understanding of loading, fisheries life histories, and sediment and tissue linkages, and effects.

The Harbors Toxics TMDL recognizes that a TMDL is built on current data and information, but that there will be opportunities to refine our scientific understanding of the Greater Harbors system during the TMDL's implementation period. In this sense, the TMDL is a living document and provides opportunities to conduct special studies, collect new data, and address new policies. Given the scope and complexity of the TMDL, Vice Chair Spivy-Weber indicated that it would be helpful to elucidate areas of current knowledge and direction and those areas where we anticipate continuing research and development – the results of which can be used to refine the TMDL well in advance of the final implementation deadline.

TMDL Components/Guidance currently available	**Future Policies/Special Studies included in Implementation Schedule to refine TMDL**
A. Numeric Targets • Water Column – CTR • Fish Tissue – OEHHA FCGs	• SQO Phase 2 assessment methodology for Indirect Effects • Toxicity Policy

TMDL Components/Guidance currently available	Future Policies/Special Studies included in Implementation Schedule to refine TMDL
• Sediment o Narrative SQOs for Direct Effects and Indirect Effects (See SQO Part 1, pp. 1, 3) o Numeric: NOAA TECs and ERLs	• Special Studies: o Stressor Identification Studies o Foraging ranges of targeted fish; resident species o Linkage between sediment concentrations and desired fish tissue concentrations o Fish consumption study
B. Sediment Allocations • Calculated based on the sediment quality value (SQV) for chemical identified in the SQO Part 1 TMDL = Sediment dep. rate x SQV • SQV is initially set equal to lower of ERL value or BSAF derived value[11]	• Initial SQVs may be replaced based on future site-specific (toxic or benthic impact) studies or stressor identification studies. • BSAF derived values may be replaced based on harbor-specific sediment and fish tissue linkage studies that focus on resident species. • Evaluation of need for additional allocations to address impairments.
C. Model and Linkage Analysis • Hydrodynamic and Sediment- Contaminant Transport Model (EFDC) • The Watershed Model Development for Simulation of Loadings to the Los Angeles/Long Beach Harbors Report (LSPC)	• Additional information/monitoring data may be used to refine the existing watershed/receiving model • The Los Angeles Water Board and the Ports of LA/LB will work together to refine the EFDC/LSPC models
D. Assigned WLAs among responsible parties (Staff Report, Appendix III) • $TMDL_{Watershed}$ = Sed. dep. rate x SQV • $WLA_{Watershed}$ = TMDL x % Watershed contribution • $WLAs_{Permittee}$ = $WLA_{Watershed}$ x % Drainage Area	• Additional information may be used to refine the distribution of allocations among responsible parties • Special study on fraction of suspended sediment in discharge that is deposited to bed sediment
E. Alternative compliance pathways for fish tissue targets by 2032: a. Fish tissue targets are met in species resident to the TMDL waterbodies[12] b. Final sediment allocations are met c. Sediment numeric targets to protect fish tissue are met in bed sediments over a three-year averaging period d. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended ('SQO Phase 2').	• Special studies for foraging ranges of targeted fish will be used to select appropriate species of fish to determine compliance with fish tissue target relative to the condition of the Greater Harbor waters and bed sediments.

[11] The BSAF accounts for the sediment concentration, the associated food web, and the target fish tissue level.
[12] A site-specific study to determine resident species shall be submitted to the Executive Officer for approval.

TMDL Components/Guidance currently available	Future Policies/Special Studies included in Implementation Schedule to refine TMDL
• Required monitoring includes fish tissue testing for several species (i.e., white croaker; a sport fish; a prey species).	

Although this is arguably the most studied TMDL in the region (work has been ongoing since 2005), the Los Angeles Water Board recognizes that our scientific understanding of the impairments in the Dominguez Channel and Greater Harbor Waters and the dynamics of the system will continue to increase as new monitoring data are collected and special studies completed. This TMDL has been developed in recognition of this, and as such, multiple avenues to refine the TMDL are included in the implementation plan, as indicated above.

While our understanding will continue to expand over the 20 year term of the implementation of this TMDL, the Los Angeles Water Board and USEPA have determined based on extensive analysis that there is compelling evidence of impairment and sufficient knowledge of the sources contributing to the impairment to embark on actions to restore these waterbodies in order to protect human health and ensure a healthy ecosystem. Please let me know if I can provide any additional information or if there are any other issues that we should further elucidate before the State Water Board meeting to consider approval of this TMDL.

Attachments:

A. Process Diagram for Direct Effects TMDLs
B. Process Diagram for Indirect Effects TMDLs
C. Maps of Distribution of Contaminants in Harbor Sediments
D. Table of Requirements for Each Municipality and Other Responsible Agencies
E. Table of TMDL Requirements over 20-year Implementation Period

cc (w/ attachments):
Tom Howard, Executive Director
Jonathan Bishop, Chief Deputy Director
Vicki Whitney, Deputy Director, Division of Water Quality
Rik Rasmussen, Chief, TMDL Section
Frances McChesney, Office of Chief Counsel
Sarah Olinger, Office of Chief Counsel
Alexis Strauss, Water Division Director, US EPA Region IX
Dr. Peter Kozelka, US EPA Region IX

<table>
<tr><th>RESPONSIBLE PARTIES</th><th>FIRST 5 YEARs</th><th>YEARs 6 TO 20</th><th>BY 20 YEARs</th></tr>
<tr><td>Dominguez Channel Responsible Parties</td><td colspan="2">COMPLY WITH INTERIM ALLOCATIONS – Interim wet freshwater allocation (ug/L)– (BPA, page 10)
MONITORING[1]: (1) WATER, (2) SEDIMENT (BPA pages 23-24)
Submit MRP (6 month);
Submit annual reports (15 month after workplan approval and annually after) (BPA Tasks 2,3, and 4 page 38)
IMPLEMENTATION PLAN AND CONTAMINATED SEDIMENT MANAGEMENT PLAN (CSMP): Submit CSMP – 2 years (BPA, Task 5 page 38)</td><td rowspan="2">COMPLY WITH FINAL WLAs:
Water WLAs for DC (wet-weather only)
Water (wet-weather) and sediment WLAs Torrance lateral (BPA pages 11-13)
ANNUAL MRP (BPA Task 4, page 38)</td></tr>
<tr><td></td><td>IMPLEMENTATION PLAN, PHASE I (year 1-5) (BPA page 29-31)
Agreements between cooperating parties and to develop a detailed scope of work with priorities
Implement structural and non-structural BMPs
Evaluate sediment condition through SQO process – list of impacted sites to be managed</td><td>IMPLEMENTATION, PHASE II (year 6-15)
IMPLEMENTATION, PHASE III (year 16-20)</td></tr>
<tr><td>Dominguez Channel Estuary Responsible Parties</td><td colspan="2">COMPLY WITH INTERIM ALLOCATIONS: Interim sediment allocation (mg/kg) (BPA, first table on page 11). Compliance options:
SQO Part 1, is met; or
Meet the interim allocations in bed sediment; or
Meet the interim allocations in the discharge.(BPA, page 11,2nd paragraph)
MONITORING: (1) WATER, (2) SEDIMENT, AND (3) FISH TISSUE (BPA pages 23-24)</td><td>COMPLY WITH FINAL WLAs and LAs
Water WLAs for non MS4 point sources (BPA page 13)
Sediment WLAs and LAs</td></tr>
</table>

[1]Responsible parties are each individually responsible for conducting water, sediment, and fish tissue monitoring as specified in the BPA. However, they are encouraged to collaborate or coordinate their efforts to avoid duplication and reduce associated costs. Dischargers interested in coordinated monitoring shall submit a coordinated MRP that identifies monitoring to be implemented by the responsible parties. Under the coordinated monitoring option, the compliance point for the stormwater WLAs shall be storm drain outfalls or a point(s) in the receiving water that suitably represents the combined discharge of cooperating parties (See BPA pages 24-27)

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• ANNUAL MRP (BPA Task 4, page 38)</td></tr>
<tr><td></td><td>• IMPLEMENTATION PLAN, PHASE I (year 1-5) (BPA, page 29-30; Task 5 page 38)
o Agreements between cooperating parties and to develop a detailed scope of work with priorities
o Implement structural and non-structural BMPs
o Evaluate sediment condition through SQO process – list of impacted sites to be managed</td><td>• IMPLEMENTATION , PHASE II (year 6-15)(BPA, page 30; Task 11 page 39):
o Implement additional BMPs and site remediation actions based on results of Phase I
o Report on status of implementation of Phase II (year 10)
o Complete Phase II (15 year)
• IMPLEMENTATION, PHASE III (year 16-20)(BPA, page 31; Task 13 page 39)
Implementation of secondary and additional implementation action to be in compliance with final allocations</td></tr>
<tr><td></td><td colspan="2">• SPECIAL STUDIES AND RECONSIDERATION OF TMDL TARGETS, ALLOCATIONS, AND SCHEDULE (BPA page 34-35)
o Optional studies include but not limited to fish tissue, foraging ranges of targeted fish, watershed and hydrodynamic models, LAR and SGR contaminant contributions, air deposition, DDT related to Montrose site
o Incorporate new State policies including, but not limited to SQO Part II, Toxicity Policy, Air quality criteria and other regulations affecting air quality</td></tr>
<tr><td>Greater LA/LB Harbor Waters Responsible Parties including Consolidated Slip</td><td colspan="2">• COMPLY WITH INTERIM ALLOCATIONS: Interim sediment allocation (mg/kg) (BPA, first table on page 11). Compliance options:
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• IMPLEMENTATION PLAN AND CONTAMINATED SEDIMENT MANAGEMENT PLAN: Submit CSMP – 2 years (BPA, Task 5 page 38)</td><td rowspan="3">POTW (BPA pages 13 and 15)
○ Sediment WLAs and LAs (BPA pages 14-21)
• ANNUAL MRP (BPA Task 4, page 38)</td></tr>
<tr><td></td><td>• IMPLEMENTATION PLAN, PHASE I (year 1-5) (BPA, pages 31-33; Task 5 page 38)
○ Submit Implementation Plan and Contaminated sediment Plan (CSMP)to address contaminated sediments in DC with milestones for load reductions or removals – 2 years
○ Removal of contaminated sediment within areas of known concern
○ Prioritization assessment of contaminated sediment through SQO process
○ Implement BMPs</td><td>• IMPLEMENTATION , PHASE II (year 6-15)(BPA, pages 33-34; Task 11 page 39):
○ Implement additional BMPs and site remediation actions based on results of Phase I
○ Report on status of implementation of Phase II (year 10)
○ Complete Phase II (15 year)
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RESPONSIBLE PARTIES	FIRST 5 YEARs	YEARs 6 TO 20	BY 20 YEARs
Parties	○ SQO Part 1, is met; or ○ Meet the interim allocations in bed sediment; or ○ Meet the interim allocations in the discharge.(BPA, page 11,2nd paragraph) • **MONITORING: (1) WATER, (2) SEDIMENT, AND (3) FISH TISSUE** (BPA pages 24-27) ○ Submit MRP (6 month); ○ Submit annual reports (15 month after workplan approval and annually after) (BPA Tasks 2,3, and 4 page 38) • **IMPLEMENTATION PLAN AND CONTAMINATED SEDIMENT MANAGEMENT PLAN:** Submit CSMP – 2 years (BPA, Task 5 page 38)		○ Water WLAs for non MS4 point sources (BPA page 13) ○ Sediment WLAs and LAs (BPA pages 14-21) • **ANNUAL MRP** (BPA Task 4, page 38)
	• **IMPLEMENTATION PLAN, PHASE I** (year 1-5) (BPA, pages 31-33; Task 5 page 38) ○ Submit Implementation Plan and Contaminated sediment Plan (CSMP)to address contaminated sediments in DC with milestones for load reductions or removals – 2 years ○ Removal of contaminated sediment within areas of known concern ○ Prioritization assessment of contaminated sediment through SQO process ○ Implement BMPs	• **IMPLEMENTATION , PHASE II** (year 6-15)(BPA, pages 33-34; Task 11 page 39): ○ Implement additional BMPs and site remediation actions based on results of Phase I ○ Report on status of implementation of Phase II (year 10) ○ Complete Phase II (15 year) • **IMPLEMENTATION, PHASE III** (year 16-20)(BPA, page 34; Task 13 page 39) Implementation of secondary and additional implementation action to be in compliance with final allocations	
	• **SPECIAL STUDIES AND RECONSIDERATION OF TMDL TARGETS, ALLOCATIONS, AND SCHEDULE** (BPA page 34-35) ○ Optional studies include but not limited to fish tissue, foraging ranges of targeted fish, watershed and hydrodynamic models, LAR and SGR contaminant contributions, air deposition, DDT related to Montrose site ○ Incorporate new State policies including, but not limited to SQO Part II, Toxicity Policy, Air quality criteria and other regulations affecting air		

RESPONSIBLE PARTIES	FIRST 5 YEARs	YEARs 6 TO 20	BY 20 YEARs
	quality		
Los Angeles River and San Gabriel River Responsible Parties	• **WLAs AND LAs ARE NOT REQUIRED** • **MONITORING: (1) WATER, (2) SEDIMENT** o Submit MRP (6 month); o Submit annual reports (15 month after workplan approval and annually after) (BPA Tasks 2,3, and 4 page 38)		• **ANNUAL MRP** (BPA Task 4, page 38)
	IMPLEMENTATION PLAN, PHASE I (year 1-5) (BPA, page 34; Task 6 page 38) • Submit report of implementation of current activities support downstream TMDL – 2 year	**IMPLEMENTATION PHASES II AND III** (year6-15) (BPA page 34;Task 6) • Implementation actions and TMDLs to allocate contaminant loads between dischargers in the Los Angeles and San Gabriel Rivers may be developed and required in Phases II and III as necessary to meet the targets in the Greater Harbor waters.	

Responsible parties for assigned LAs and WLAs and monitoring for this TMDL as referenced in the table are listed below (BPA pages 36-37):

1. Dominguez Channel Responsible Parties
   - Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary MS4 Permittees
     - Los Angeles County
     - Los Angeles County Flood Control District
     - Caltrans
     - City of Carson
     - City of Compton
     - City of El Segundo
     - City of Gardena
     - City of Hawthorne
     - City of Inglewood
     - City of Lawndale
     - City of Long Beach
     - City of Los Angeles

  - City of Manhattan Beach
  - City of Redondo Beach
  - City of Torrance
- Individual and General Stormwater Permit Enrollees
- Other Non-stormwater Permittees
- Dominguez Channel Estuary Subgroup for bed sediment and fish:
  - Los Angeles County
  - Los Angeles County Flood Control District
  - Caltrans
  - City of Carson
  - City of Compton
  - City of Gardena
  - City of Los Angeles
  - City of Long Beach
  - City of Torrance

2. Greater Los Angeles and Long Beach Harbor Waters Responsible Parties
- Greater Los Angeles and Long Beach Harbor Waters MS4 Permittees
  - Los Angeles County
  - Los Angeles County Flood Control District
  - Caltrans
  - Bellflower
  - City of Lakewood
  - City of Long Beach
  - City of Los Angeles
  - City of Paramount
  - City of Signal Hill
  - City of Rolling Hills
  - City of Rolling Hills Estates
  - Rancho Palos Verdes
- City of Los Angeles (including the Port of Los Angeles)
- City of Long Beach (including the Port of Long Beach)
- State Lands Commission
- Individual and General Stormwater Permit Enrollees
- Other Non-stormwater Permittees, including City of Los Angeles (TIWRP)
- <u>Los Angeles River Estuary Subgroup for bed sediment and fish:</u>

  - Los Angeles County
  - Los Angeles County Flood Control District
  - City of Long Beach
  - City of Los Angeles
  - City of Signal Hill
  - Caltrans
- Consolidated Slip Responsible Parties subgroup
  - Consolidated Slip MS4 Permittees
    - Los Angeles County
    - Los Angeles County Flood Control District
    - City of Los Angeles

3. Los Angeles River and San Gabriel River Watershed TMDLs Responsible Parties

- Los Angeles River and San Gabriel River metals TMDLs responsible parties (For list of responsible parties, see Chapter 7-13 herein and US EPA, "Total Maximum Daily Loads for Metals and Selenium: San Gabriel River and Impaired Tributaries", March 26, 2007.)

Western States Petroleum Association
Credible Solutions ● Responsive Service ● Since 1907

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

---

[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,

Patty Senecal
Manager, Southern California Region and Infrastructure Issues
Western States Petroleum Association
310-678-7782

No.	Author	Comment	Response
		impaired for copper." Therefore, the Regional Board should pursue de-listing of the water body for copper.	
37.6		**Whole Effluent Toxicity** The TMDL staff report does not discuss the proposed Whole Effluent Toxicity (WET) policy under review by the State Water Resources Control Board. This TMDL should be either compatible with the WET policy or pre-empt the policy. As with the proposed WET policy, the TMDL should initially require only monitoring for toxicity. If toxicity is not found in a water body, then it should be a lower priority to do monitoring for the individual pollutants: If toxicity is found, a toxicity identification evaluation (TIE) or additional monitoring could be required consistent with the WET policy to identify the pollutant(s) causing the toxicity.	The Staff Report and the Basin Plan Amendment do address the Toxicity Policy now under development. The Staff Report address the Toxicity Policy in Section 3.1.3. The Basin Plan Amendment specifies that *"Targets based on new toxicity criteria that achieve the narrative Toxicity objective of Chapter 3 of this Basin Plan may substitute for the TU_c of 1, when those new criteria are adopted and in effect.."* In addition, The Staff Report and BPA have been revised to clarify that the interim toxicity WLA shall be implemented as a trigger requiring additional evaluation (e.g., Toxicity Identification Evaluations).
37.8		**Funding:** Due to limited competing resources, and having to address 70 active TMDLs statewide (with many in the pipeline), Caltrans is facing a challenge to address the TMDLs outside of the funding allocated to applicable highway projects. Caltrans does not have the authority to impose user or utility fees to pay for the TMDL implementation. Caltrans requests that the difficulty in funding be acknowledged and that language be added to the TMDL to allow for flexibility in implementation during times of funding challenges.	The Staff Basin Plan Amendment has been modified to include several new methods of determining compliance; see response to **Comments 21.1, 21.3 and 21.5**. The implementation schedule is 20 years long, giving responsible parties sufficient flexibility in addressing TMDL requirements.
38.	Western States Petroleum Association		
38.1		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	Comment noted and detailed response to comments are immediately below.

<table>
<tr><th>No.</th><th>Author</th><th>Comment</th><th>Response</th></tr>
<tr><td></td><td></td><td>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. RI 1-XXX.

<table>
<tr><th>Constituent</th><th>units</th><th>Allocation</th></tr>
<tr><td>Copper</td><td rowspan="7">mg/kg sediment</td><td>220</td></tr>
<tr><td>Lead</td><td>510</td></tr>
<tr><td>Zinc</td><td>789</td></tr>
<tr><td>DDT</td><td>1.27</td></tr>
<tr><td>PAH</td><td>31.60</td></tr>
<tr><td>PCB</td><td>1.490</td></tr>
<tr><td></td><td></td></tr>
</table>
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.</td><td></td></tr>
<tr><td>38.6a</td><td></td><td>Final Salt Water Column Allocations.</td><td>The TMDL includes saltwater water column allocations for</td></tr>
</table>

No.	Author	Comment	Response
		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. RI I-XXX. **Constituent** | **Units** | **Allocation**	Dominguez Estuary. These are equivalent to CTR chronic criteria for total metals to protect aquatic organisms as well as recognize that total metals will contribute some portion to sediment metal levels via precipitation and settling. With appropriate sample preparation (removal of salt matrix), these concentrations are achievable via standard analytical methods; e.g., ICP-MS. For total PAHs and bioaccumulative organics, these allocations are set equal to CTR human health criteria for consumption of organisms only. We acknowledge that bioaccumulative pollutant concentrations are very low, although not 'below current analytical capabilities'. Several modified monitoring methods are viable for detecting these compounds in unfiltered samples, including passive samplers or high volume extraction techniques. The refineries have in the past provided non-detect results simply because they have not contracted with laboratories with sufficiently low detection limits. The sensitivity of measuring devices has improved over past 20 years; the refineries should accordingly improve their analytical results using current technologies for aqueous saline solutions, especially for PAH compounds.

Tesoro Refining & Marketing Company LLC

In the Matter of Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit (Order No. R4-2013-0157, NPDES No. CA0059153) and Time Schedule Order (Order No. R4-2013-0158) Adopted by the Los Angeles Regional Water Quality Control Board

Exhibit 3

Post-TMDL Communications

California Regional Water Quality Control Board
Los Angeles Region

320 W. 4th Street, Suite 200, Los Angeles, California 90013
(213) 576-6600 • FAX (213) 576-6640
http://www.waterboards.ca.gov/losangeles

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

February 14, 2012

Ms. Alexis Strauss, Director (WTR-1)
Water Division
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, California 94105

Dear Ms. Strauss:

REQUEST FOR U.S. ENVIRONMENTAL PROTECTION AGENCY APPROVAL OF AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE LOS ANGELES REGION TO INCORPORATE A TOTAL MAXIMUM DAILY LOAD FOR TOXIC POLLUTANTS IN DOMINGUEZ CHANNEL AND GREATER LOS ANGELES AND LONG BEACH HARBOR WATERS

Pursuant to federal Clean Water Act Section 303(d)(2) and 303(c)(2), we are submitting for U.S. Environmental Protection Agency's (U.S. EPA's) approval, an amendment to the Water Quality Control Plan for the Los Angeles Region (Basin Plan) to incorporate a Total Maximum Daily Load (TMDL) for toxic pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters. The Basin Plan amendment was adopted by the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) on May 5, 2011 under Resolution No. R11-008. The Basin Plan amendment was approved by the State Water Resources Control Board (State Water Board) on February 7, 2012 under Resolution No. 2012-0008.

The amendment documentation (portions of the Los Angeles Water Board administrative record and State Water Board administrative record) is being sent to Cindy Lin for review of the TMDL.

In accordance with your request, we are submitting this amendment concurrently to both U.S. EPA and the Office of Administrative Law (OAL). OAL's approval letter will be transmitted upon receipt.

We look forward to receiving your approval of this Basin Plan amendment. If you have any questions on this subject, you may contact me at (213) 576-6605 (sunger@waterboards.ca.gov).

You may also contact Thanhloan Nguyen at (213) 576-6689 (tnguyen@waterboards.ca.gov), who is the lead staff person on this matter, or L.B. Nye, Ph.D., Chief TMDL Unit 1, at (213) 576-6785 (lnye@waterboards.ca.gov).

Sincerely,

Samuel Unger

Samuel Unger
Executive Officer
Los Angeles Regional Water Quality Control Board

cc: (with amendment documentation)

Ms. Cindy Lin (WTR-2)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

cc: (without amendment documentation)

Ms. Janet Hashimoto (WTR-2)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

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

MAR 2 3 2012

Sam Unger
Executive Officer
Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013

Dear Mr. Unger:

Thank you for submitting the Basin Plan Amendment containing the Total Maximum Daily Load (TMDL) for toxic pollutants (metals, chlordane, dieldrin, toxaphene, PAHs, DDT and PCBs) in the Dominguez Channel and greater Los Angeles-Long Beach Harbor waters. Based on the United States Environmental Protection Agency's (EPA) review of the TMDL submittal under Clean Water Act (CWA) section 303(d), I have concluded the TMDL adequately addresses the pollutants of concern and, upon implementation, will result in attainment of the applicable water quality standards for the Dominguez Channel and greater Los Angeles-Long Beach Harbor waters. All required elements are adequately addressed; therefore, the TMDL is hereby approved pursuant to CWA section 303(d)(2).

EPA received the State Water Resources Control Board's complete TMDL package for approval on March 22, 2011. The TMDL includes waste load and load allocations as needed, takes into consideration seasonal variations and critical conditions, and provides an adequate margin of safety. The State has provided adequate opportunities for public review and comment on the TMDL, and described how public comments were considered in the final TMDL.

The TMDL submittal also contains a detailed plan for implementing the TMDL. Current federal regulations do not define TMDLs as containing implementation plans; therefore, EPA is not taking action on the implementation plan provided with this TMDL. However, EPA concurs with the State's proposed implementation approaches.

If you have any questions concerning this approval, please call me at (415) 972-3572 or Cindy Lin at (213) 244-1803.

Sincerely,

Alexis Strauss 23 March 2012
Alexis Strauss
Director, Water Division

Enclosure

cc: Tom Howard, SWRCB

CALIFORNIA
Water Boards

Los Angeles Regional Water Quality Control Board

August 31, 2012

Nancy Woo, Acting Water Division Director
Mail Code WTR-1
US EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

TOTAL MAXIMUM DAILY LOAD FOR TOXIC POLLUTANTS IN DOMINGUEZ CHANNEL AND GREATER LOS ANGELES AND LONG BEACH HARBOR WATERS

Dear Ms. Woo,

On February 14, 2012, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) requested U.S. Environmental Protection Agency (USEPA) approval of the Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters (hereinafter, Harbors Toxics TMDL or TMDL). At that time, the Los Angeles Water Board requested approval of the TMDL, and the associated implementation plan adopted as part of the State's action, pursuant to both sections 303(c)(2) and 303(d)(2) of the Clean Water Act (CWA). On March 23, 2012, USEPA approved the TMDL pursuant to only CWA section 303(d)(2). USEPA later requested clarification regarding which portions of the TMDL the Los Angeles Water Board seeks approval of pursuant to CWA section 303(c)(2).

The Los Angeles Water Board and the State Water Resources Control Board (State Water Board) (collectively, Water Boards) are seeking authority to provide compliance schedules consistent with the waste load allocations (WLAs), including interim WLAs, that are based on California Toxics Rule (CTR) criteria and the associated implementation schedule in the Harbors Toxics TMDL, and which will be included in NPDES permits pursuant to CWA section 301(b)(1)(C). Without CWA section 303(c)(2) approval, compliance schedules for CTR criteria are no longer authorized pursuant to the CTR or by the State Water Board's *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits* (Resolution No. 2008-0025) (hereinafter, Compliance Schedule Policy). Accordingly, this letter clarifies our submission dated February 14, 2012, to request that USEPA approve, pursuant to CWA section 303(c)(2), the request for compliance schedule granting authority contained in the implementation plan in the TMDL for CTR-based WLAs assigned to the following categories of NPDES dischargers and pollutants:

NPDES Dischargers	Pollutant
Non-MS4 Stormwater Dischargers - General Construction, General Industrial, and individual industrial permittees	Copper, Lead, Zinc, DDT, Dieldrin, Total PCBs, PAHs, Chlordane and Pyrene
Other Non-Stormwater dischargers	Copper, Lead, and Zinc

With respect to a municipal separate storm sewer (MS4) permit that contains effluent limitations pursuant to CWA sections 402(p)(3)(B) and/or 303(d), the Water Boards have concluded that CWA section 303(c)(2) approval for compliance schedule authorization is not required to allow a compliance schedule for water quality standards in a MS4 permit. This is because the Compliance Schedule Policy does not apply to MS4 permits, as the Policy expressly only applies to NPDES permits with effluent limitations established under CWA section 301(b)(1)(C). MS4 permits are not subject to CWA section 301(b)(1)(C). Rather, effluent limitations in MS4 permits are established pursuant to CWA section 402(p)(3)(B), and, if applicable, section 303(d). The Water Boards' conclusions about TMDL implementation plans and MS4 permits extend to all water quality standards, whether promulgated by USEPA or the State. Therefore, the Los Angeles Water Board does not believe CWA section 303(c)(2) approval of the implementation plan in the Harbors Toxics TMDL for CTR-based WLAs for MS4 dischargers, including the California Department of Transportation (Caltrans), is required to include compliance schedules in MS4 permits. However, if USEPA disagrees with this conclusion, the Los Angeles Water Board hereby requests CWA section 303(c)(2) approval for compliance schedule granting authority consistent with the implementation plan in the Harbors Toxics TMDL associated with CTR-based WLAs assigned to MS4 discharges as well, including those assigned to Caltrans. The Water Boards understand that the requirements of 40 Code of Federal Regulations (CFR) section 122.47 must be satisfied when including compliance schedules in any NPDES permit.

In adopting the Harbors Toxics TMDL, the Los Angeles Water Board analyzed the time necessary for all NPDES dischargers to achieve the WLAs established in the TMDL. The Los Angeles Water Board determined that a maximum of 20 years is needed for these dischargers to fully implement programs to achieve the CTR-based WLAs. In establishing the implementation schedule, the Los Angeles Water Board considered the technical challenges, complexities due to multiple responsible parties and the need for multi-party agreements, and the presence of Superfund sites, as well as the multitude of programs that are likely to be implemented to achieve the WLAs. The 20-year implementation schedule provides sufficient time for flexibility in compliance methods to deal with uncertainties and to allow for prioritization of actions while achieving water quality as soon as possible consistent with 40 CFR section 122.47. Section 7.2 of the Los Angeles Water Board's TMDL Staff Report details the development of the schedule. During the incorporation of WLAs into permits as water quality based effluent limitations, the Water Boards will provide justification supporting the compliance schedules, drawing upon this analysis and other information as necessary, to ensure the compliance schedules meet the requirements of 40 CFR section 122.47.

If you have any questions regarding this request, please do not hesitate to contact Renee Purdy, Section Chief of Regional Programs, at (213) 576-6622 or Jennifer Fordyce, Los Angeles Water Board Counsel, at (916) 342-6682.

Sincerely,

Chief Deputy Executive Officer

Samuel Unger, P.E.
Executive Officer

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

NOV 02 2012

Samuel Unger, Executive Officer
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Dear Mr. Unger:

The U.S. Environmental Protection Agency (the EPA) has reviewed your August 31, 2012 letter regarding the Los Angeles Regional Water Quality Control Board (LARWQCB) and the California State Water Resources Control Board (State Board) request for authority to provide compliance schedules consistent with the waste load allocations (WLAs) based on California Toxics Rule (CTR) criteria, pursuant to 303(c) of the Clean Water Act (CWA). I am pleased to inform you that we are approving the authorization.

The approval is based on the State's Total Maximum Daily Load (TMDL) for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters (Harbors Toxics TMDL) adopted by the LARWQCB as Resolution Number R11-008 on May 5, 2011, approved by the State Board as Resolution Number 2012-0008 on February 7, 2012, and approved by the Office of Administrative Law on March 22, 2012. The EPA approved the TMDL pursuant to CWA section 303(d)(2) on March 23, 2012, and noted that our approval did not include the TMDL implementation plan, as it is not required under current federal regulations.

Subsequently, on May 30, 2012, the EPA verbally requested clarification of the State Board and LARWQCB's intentions regarding a compliance schedule authorization request pursuant to 303(c)(2) because it was unclear from the TMDL what process would be implemented to assure compliance with 40 CFR 122.47 requirements for compliance schedules to be incorporated into National Pollutant Discharge Elimination System (NPDES) permits. The clarification was received by the EPA on August 31, 2012, and is the subject of this approval.

The Compliance Schedule Authorization Request

The request is for authority pursuant to 303(c)(2) to provide compliance schedules consistent with WLAs, including interim WLAs, that are based on CTR criteria and the associated implementation schedule in the Harbors Toxics TMDL, which will be included in NPDES permits pursuant to the CWA section 301(b)(1)(c).

The request specifies that the LARWQCB may authorize compliance schedules in NPDES permits for up to 20 years for Non-MS4 stormwater Dischargers (General Construction, General industrial and individual industrial permittees) for Copper, Lead, Zinc, DDT, Dieldrin, Total PCBs, Chlordane, and Pyrene, and for other Non-stormwater Dischargers, for Copper, Lead, and Zinc, consistent with the Implementation Plan in the Harbors Toxics TMDL.

Today's Action

Pursuant to CWA section 303(c) and the implementing federal regulations at 40 CFR 131, the EPA hereby approves this compliance schedule authorizing provision. Section 303(c) of the CWA requires the EPA to approve or disapprove new or revised state-adopted water quality standards. The State regulatory provisions subject to the EPA's approval authority under section 303(c) are those addressing antidegradation, beneficial uses, water quality criteria, and certain policies and procedures for the implementation of water quality standards for surface waters. Under the EPA's water quality standards regulations, a state has discretion to include in its standards "policies generally affecting their application and implementation, such as mixing zones, low flows and variances" 40 C.F.R. 131.13. Though discretionary with the state, the Administrator has stated that authorizing provisions for compliance schedules such as that described in this request are subject to the EPA's review under 40 CFR Section 131.13. In re Star-Kist Caribe, Inc., 3 E.A.D. 172, 182-183, n16 (Adm'r 1990) modification denied, 4 E.A.D. 35 (E.A.B. 1992); In re City of Ames, 6 E.A.D. 374 (EAB1996). As such, authorizing provisions for compliance schedules are subject to the EPA's review and approval under the EPA CWA section 303(c).

Basis for Approval

In regards to this request to approve a compliance schedule authorizing provision, the EPA based its decision on CWA section 303(c) and implementing regulations at 40 CFR 131.5 and 131.6 in conjunction with the approved Harbors Toxics TMDL (which included extensive public participation). Specifically, the EPA focused on the 20-year implementation plan and schedule in this Harbors Toxics TMDL.

The EPA also considered guidance regarding compliance schedule authorizing provisions and the requirements at 40 CFR 122.47 for incorporating compliance schedules in specific NPDES permits. In 2007, the EPA headquarters clarified how permitting authorities should incorporate compliance schedules in specific permits after the State has clearly indicated in its water quality standards or implementing regulations that it intends to allow them ("Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits," Memorandum from James A. Hanlon to Alexis Strauss, May 10, 2007, enclosed).

As discussed in the 2007 memorandum, the permitting authority should document the basis for its conclusions that the compliance schedule is necessary and appropriate for that permit and will result in compliance as soon as possible within the timeframe allowed by the compliance schedule authorizing provision. The compliance schedule must provide an enforceable sequence of actions or operations that will lead to compliance with the effluent limitation along with associated interim milestones and schedules. As explained in its clarifying letter of August 31, 2012, the LARWQCB understands that the requirements of 40 CFR section 122.47 must be satisfied and documented on a permit-by-permit basis when including compliance schedules in any NPDES permit and intends to follow this approach once authorized.

Under the current statewide compliance schedule policy, compliance schedules for implementing WLAs in TMDLs may exceed 10 years, as specified in an adopted TMDL Implementation Plan (State Water Resources Control Board Resolution No. 2008-0025, "Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits," ("Policy") paragraph (6)(c)). However, the Policy does not apply to CTR criteria; the CTR had a compliance schedule authorizing provision when

promulgated but that provision had a sunset date of May 2005. For this reason, the LARWQCB would not be able to include a compliance schedule in any specific NPDES permit for CTR criteria without an approved compliance schedule authorizing provision.

Under the Policy, any resulting schedule in a specific NPDES permit must be both as short as possible and within the timeframe set forth in the TMDL implementation plan. The LARWQCB considered the technical issues and complexities of the multi-party agreements and programs to be implemented to achieve the WLAs and concluded that the 20-year implementation schedule in this Harbor Toxics TMDL provides sufficient time for flexibility to deal with uncertainties while achieving water quality as soon as possible. While the compliance schedule authorization provision establishes an outer bound limit of 20 years, it does not presume or guarantee that a specific discharger may receive a 20 year compliance schedule. Rather, each specific permit containing a compliance schedule must document that the schedule in question will lead to attainment with the permit's water quality-based effluent limit (WQBEL) "as soon as possible" and no later than 20 years after the relevant TMDL with the WLA is issued.

Furthermore, the LARWQCB states that during the incorporation of WLAs into permits as WQBELs, the Water Boards will provide justification supporting the compliance schedules to ensure that the compliance schedules meet all of the requirements of 40 C.F.R. section 122.47.

Public Participation

The EPA compliments the State on its efforts to include the public in the development and review of new and revised water quality standards. Public involvement is an integral component of a successful water quality program. Based upon our review of the administrative record for the subject TMDL, the public review procedures followed by the State in the development of State Board Resolution Number 2012-0008 and the LARWQCB Resolution Number R11-008 were consistent with the procedural requirements for public participation in triennial reviews, adoption, and revision of state water quality standards.

Endangered Species Act Section 7

Section 7(a)(2) of the Endangered Species Act (ESA) states that each federal agency shall, in consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (the Services), ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species (listed species) or result in destruction or adverse modification of designated critical habitat of such species. Consistent with the requirements of Section 7(a)(2) and implementing regulations at 50 CFR Part 402, EPA has initiated consultation with the Services regarding our action approving the compliance schedule authorizing provision under the Clean Water Act. We anticipate concluding consultation in the near future. Although we do not believe our action will cause any impacts of concern on listed species or designated critical habitat, our approval is subject to the outcome of the ESA Section 7(a)(2) consultation process.

Conclusion

This approval action authorizes the LARWQCB to include compliance schedules, provided they are consistent with the CWA and the EPA regulations, in NPDES permits issued to existing dischargers for

more stringent WQBELS based on WLAs in the State's TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters.

In closing, the EPA commends the State Water Board staff for its excellent work on the TMDL and implementation schedule. If there are any questions regarding our action, please contact Janet Hashimoto at (415) 972-3452 or Suesan Saucerman at (415) 972-3522 of the Standards and TMDL Office. As always, we look forward to continued cooperation with the State in achieving our mutual environmental goals.

Sincerely,

Nancy Woo, Acting Director
Water Division

Enclosure

cc: Deborah Smith, Chief Deputy Director, LARWQCB
Renee Purdy, Section Chief of Regional Programs, LARWQCB
Tom Gardner, USEPA, Office of Water

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 10 2007

OFFICE OF
WATER

MEMORANDUM

SUBJECT: Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits

FROM: James A. Hanlon, Director
Office of Wastewater Management

TO: Alexis Strauss, Director
Water Division
EPA Region 9

Recently, in discussions with Region 9, questions have been raised concerning the use of compliance schedules in National Pollutant Discharge Elimination System (NPDES) permits consistent with the Clean Water Act (CWA) and its implementing regulations at 40 C.F.R. § 122.47. The use of compliance schedules in NPDES permits is also the subject of ongoing litigation in California. The purpose of this memo is to provide a framework for the review of permits consistent with the CWA and its implementing regulations.

When may a permitting authority include a compliance schedule in a permit for the purpose of achieving a water quality-based effluent limitation?

In *In The Matter of Star-Kist Caribe, Inc.*, 3 E.A.D. 172, 175, 177 (1990), the EPA Administrator interpreted section 301(b)(1)(C) of the CWA to mean that 1) after July 1, 1977, permits must require immediate compliance with *(i.e.,* may not contain compliance schedules for) effluent limitations based on water quality standards adopted before July 1, 1977, and 2) compliance schedules are allowed for effluent limitations based on standards adopted after that date only if the State has clearly indicated in its water quality standards or implementing regulations that it intends to allow them.

What principles are applicable to assessing whether a compliance schedule for achieving a water quality-based effluent limitation is consistent with the CWA and its implementing regulations?

1. "When appropriate," NPDES permits may include "a schedule of compliance leading to compliance with CWA and regulations ... as soon as possible, but not later than the applicable statutory deadline under the CWA." 40 C.F.R. § 122.47(a)(1). Compliance schedules that are longer than one year in duration must set forth interim requirements and dates for their achievement. 40 c.F.R. § 122.47(a)(3).

2. Any compliance schedule contained in an NPDES permit must be an "enforceable sequence of actions or operations leading to compliance with a [water quality-based] effluent limitation ["WQBEL"]" as required by the definition of "schedule of compliance" in section 502(17) of the CWA. *See also* 40 c.F.R. § 122.2 (definition of schedule of compliance).

3. Any compliance schedule contained in an NPDES pennit must include an enforceable final effluent limitation and a date for its achievement that is within the timeframe allowed by the applicable state or federal law provision authorizing compliance schedules as required by CWA sections 301(b)(1)(C); 502(17); the Administrator's decision in *Star-Kist Caribe, Inc.* 3 E.A.D. 172, 175, 177-178 (1990); and EPA regulations at 40 C.F.R. §§ 122.2, 122.44(d) and 122.44(d)(I)(vii)(A).

4. Any compliance schedule that extends past the expiration date of a pennit must include the final effluent limitations in the pennit in order to ensure enforceability of the compliance schedule as required by CWA section 502(17) and 40 C.F.R. § 122.2 (definition of schedule of compliance).

5. In order to grant a compliance schedule in an NPDES pennit, the pennitting authority has to make a reasonable finding, adequately supported by the administrative record, that the compliance schedule "willlead[] to compliance with an effluent limitation ... " "to meet water quality standards" by the end of the compliance schedule as required by sections 301(b)(I)(C) and 502(17) of the CWA. *See also 40* C.F.R. §§ 122.2, 122.44(d)(1)(vii)(A).

6. In order to grant a compliance schedule in an NPDES pennit, the permitting authority has to make a reasonable finding, adequately supported by the administrative record and described in the fact sheet (40 C.F.R. § 124.8), that a compliance schedule is "appropriate" and that compliance with the final WQBEL is required "as soon as possible." *See* 40 C.F.R. §§ 122.47(a), 122.47(a)(I).

7. In order to grant a compliance schedule in an NPDES pennit, the permitting authority has to make a reasonable finding, adequately supported by the administrative record, that the discharger cannot immediately comply with the WQBEL upon the effective date of the pennit. 40 C.F.R. §§ 122.47, 122.47(a)(1).

8. Factors relevant to whether a compliance schedule in a specific permit is "appropriate" under 40 C.F.R. § 122.47(a) include: how much time the discharger has already had to meet the WQBEL(s) under prior permits; the extent to which the discharger has made good faith efforts to comply with the WQBELs and other requirements in its prior permit(s); whether there is any need for modifications to treatment facilities, operations or measures to meet the WQBELs and if so, how long would it take to implement the modifications to treatment, operations or other measures; or whether the discharger would be expected to use the same treatment facilities, operations or other measures to meet the WQBEL as it would have used to meet the WQBEL in its prior permit.

9. Factors relevant to a conclusion that a particular compliance schedule requires compliance with the WQBEL "as soon as possible," as required by 40 C.F.R. § 122.47(a)(1) include: consideration of the steps needed to modify or install treatment facilities, operations or other measures and the time those steps would take. The permitting authority should not simply presume that a compliance schedule be based on the maximum time period allowed by a State's authorizing provision.

10. A compliance schedule based solely on time needed to develop a Total Maximum Daily Load is not appropriate, consistent with EPA's letter of October 23, 2006, to Celeste Cantu, Executive Director of the California State Water Resources Control Board, in which EPA disapproved a provision of the Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries for California.

11. A compliance schedule based solely on time needed to develop a Use Attainability Analysis is also not appropriate, consistent with EPA's letter of February 20, 2007, to Doyle Childers, Director Missouri Department of Natural Resources, nor is a compliance schedule based solely on time needed to develop a site specific criterion, for the same reasons as set forth in the October 23, 2006, (referenced in Paragraph 10) and February 20, 2007 letters.

If you have any questions, please contact me at (202) 564-0748 or have your staff contact Linda Boornazian at (202) 564-0221.

Tesoro Refining & Marketing Company LLC

In the Matter of Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit (Order No. R4-2013-0157, NPDES No. CA0059153) and Time Schedule Order (Order No. R4-2013-0158) Adopted by the Los Angeles Regional Water Quality Control Board

Exhibit 4

Petitioner's 9/9/13 Comment Letter

TESORO

Tesoro Refining & Marketing Company LLC
Los Angeles Refinery – Calciner Operations
1175 Carrack Avenue
Mailing Address: P.O. Box 1028
Wilmington, CA 90748-1028
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Via U.S. Mail and Email (to recipients and losangeles@waterboards.ca.gov)

September 9, 2013

Mr. Samuel Unger, Ms. Cassandra Owens and Ms. Rosario Aston
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Re: Comments on August 9, 2013 Revised Tentative Waste Discharge Requirements Proposed For Tesoro Refining & Marketing Company, LLC, Wilmington Calciner and based on the waste load allocations ("WLAs") of Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters ("Harbor Toxics TMDL" or "TMDL")

Dear Ms. Owens, Ms. Aston, and Mr. Unger:

We continue to oppose immediately applicable monitoring duties and numeric effluent limits for lead, 4,4'-dichlorodiphenyltrichloroethane (4,4'-DDT or "DDT")[1] and total polychlorinated biphenyls ("PCBs") in the above-referenced proposed Waste Discharge Requirements ("Proposed WDRs") for the Wilmington Calciner ("Calciner" or "Facility"), 1175 Carrack Ave., Wilmington, CA (NPDES No. 0059153, CI No. 6571). The Calciner's operations do not discharge DDT or PCBs at all or lead at actionable levels. No DDT or PCBs have been detected in the Calciner process waters, and any actionable levels of lead detected so far are not believed to originate from the Facility. These pollutants come primarily, if not exclusively, from the air, not the Calciner. In absence of data showing these are from the Calciner, these monitoring duties and limits are improper and inappropriate. We request that you strike them from the Proposed WDRs. Should the monitoring duties and limits remain, we ask that they appear as monitoring thresholds only and that monitoring apply only during years in which a discharge from the Facility occurs.

Further, the Calciner's discharges are very infrequent because it has a 900,000-gallon pond structure where the Facility takes in storm water and combines it with Facility process water in the pond for re-use on site. The Facility has the capacity to retain water for a 50-year, 24-hour storm. Accordingly, we also request that the permit include a design storm provision and other changes to reflect the infrequency of discharge from the Facility.

Given the many technical and legal issues in this tentative permit, we request 45 minutes to present our concerns during the October 3, 2013 hearing.

[1] For simplicity, we refer to 4,4'-DDT as DDT at times in our comments.

As applied to the Calciner, the Proposed WDRs are unreasonable. Although the last discharge from the Calciner was more than eight years ago – and despite many meetings with staff[2] – the Proposed WDRs have remained essentially the same as proposed on April 16, 2012. They require that Tesoro, either by itself or as part of a group monitoring effort, prepare and implement a monitoring plan that will include water column sampling, sediment monitoring, and fish tissue monitoring within the Long Beach Inner Harbor Area. (Proposed WDRs at p. 23.) The Proposed WDRs also include new numeric water quality based effluent limitations ("WQBELs") for lead, DDT and PCBs, which are based on the Harbor Toxics TMDL.[3] (*Id.* at 15 and F-25.) Failure to meet the limits or monitoring duties carries the risk of penalties of up to $37,500 per day per violation. (33 U.S.C. § 1319(d) (adjusted from $25,000 to $37,500 pursuant to 74 Fed. Reg. 626, 627 (2009).). For a facility that discharges once every 50 years, these monitoring duties, limits, and potential penalties are wholly unreasonable and not supported by data or law.

The TMDL that forms the legal basis of the new limits and monitoring duties was developed and based on a 20-year implementation schedule that the Regional Board and EPA eliminated without notice to stakeholders. The Regional Board and EPA communicated about the schedule with each other from about February 2012 through August 2012, and on November 8, 2012, the Regional Board and EPA effectively eliminated the 20-year schedule altogether. (*See* Attachment A to this letter.) Instead, compliance schedules are available to dischargers who can show they "cannot immediately comply with the WQBEL upon the effective date of the permit." (*Id.* at page 2 of the May 10, 2007 EPA Memorandum.)

The Calciner does not know if it can comply with the new Proposed WDRs because it has not discharged for eight years; accordingly, the Facility proposed a Time Schedule Order (TSO) to staff on March 28, 2013 and will be submitting a separate letter with comments and suggested revisions to the TSO that staff proposes. The TSO that the Calciner proposed includes a study to see if the Calciner's conveyances are likely to carry DDT, PCB, and lead from atmospheric deposition. If a TSO is necessary in this matter, we would like confirmation that it can be followed with a compliance schedule if the Calciner finds it cannot comply with the new WQBELs for DDT, PCB, and lead.

This TMDL-related permit is fraught with technical and legal complexity. But, at the core, this case is not that complicated, nor are the Calciner's requests.

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[2] The parties' meetings included March 29, 2012, May 17, 2012, December 10, 2012, January 31, 2013, and June 12, 2013.

[3] The Proposed WDRs impose the following numeric limits in micrograms per liter (µg/L) or pounds per day (lbs/day):

	Average Monthly	Maximum Daily
Lead	7 µg/L	14 µg/L
	0.1 lbs/day	0.1 lbs/day
DDT	0.0006 µg/L	0.001 µg/L
	5.4E-06 lbs/day	1.1E-05 lbs/day
PCB	0.0002 µg/L	0.0003 µg/L
	1.6E-06 lbs/day	3.1E-06 lbs/day

Core Facts

The Harbor waters and sediment are contaminated with primarily legacy pollutants, including DDT and PCBs. These were discharged long ago and now linger in air and then bounce around from land surfaces to water surfaces like grasshoppers. (May 5, 2011 Harbor Toxics TMDL Staff Report at 44, 52, 57, 103 (identifying the primary sources as nonpoint source from legacy sources);[4] (EPA Guidance, "Frequently Asked Questions About Atmospheric Deposition," (EPA No. 453, September 2001) at 5.) According to EPA, grasshopper pollutants are emitted from the original source, transported some distance, and deposited. From there, a portion is re-emitted, transported further, and re-deposited. As it rains, the runoff picks up the chemicals. DDT legacy pollution is particularly interesting. It was banned from use in the early 1970s, so there are no ongoing sources that discharge the pollutant. In fact, for DDT, the Regional Board has estimated that ***the amount of DDT from the air to the Inner Harbor waters is 129 grams per year. This alone exceeds the 3.56-gram-per year total allocated for DDT in the Inner Harbor.*** (Attachment A to Resolution No. R11-008 at p. 19.) Similarly, airborne lead remains within the environment even though leaded gasoline use was discontinued decades ago, and there is abundant literature establishing this.[5] PCBs also remain within the environment even though the TMDL did not specifically calculate a load allocation for the atmospheric sources of PCBs; ***in fact, the TMDL found that the Harbor waters are a source of PCBs to the atmosphere, and Harbor sediments are a source of PCBs to the Harbor waters.*** (TMDL Staff Report, Appendix III at p. III-46.)

Thus, the sources of pollutants to the Harbor are clearly historic, legacy sources, and the Calciner is not one of them. The Calciner did not use or discharge PCBs, DDT, or lead. There have been no PCBs or DDT detected at all in pond water at the Facility, based on 2007, 2008, 2009, 2010, and 2011 samples (note that no discharges to receiving waters occurred in these years). The lead that was detected in pond water is not representative of a discharge and is not known to cause a discharge above actionable levels. Thus, ***there is not a single data point that shows the Facility even discharges PCBs, DDT, or lead from its processes to receiving waters.*** (*See also* footnote 6 below.)

To confirm this conclusion, the Calciner evaluated whether its coke product could cause a non-compliant discharge. (June 6, 2012 Comment Letter at App. 2-4.) ***The Calciner found that if all the suspended solids in storm water from the Facility originated from coke, concentrations of metals (including lead) would be below the effluent limitations for these constituents. Based on these calculations and the fact that PCBs and DDT have not been present at the Facility, atmospheric deposition is the only viable source that could raise the concentrations of these constituents in the***

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[4] *See also* June 6, 2012 Calciner Comment Letter (submitted by Tesoro's predecessor, BP) at App. 2-4. (explaining that "[n]on-point sources, by definition, include pollutants that reach waters from a number of diffuse land uses and are not regulated through NPDES permits (Staff report at 44);" that "[a]tmospheric deposition is a nonpoint source of metals to the watershed through both direct deposition onto waterbody surface and indirect deposition onto land and then urban runoff carries into the waterbody (*id.* at 52)[;]" and that another nonpoint source of pollution includes "fluxes from currently contaminated sediments into the overlying water[.]"

[5] *See, e.g.*, Harris, A.R., and C.I. Davidson, The Role of Resuspended Soil in Lead Flows in the California South Coast Air Basin, *Environ. Sci. Technol.*, 2005, *39* (19), pp 7410–7415; Young, T.M., D.A. Heeraman, G. Sirin, and L.L. Ashbaugh, Resuspension of Soil as a Source of Airborne Lead near Industrial Facilities and Highways, *Environ. Sci. Technol.*, 2002, *36* (11), pp 2484–2490.

storm water that could in the future be discharged through Facility conveyances.[6] Further, PCBs, DDT, and lead sorb strongly to particles, and the particulates would likely settle in the pond water and be dredged and removed at the Facility.[7] It, therefore, is highly unlikely that any DDT, PCB, or lead that lands on the Facility and is carried to the pond could reach the Cerritos Channel. (Calciner's April 2, 2012 Comment Letter.)

Lastly – and even more compelling – ***if the Calciner and all other point sources ceased discharging to the Harbor altogether, the Harbor waters would still exceed the TMDL loads for DDT and PCBs***. (Comment Letter at App. 2-2 (explaining that even if all or most WLAs were close to or equal to zero, the TMDL for DDT and PCBs would not likely be attained because of the high levels of background (legacy) pollution).)[8]

The data show no reasonable likelihood of discharge, yet the Proposed WDRs assume a discharge and assign to the Calciner significant statutory duties and liabilities, including:

- immediate compliance with TMDL-based numeric limits that were developed on a 20-year schedule and the risk of significant penalties of up to $37,500 for any violation; and
- monitoring that is a science experiment of sorts where the Calciner – a very infrequent discharger – must go to the Channel and conduct extensive monitoring of water, fish, and sediment impacted by pollution other dischargers have caused over time. (Although a monitoring group has been formed, we do not know if we will be able to join the group, or the terms of participation, and we believe it is wholly inappropriate to impose on one discharger the duties of several.)

The Calciner's Requests

Based on these facts and applicable law, the Calciner has the following requests.

Ideally, we ask that the Regional Board:

1. Strike the TMDL-related limits and associated monitoring. We understand that staff believes that the mere existence of a Harbor Toxics TMDL compels it to impose numeric lead, DDT, and PCB limits on each and every NPDES permit holder within the watershed, even those, like the Calciner, that have no data that industrial processes result in the discharge of these pollutants

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[6] In particular, concentrations of copper, lead, and zinc in coke at Calciner are 1.1, 0.70, and 4.19 mg/kg on average, and range to maximum values of 10.65, 5.20, and 36 mg/kg, respectively. For total suspended solids ("TSS") concentrations of 38 mg/L [the concentration of TSS in the last discharge in January 2005], and if it is assumed that coke is the source of all TSS in storm water from the Facility, concentrations of copper, lead, and zinc in discharges could range as high as 0.4, 0.2, and 1.4 µg /L (*i.e.*, all well below the proposed effluent limitations). Thus, it is unlikely that exceedances would result from the coke product. See June 6, 2012 comment letter, at Appendix 2-4.

[7] In particular, the dredged material from the pond is profiled and typically landfilled as non-hazardous waste.

[8] *See* Tables 6 and 7 of the November 29, 2010 memorandum from TetraTech to Peter Kozelka at USEPA Region 9, included in Appendix III to the Staff Report for the Harbor TMDL. This memorandum presents model results for the "existing condition" scenario, and for a hypothetical scenario in which pollutants in inflows to the Harbor area were reduced to zero. Model results for the two scenarios show no difference in the maximum pollutant concentrations of DDT and PCBs in Long Beach Inner Harbor sediments, and a theoretical 2.84% and 1.20% difference for the average concentrations of DDT and PCBs, respectively, in Long Beach Inner Harbor sediments.

or those that have no control over the nonpoint-source pollution that enters their facility. But, the regulatory framework compels the opposite result for three primary reasons:

First, WLAs established by the Harbor Toxics TMDL must be considered but not without a reasonable potential analysis that properly considers the infrequent and intermittent nature of the Calciner's discharges. It is unclear that there exists a scientifically appropriate basis for determining reasonable potential for infrequent, intermittent discharges that occur only during extreme storm and high flow conditions. Further, where, as here, point sources are very small as compared to nonpoint source loadings or to the mass of pollutant already resident in the receiving water sediments, EPA allows waste minimization plans instead of numeric effluent limits. ("TMDLs Where Mercury Loadings are Predominantly From Air Deposition," at 12 (EPA, Sept. 2008).) Likewise, the nonpoint source nature of the pollution requires BMPs rather than numeric limits for such a discharge. (May 20, 2004 Policy for Implementation and Enforcement of The Nonpoint Source Pollution Program.) And, numeric effluent limits can be higher than the WLAs in circumstances where nonpoint source loadings are greater than point source loadings. (*See .e.g, State of Louisiana v. Joint Pipeline Group*, 2010 Ark. 374 (2010).)

Second, the Calciner is not an entity that discharges lead, DDT, and PCBs from a point source to navigable waters and, therefore, has no statutory obligation to obtain or be subject to a permit for pollutants it never adds to the Channel. It has long been established that no plant can be "said to be in violation of the limitations on account of pollutants that it did not add to the water." (*Appalachian Power Co. v. Train*, 545 F.2d 1351, 1378 (4th Cir. 1976).) The Proposed WDRs are contrary to the National Pollutant Discharge Elimination System ("NPDES").

Third, the California Toxics Rule ("CTR"), 40 C.F.R. § 131.38, is not a basis to impose numeric limits for the new Proposed WDRs for lead, PCBs, and DDT. EPA has established an exceedance frequency of once every three years for CTR. The Facility discharges only during a 50-year, 24-hour (or larger) storm event. Thus, discharges from the Facility are expected to occur far less frequently than once in a three-year period, and to result in a negligible "long-term" exposure. Further, CTR limits expressly apply only in receiving waters, not end-of-pipe.

Appendix I of our letter provides a legal basis for our position.

In addition, the Calciner believes that it is improper for the permit to require special studies to conduct monitoring of the Harbor receiving water column, sediments, and fish tissue. Tesoro requests that these special study requirements be deleted from the permit.

Alternatively, if the numeric WQBELs for lead, DDT, and PCB remain in the permit, we ask that the Regional Board:

2. Restore the 20-year implementation schedule for the TMDL and revise the new limits to numeric action levels that would function as monitoring thresholds that apply only during discharge. We do not believe that the original 20-year implementation schedule can be eliminated without industry input. The elimination of the 20-year implementation schedule required notice to industrial dischargers and the opportunity to be heard. We are also concerned that the final effluent limitations are becoming final before TMDL reopeners are considered by the Regional Board, and that anti-backsliding considerations would hinder the Board's ability to adjust or modify effluent limitations in response to future changes to TMDL targets and allocations. Appendix II of our letter provides legal authority for our position.

Further, as noted above, the Calciner believes that it is improper for the permit to require special studies to conduct monitoring of the Harbor receiving water column, sediments, and fish tissue. Tesoro requests that these special study requirements be deleted from the permit, or, if that is not possible, that the permit specify that these requirements only apply in years in which there is a discharge from the Facility to receiving waters. The requirement to submit a Monitoring Plan and quality assurance project plan ("QAPP") 20 months after TMDL effective date (top of p. 24 of the Proposed WDRs) is also unreasonable. The Harbor Toxics TMDL became effective in March 2012, so this language would require Tesoro to submit these documents in October 2013, before the effective date of permit.

Additionally, we ask that the Regional Board:

3a. Allow a compliance storm event provision and revise Average Monthly Effluent Limitation (AMEL) provisions in the Proposed WDRs. Appendix III of this letter describes this point further.

3b. Address the remaining relevant requests from the June 6, 2012 comment letter, namely:

- Eliminate from the Proposed WDRs the new limit for total petroleum hydrocarbons ("TPH") because the permit already contains oil and grease limits.
- Eliminate the effluent limitations for bacteria from the Proposed WDRs, and include the bacteria requirements solely as receiving water limitations.

Appendix III also addresses these points.

4. Address additional technical comments, outlined in Appendix IV of this letter, if the limits remain in the permit.

5. Confirm that any required TSO can be followed with a compliance schedule if the Calciner's studies find the Facility cannot comply with the TMDL-based WQBELs for PCB, DDT, and lead.

Concluding Remarks

In summary, for more than a year, staff have indicated that any pollutant that lands on the Calciner facility from off site or the air becomes the responsibility of Tesoro to monitor, treat, and reduce. This position is completely unsupported by law for an industrial discharger. We know of no legal authority that assigns to industrial dischargers the responsibility to monitor, treat, and reduce another discharger's pollutant. The Board has pointed to no authority that allows it to impose numeric effluent limitations that would likely force the Calciner to construct and build a treatment system to treat and reduce pollutants from another source outside the Facility. A facility has no means to control aerial deposition of legacy pollution, particularly where the waterbody itself is emitting PCBs that can travel in a grasshopper manner to facilities within the water basin. At the Calciner, street sweeping already occurs and would address nonpoint source atmospheric depositions of PCBs, DDT, and lead; however, we know of no evidence that street sweeping is sufficient to reduce legacy pollution from the air to levels that would allow compliance with the proposed effluent limitations. Even more compelling is the fact that there are no data that show the Calciner conveyances carry these pollutants to receiving waters.

The pollution in the Harbor sediments stems in part from the channel itself (for PCBs) and historic discharges and/or nonpoint source pollution. The staff report attributes the vast majority of pollutants to nonpoint source pollution. The condition of the Harbor must be addressed within the bounds of governing federal and state law. Because the majority of the contamination is nonpoint source, it falls within the nonpoint source program under the May 20, 2004 Policy for Implementation

and Enforcement of The Nonpoint Source Pollution Program, but unfortunately California has not developed its nonpoint source program well like many other states.[9] So, instead the Board and EPA are shifting nonpoint source responsibilities disproportionately upon NPDES permit holders. The NPDES program does not provide the legal authority to shift the burden of nonpoint source clean-up duties to point sources, and the TMDL process is not the appropriate tool. A recent Congressional study reached the same conclusion: ***the Clean Water Act "does not directly regulate nonpoint sources of pollution, including pollution resulting from atmospheric deposition," and state and local agencies also do "not have authority or tools to control these types of sources and would find it difficult to develop a project to control atmospheric deposition."*** (Claudia Copeland, "EPA Faces Challenges in Addressing Damage Caused by Airborne Pollutants," Report to Congressional Requesters at 22-23 (January 2013, Congressional Research Service, GAO-13-39).)

The lack of apparent regulatory authority to reach atmospheric deposition makes it impossible, in our view, for the Regional Board to impose numeric limits and monitoring duties based on airborne pollutants. More troubling is that a violation of a numeric limit or monitoring duty carries a risk of penalties of $37,500 per day. The Calciner has no reasonable means to control, address, or reduce airborne contaminants above its Facility, and we believe it is improper and inappropriate to include limits and duties wholly outside express legal authority and completely unrelated to Facility operations.

The risk of penalty is aggravated further by the Regional Board's elimination of the 20-year implementation schedule for the Harbor Toxics TMDL without notice to industrial stakeholders. As we stated in our June 6, 2012 Comment Letter,[10] this eliminates the even playing field for industrial dischargers and is contrary to the State Water Resources Control Board Water Quality Enforcement Policy. The Policy mandates fair and consistent enforcement actions, but that is not possible if some dischargers are punished rather than rewarded for early compliance. (See Policy at § I ("[t]he goal of the . . . Policy is to . . . [define] . . an enforcement process that addresses water quality problems in the most . . . consistent manner[.]")

We look forward to your reconsideration of striking the TMDL-based WQBELs for lead, DDT, and PCB from the Proposed WDRs as well as all associated monitoring requirements. Should the requirements remain, we ask that they appear as monitoring thresholds only and that monitoring apply only during years in which a discharge from the Facility occurs. We also request a design storm provision in the permit as described on page one of Appendix III.

Sincerely,

Adrian Rosu

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[9] Claudia Copeland, "Clean Water Act and Pollutant Total Maximum Daily Loads (TMDLs)," CRS Report for Congress Prepared for Members and Committees of Congress at 3, 6 (Sep. 21, 2012, Congressional Research Service, 7-5700, R42752) (explaining that TMDLs have been criticized as ineffective for restoring impaired waters when nonpoint sources with few or no controls are the main sources of impairment).

[10] We explained on page App. 1-2 of our June 6, 2012 comment letter that "[r]equiring a point source to achieve a limit based on WLAs before 2032 would burden the discharger unfairly as compared to other dischargers. Making a discharger who can comply early subject to a compliance schedule would subject the discharger to fines and penalties for any potential excursion above the applicable TMDL-based limits. If the Proposed WDRs are applied in this manner in the Calciner's and other permits, their implementation results in discriminatory action against those who might be able to comply early."

Appendix I

I. THE CLEAN WATER ACT'S TMDL AND NPDES PROGRAMS DO NOT SUPPORT ISSUANCE OF THE PROPOSED WDRs

The Clean Water Act's regulatory programs do not support the Proposed WDRs for DDT, PCBs, and lead from off-site or airborne sources.

A. TMDL PROGRAM REQUIRES REASONABLE POTENTIAL, THEN WQBELS "CONSISTENT WITH" NOT IDENTICAL TO THE WLAs

Where a TMDL exists, federal regulations require a two-step process to develop WQBELs: (a) a reasonable potential analysis and, ***if reasonable potential exists to cause or contribute to an excursion above a water quality standard ("WQS"),*** (b) development of effluent limitations that are "consistent with assumptions and requirements of any available wasteload allocation for the discharge." (40 CFR § 122.44(d)(1)(iii) then 40 CFR § 122.44(d)(1)(vii)(B).) EPA has recognized "consistent with" does not mean "identical to" the WLAs. (65 Fed. Reg. 64746, 64791 (October 30, 2000).) Thus, for example, "[e]ffluent limitations for point source discharges for storm water may be narrative . . . in terms of best management practices[.]" (*Id.*) Here, the Proposed WDRs for lead, DDT, and PCB improperly skip the reasonable potential analysis and impose numeric WQBELs identical to the WLAs. This is contrary to the regulations and unauthorized. The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (aka as SIP) in no way removes the federal requirement of determining reasonable potential under 40 C.F.R. § 122.44(d)(1)(i)-(iii).

In addition, Tesoro notes that the reasonable potential procedures contained in the SIP (which, per footnote 1, does not apply to stormwater) should not be applied to an infrequent, intermittent discharge that occurs only during storm events, when flow rates in the receiving water are extraordinarily high. As with the development of numeric limits for storm water discharges, it is unclear that there exists a scientifically appropriate basis for determining reasonable potential for infrequent, intermittent discharges that occur only during extreme storm and high flow conditions.

1. Numeric Limits Are Not Appropriate Where Point Sources Provide Small Load

Also, numeric limits are wholly inappropriate when a TMDL involves point sources that provide a very small load as compared to nonpoint source loadings. In such situations, EPA allows waste minimization plans instead of numeric effluent limits. ("TMDLs Where Mercury Loadings are Predominantly From Air Deposition," at 12 (EPA, Sept. 2008).) EPA states that in "situations where the pollutant loadings are primarily from air deposition" and "where point sources are very small compared to loadings from air deposition, states continue to have the option of implementing the WLA in permits through mercury minimization plans where appropriate." (*Id.* at 12.) In fact, most mercury TMDLs have identified waste minimization plans with follow-up monitoring to implement the WLAs rather than effluent limitations or criteria applied at end-of-pipe. EPA's policy is not limited to mercury but extends to any pollutant from atmospheric deposition. Likewise, the nonpoint source nature of the pollution in fact requires BMPs rather than numeric limits. (May 20, 2004 Policy for Implementation and Enforcement of The Nonpoint Source Pollution Program at 7 ("the most successful control of nonpoint sources is achieved by prevention or by minimizing the generation of NPS discharges.").) Clearly, minimization plans – rather than numeric limits – are the most successful, frequent, and appropriate means to address nonpoint source atmospheric deposition. Why, then, would the Proposed WDRs depart from this practice and instead impose numeric WQBELs? They should not. If the numeric WQBELs for lead, DDT, and PCB are not stricken from the permit, they should be monitoring thresholds with BMPs or a waste minimization plan consistent with these policies.

Imposing BMPs without numeric limits would be consistent with other TMDL practices we have been able to evaluate recently. For example, in 2010, the EPA issued a permit to the District of Columbia Water and Sewer Authority for their Blue Plains Wastewater Treatment Plant (NPDES Permit Number DC00211 9). The TMDL WLA that the permit implemented was based on four samples from the facility – very similar to the case here – and in lieu of numeric limits, EPA required that the permittee monitor for PCBs and develop and implement BMPs to reduce sources. (*Id.* at 10.) We believe a similar approach should be applied to the Calciner's WDRs.

2. Effluent Limits Can Be, and Should Be, Greater Than WLAs where Point Sources Contribute Small Loads

Lastly, where, as here, atmospheric deposition is the greatest contributor of a pollutant, a WQBEL in a permit can be greater than a WLA. For example, in *State of Louisiana v. Joint Pipeline Group*, 2010 Ark. 374 (2010), the state of Louisiana and certain non-governmental organizations challenged an NPDES permit because its numeric mercury effluent limit was above the applicable TMDL WLA. The court affirmed the permit, noting even if the TMDL was zero, the WQS would not be attained because of the high mercury loadings from nonpoint source pollution and background. (*Id.* at *10.)

Here, the Harbor Toxics TMDL raises the precise issue in *State of Louisiana*. Even if the WLAs from point sources were zero, the TMDL loads would be exceeded. (Comment Letter at App. 2-2.)[1] In such situations, it is inappropriate and unreasonable for staff to interpret applicable regulations to compel numeric WQBELs equal to the WLAs. Neither the regulations, case law nor established TMDL practice compels this result.

B. THE NPDES PROGRAM PROVIDES NO BASIS FOR THE PROPOSED WDRS; NPDES REQUIRES "DISCHARGES OF POLLUTANTS" "BY" PERSONS FROM A "POINT SOURCE" – NONE OF WHICH EXIST HERE

The NPDES Program does not provide a basis for the Proposed WDRs. The Clean Water Act ("CWA") prohibits the discharge of pollutants to navigable waters from a point source by any person. (33 U.S.C. §§ 1311(a), 1342.) There are three elements: the discharge must be "by" a person; from a point source; and of pollutants.

1. Clean Water Action Requires A Discharge "By" A Person But There is None

CWA Section 1311(a) provides that "the discharge of any pollutant *by any person* shall be unlawful." (33 U.S.C. § 1311(a) (emphasis added).) Stated differently, the CWA makes it unlawful for a person to discharge any pollutant. The only allowable discharges are under a NPDES permit or other permit.

a. There is no Legal Responsibility to Remove Pollutants of Others

It is a long-standing principle under the Clean Water Act that "[w]ithout causation, there is no legal responsibility for removing pollutants from the water." (*National Wildlife Federation v. Gorsuch*, 693 F.2d 156, 182 (D.C. Cir. 1982) (citing *Appalachian Power Co. v. Train*, 545 F.2d 1351, 1377 (4th Cir. 1976).) No plant can be "said to be in violation of the limitations on account of pollutants that it did not

[1] *See* Tables 6 and 7 of the November 29, 2010 memorandum from TetraTech to Peter Kozelka at USEPA Region 9, included in Appendix III to the Staff Report for the Harbor TMDL. This memorandum presents model results for the "existing condition" scenario, and for a hypothetical scenario in which pollutants in inflows to the Harbor area were reduced to zero. Model results for the two scenarios show no difference in the maximum pollutant concentrations of DDT and PCBs in Long Beach Inner Harbor sediments, and a theoretical 2.84% and 1.20% difference for the average concentrations of DDT and PCBs, respectively, in Long Beach Inner Harbor sediments.

add to the water." (*Appalachian Power,* 545 F.2d at1378.) EPA established long ago that the addition from a point source occurs only if the point source itself physically introduces a pollutant into water from the outside world. (*Gorsuch,* 693 F.2d at 172.)

NPDES permit authority is limited to the pollutants that an entity adds from the outside world. In *Appalachian,* industrial dischargers contested EPA's authority to require removal of pollutants that enter a plant through its intake water. The court said that "constituents occurring naturally in the waterways or occurring as a result of *other industrial discharges,* do not constitute an addition of pollutants by a plant through which they pass." (*Id.* (emphasis added).) The industrial parties argued that EPA was requiring them to treat and reduce pollutants they did not add. The court agreed this was beyond the scope of the CWA. The court's discussion on this point simplified in a brief manner that one discharger cannot be responsible for treating and reducing the pollutants of "other industrial discharges."

Here, the Calciner faces almost the same situation as the parties in *Appalachian.* The Calciner is being asked to reduce and treat grasshopper-like nonpoint source pollution that lands on its Facility from outside sources beyond its control. Those pollutants are "the result of other discharges." We know these pollutants are nonpoint source because the SWRCB defines nonpoint source pollution as that which ***"results from contact between . . . runoff. . .[and] atmospheric deposition***[.]" (May 20, 2004 Policy on the Nonpoint Source Pollution Program at 7 (emphasis added).) Tesoro by no means adds DDT, PCBs, or lead from the air to stormwater it takes in to use on site. The DDT, PCBs, and airborne lead present in stormwater intake come from two nonpoint sources: nonpoint source-impacted stormwater that picks up dry-deposited DDT, PCB, and lead, and nonpoint-source wet deposition that lands on the surface of the Calciner's pond. The NPDES program does not make the Calciner subject to limits for such nonpoint source pollution.

b. <u>Nonpoint Source Pollution Does not Convert to Point Source Like the Board Argues</u>

The Board has argued that nonpoint-source pollution instantly changes into point source pollution simply because natural forces – like wind and rain – bring the pollutant to a facility. Specifically, the Board argues that point source discharges can occur "regardless of whether the pollutant came to be present at facility from past activities" as long as the pollutant reaches the water through a facility conveyance. (*See* August 9, 2013 Response to Comments at 5.) This regulatory approach, however, has limited scope. It has been applied in the majority of cases only to the Municipal Separate Storm Sewer System systems ("MS4s") (which are designed to treat and reduce the pollutants of others) or to property owners who own contaminated land that leaches pollutants into runoff.[2] This rule does not stretch so far as to include every facility where the atmosphere deposits contaminants. If it did, the NPDES permit system would need to grow by leaps and bounds to include almost every sizeable home, church, school and office building where such pollution lands and causes runoff that exceeds a TMDL WLA. Indeed, the argument that nonpoint source runoff turns into a point source discharge was rejected in *Gorsuch* where the pollution simply passed through a dam structure. EPA concluded long ago that the character of nonpoint source pollution does not change simply because it

[2] *See e.g., S. Florida Water Mgmt. Dist. v. Miccosukee Tribe of Indians,* 541 U.S. 95, 105 (2004) (holding that one of the primary goals of the CWA was to impose NPDES permitting requirements on municipal wastewater treatment plants and that "discharge of a pollutant" includes point sources that do not themselves generate pollutants but only convey the pollutant to navigable waters); *West Virginia Highlands Conservancy v. Huffman,* 625 F.3d 159 (4th Cir. 2010) (imposing NPDES permitting on a state agency that discharged water during cleanup activities because the agency was the "superintendent" of the waste from the clean-up activities).

passes through a facility. (*Gorsuch*, 693 F.2d at 172-182.) Likewise, the nonpoint source atmospheric deposition cannot constitute a point source merely because it passes through the Calciner's pond.

2. Point Sources Exist Under Specific Circumstances, None of Which Exist Here

A point source exists where there is (a) a conveyance "from" which a pollutant discharges; and either (b) an actual discharge of pollutants or (c) a reasonable likelihood that the conveyance will deposit pollutants to navigable waters.

a. Point Sources Include Only Conveyances "From" Which Pollutants Are Discharged

Point sources include "any discernible, confined and discrete conveyance, including . . . any pipe, ditch, . . conduit. . . *from* which pollutants are or may be discharged. " 33 U.S.C. § 1362(14) (Emphasis added). The Second Circuit has found that "from" indicates a starting point and denotes the original force of something. (*Peconic Baykeeper v. Suffolk City*, 600 F 3d 180, 188-189 (2d Cir. 2010).) In *Peconic*, the court found that pesticide-spraying airplanes were point sources because they were a starting point for pollutants when they sprayed over a waterbody. The court explained, "[t]he pesticides were discharged 'from' the source and not from the air." (*Id.* at 188.) Two distinct elements, therefore, are required to find a point source: (i) a starting point for the pollutant and (ii) a conveyance of the pollutant.

Here, the Calciner is not a point source for DDT, PCBs, or airborne lead because it is not the starting point for these contaminants and because it has no data to show it conveys the pollutants to navigable waters. Quite simply, the starting point is the air, not the Calciner. The Facility has no record of ever handling, managing, or discharging DDT or PCB chemicals. The Facility also has no reason to believe that lead from its coke product could be a source of pollution in water. The Calciner can only be a point source where it is both the starting point and the means of conveyance for a pollutant. Neither is true here.[3]

b. Point Sources Involve Actual Addition

Not only is the Calciner not a starting point or likely means of conveyance for this pollutants, no actual addition of lead, DDT, or PCB can be established. The law is clear: "In absence of an actual addition of any pollutant to navigable waters, there is no point source discharge. . . no statutory obligation of point sources to comply with EPA regulations . . . and no statutory obligation of points sources to seek or obtain any NPDES permit in the first instance." (*Envtl. Prot. Info. Ctr. v. Pac. Lumber Co. ("EPIC")*, 469 F. Supp. 2d 803, 827 (N.D. Cal. 2007).) Before issuing the Proposed WDRs as final, the Regional Board must establish an addition of DDT, PCBs, and lead by Tesoro from a point source at the Calciner. No data exists to do so. Pond water sampled in 2007, 2008, 2009, 2010, and 2011 showed no detection of PCB or DDT. Lead levels detected in the pond were compliant with the proposed limits, but these may not be representative of actual discharges because they were of pond water.

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[3] Notably, Ninth Circuit courts have followed the *Peconic* decision and refused to find point source discharges unless both a starting point and conveyance are found. (*Alaska Cmty. Action on Toxics v. Aurora Energy Servs., LLC*, 2011 U.S. Dist. LEXIS 22173 (D. Alaska 2011) (airborne coal dust is not a point source without a means of conveyance); *Alaska Cmty. Action on Toxics v. Aurora Energy Servs., LLC*, 2013 U.S. Dist. LEXIS 57516, 54 (D. Alaska Mar. 28, 2013) (same); *Ecological Rights Found. v. Pac. Gas & Elec. Co.*, 713 F.3d 502, 509 (9th Cir. April 3, 2013) (utility poles that leach are not point sources without a discrete conveyance).)

c. **Point Sources Do Not Include the Calciner's Collection of Stormwater Where No *Reasonably Likelihood* of Discharge Exists**

To overcome the lack of data, the Board instead argues that the Calciner's collection of the rainwater for on-site recycling for cooling water is sufficient to establish the Calciner's conveyances as point sources. But again, this position is not supported by law. "Point source can include collected or channeled runoff if – and only if – the "conveyances . . . are ***reasonably likely*** to be the means by which pollutants are ultimately deposited into a navigable water body." (*EPIC*, 469 F. Supp. 2d at 821 (citing *Cancerned Area Residents for the Env't v. Southview Farm*, 34 F.3d 114, 118 (2d Cir. 1994).) Thus, courts have found point source discharges in numerous situations where a facility's collection of waste (in a pile, a ditch, or other collections) allows pollutants to reach navigable waters, such as through a pipe and swale (a ditch) (*Sauthview Farm*).

Here, the Calciner's collection of water does not constitute a point source at all because it is *reasonably unlikely* that the Calciner would channel or convey pollutants to navigable waters. As explained in the Calciner's April 2, 2012 comment letter, the Facility discharges only during significant storm events and after significant removal of settleable solids has occurred in the pond. The Facility also conducts street sweeping pursuant to Rule 1158 of the South Coast Air Quality Management District. There is little basis to believe that particulates discharged from the Calciner would reach the sediment bed of the receiving water; rather, because settleable solids are removed at the Facility prior to discharge, the non-settleable solids that could be discharged would likely be carried through the receiving waters without settling to the sediment bed. This is particularly true because discharges will occur only during extremely large storm events, when there is a tremendous flow of water from land surface and rivers throughout the region, and flows through the Harbor area will be unusually large. Until there are data to show a reasonable likelihood that the Calciner's conveyances will deposit pollutants in the Channel, Tesoro cannot be subject to the Proposed WDRs for lead, DDT, and PCBs.

Based on the foregoing, the Calciner's conveyances are not point sources for DDT, PCB, and airborne sources of lead.

3. **At Most, There is a Potential Discharge of Pollutants, but No Actual Discharge of Pollutants; A Discharge of Pollutants Requires Addition; Effluent Limitations Require Data**

At most, the Proposed WDRs attempt to regulate a *potential* discharge of pollutants from the Calciner. But, the Board cannot require permits for potential discharges, only actual discharges to navigable waters. (*National Pork Praducers*, 635 F.3d 738 (5th Cir. 2011) (striking down for a second time EPA's attempts to require confined animal feeding operations – CAFOs – to apply for permits whether or not the CAFOs discharged).)

a. **Discharge of Pollutants**

To establish a discharge of pollutants under the CWA, staff must show an addition of pollutants that is channelized by the Calciner. At times, ownership of a point source will trigger liability on the theory that "if you own the leaky 'faucet,' you are responsible for its 'drips.'" (*Sierra Club v. El Paso Gald Mines, Inc.* 421 F.3d 1133, 1145 (10th Cir. 2005).) In *Sierra Club*, the court held the owners of an inactive mine shaft responsible "for the discharge of pollutants occurring on their land, whether or not they acted in some way to cause the discharge." The court noted:

> The introduction of 'point source' into the statutory scheme to define 'discharge' and give context to 'addition' can only mean that we look to whether the point source is

actively adding pollutants to navigable waters. And if the point source is 'discharging,' the 'person' who owns or operates the point source is liable under the Act. (*Id.*)

The Calciner is not actively adding pollutants, nor is it an owner who controls contaminated land that leaches pollutants into runoff. Clearly, the Calciner's facility has no means to "control the leaky faucet" in these circumstances. The "leaks," so to speak, come from the air and that faucet is too large to control.

b. No Data Exist to Support the Proposed WDRs for Lead, PCB, and DDT

Additionally, there are no data upon which to impose the Proposed WDRs for lead, DDT, and PCBs. Effluent limits are improper if based on a lack of data. (*In the Matter of Chevron U.S.A. Inc.*, Order No. WQO 2002-0011, 2002 Cal. Env. Lexis 11, 14-15 (State Water Resources Control Board, 2002).) Without evidence of a discharge, it is improper to impose effluent limits. *Id.* at 20.[4] Further, at least one court has previously held that only the last three years of data should be used since data before that timeframe may not accurately reflect the actual plant performance. (*See City of Woodland v. CVRWQCB and SWRCB*, Order Granting Writ of Administrative Mandumus, Alameda County Superior Court Case No. RG04-l88200 (May 16, 2005) at page 13 (if no detections three years prior to date of RWQCB Order, then no reasonable potential and the Order should not contain limits for that substance); see also 40 C.F.R . § 122.21(j)(4)(vi) (suggesting using last 4.5 years of data).)

Together the legal authorities and evidence show there is (a) no discharge of pollutants, (b) "by" Tesoro (c) from a point source (d) to navigable waters. In absence of these elements, there is "no statutory obligation of point sources to comply with EPA regulations . . . and no statutory obligation of point sources to seek or obtain any NPDES permit in the first instance." (*EPIC,* 469 F. Supp. 2d at 827.)

C. THE CTR DOES NOT PROVIDE A BASIS FOR THE PROPOSED WDRs

The California Toxics Rule ("CTR"), 40 C.F.R. § 131.38, is not a basis to impose numeric limits for the new Proposed WDRs for lead, PCBs, and DDT.

EPA has established an exceedance frequency of once every three years for CTR, stating that the CTR "acute criterion for a pollutant [may] be exceeded no more than once in three years on average" and that "the chronic criterion for a pollutant be exceeded no more than once in three years on the average." (65 Fed. Reg. 31682, 31702 (May 18, 2000).)[5] As noted throughout these comments, the

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[4] In *In the Matter of Chevron U.S.A. Inc.*, Chevron contended that the Regional Board improperly evaluated its ability to meet new effluent limits based solely on the use of past performance data that underestimated the true range of data over time. The State Board agreed. "[W]e noted the potential problems associated with calculating limits based upon small data sets because the maximum observed value may not be truly representative of the full range of data." *Id.* at 14-15. Chevron also contended that past pesticide manufacturing without other evidence of discharge did not provide a basis for imposing limits on non-detected compounds. *Id.* at 19. Again, the State Board agreed. "Past manufacture of pesticides does not establish the reasonable potential for causing or contributing to an exceedance . . . if the facility where manufacturing took place has no discharge through which remaining pesticides could reach receiving waters." (*Id.* at 22.)

[5] The CTR Final Rule notes, "[t]he aquatic life criteria are considered by EPA to be protective when applied under the conditions described in the section 304(a) criteria documents and in the TSD. For example, water body uses should be protected if the criteria are not exceeded, on average, once every three year period." (65 Fed. Reg. at 31700). The Rule further specifies as follows:

> Exceedances frequency: In a water quality criterion for aquatic life, EPA recommends an allowable frequency for excursions of the criteria... This allowable frequency provides an appropriate period of time during which the aquatic community can recover from the effect of

Facility discharges only during a 50-year, 24-hour (or larger) storm event. Thus, discharges from the Facility are expected to occur far less frequently than once in a three-year period, and to result in a negligible "long-term" exposure when compared to a 70-year exposure period. On this basis, Tesoro maintains that numeric limits for DDT, PCBs, and lead are entirely inappropriate for discharges from the Calciner; or that a design/compliance storm is justified for numeric limits based on CTR aquatic life criteria, and also appropriate for human health-based criteria.

Further, CTR limits expressly apply only in receiving waters and, within this scope, include points that discharge directly in receiving waters. (40 C.F.R. § 131.38(c) ("the criteria apply throughout the water body including at the point of discharge into the water body.") The criteria do not apply end-of-pipe for a facility, like the Calciner, that does not discharge directly to receiving waters.

> an excursion and then function normally for a period of time before the next excursion. An excursion is defined as an occurrence of when the average concentration over the duration of the averaging period is above the CCC or the CMC... In addition, providing an allowable frequency for exceeding the criterion recognizes that it is not generally possible to assure that criteria are never exceeded... Based on the available data, today's [CTR] rule requires that the acute criterion for a pollutant be exceeded no more than once in three years on average. EPA is also requiring that the chronic criterion for a pollutant be exceeded no more than once in three years on the average. (*Id.* at 31702.)

Similar considerations also apply for CTR criteria intended to protect human health. As noted in the Rule, "EPA's model for human health effects assumes that such effects occur because of a long-term exposure to low concentration of a toxic pollutant, for example, two liters of water per day for seventy years." (*Id.*) This type of exposure is not possible for a discharge that occurs extraordinarily infrequently, and that is very short (one day or less) in duration.

Appendix II

II. REJECTION OF A TMDL IMPLEMENTATION SCHEDULE REQUIRES RULE MAKING

Tesoro also believes the Proposed WDRs are improper because they eliminate the 20-year implementation schedule for the Harbor Toxics TMDL. An interesting turn of events led to the rejection of this schedule. Originally, on February 14, 2012, the TMDL included provisions for a 20-year implementation schedule, and compliance with the final wasteload allocations was not required until 2032, as outlined in a January 27, 2012 memorandum from the Regional Board to the State Water Resources Control Board and other public documents and hearings. Our June 6, 2012 Comment Letter outlines the 20-year implementation schedule in depth so we will not repeat that here. On March 23, 2012, EPA did not approve the 20-year implementation schedule. On May 30, 2012, EPA verbally requested that the Los Angeles Regional Water Quality Control Board clarify its February 14, 2012 request for EPA approval of the 20-year TMDL implementation schedule pursuant to state authority to adopt water quality standards under CWA Section 303(c). On August 31, 2012, the Regional Board clarified to EPA that the CWA Section 303(c) request was apparently not a request for a 20-year implementation schedule but instead was a request for compliance schedules, which involve different regulatory programs and policy, including Section 122.47 of Title 40 of the Code of Federal Regulations. EPA approved the Regional Board request on November 8, 2012.

The Calciner learned of the letter correspondence between EPA and the Regional Board because it asked during a December 10, 2012 meeting. In response, Board staff revealed the existence of and produced copies of the letters on the subject of the 20-year implementation schedule. No notice was provided about EPA's rejection of the 20-year implementation schedule for the Harbor Toxics TMDL. Today, it appears that the TMDL that the Regional Board based and passed on 20-year implementation schedule has become effective immediately because the EPA and the Regional Board exchanged letters in 2012.

A. EPA'S AND THE REGIONAL BOARD'S LETTER EXCHANGE CHANGED THE WLAs FROM INTERIM TO FINAL

EPA's and the Regional Board's letter exchange fundamentally changed the WLAs from interim limits to final limits. At numerous public hearings, dischargers were told that the WLA was interim only for 20 years and that final attainment was in 2032. Then, Resolution No. R11-008 was adopted on May 5, 2011 and memorialized the Harbor Toxics TMDL as "interim" in the first year and final in 2032. Now, dischargers are learning about a different WLA that is immediately final, apparently for all classes of discharger except for MS4s.

B. THE ELIMINATION OF THE 20-YEAR IMPLEMENTATION REQUIRES NOTICE AND OPPORTUNITY TO BE HEARD

The elimination of the 20-year implementation schedule required notice and opportunity for industry to be heard, as mentioned in our June 6, 2012 comment letter.

Normally, approval or disapproval of state submissions under the Clean Water Act are not rule making subject to notice and comment. (*Sierra Club* v. *United States EPA*, 162 F. Supp. 2d 406, 419-420 (D. Md. 2001).) However, disapproval of a state's implementation plan can trigger new rulemaking notice. (*See Bravos* v. *Green*, 306 F. Supp. 2d 48 (D.D.C. 2004).)

The extent of rulemaking notice arose in *Bravos* v. *Green*, 306 F. Supp. 2d 48. There, litigation involved a TMDL, which was adopted by the state environmental department and submitted to the EPA along with a proposed implementation schedule. The EPA issued a letter that it had reviewed this plan.

Citizens sued, arguing that this letter unlawfully approved the plan, which lacked the requisite reasonable assurances that the TMDLs would be implemented. The EPA countered that the court lacked jurisdiction over the suit, arguing that there was no agency action as the letter did not constitute approval of the plan. The court agreed with EPA, finding that EPA had only commented on the implementation plan and that the EPA letter did not approve the plan.

Here, unlike *Bravos,* EPA and the Regional Board have done more than merely comment on the 20-year implementation schedule. EPA disapproved the implementation schedule and in doing so changed the WLAs radically from interim to final. Such a change in the waste load allocation is a final agency action under the APA and also constitutes rulemaking that should have triggered notice requirements.

Federal regulations do not allow EPA the ability to unilaterally change TMDL WLAs. Specifically, 40 C.F.R. § 130.7(d)(2) requires public notice and comment whenever the Regional Administrator disapproves a loading. EPA has disapproved a loading, namely the interim WLA of the Harbor Toxics TMDL. The regulation allows EPA to make virtually any revisions if "deemed appropriate" but requires notice to stakeholders. The regulation further provides that the state must include EPA's changes in its water quality plan. (*Id.*) Now that EPA has rejected the 20-year implementation schedule, this would require, in our view, a revision to the references to "interim" and "final" in May 5, 2011 Basin Plan Amendment, specifically to Table 7 of Resolution No. R11-008. The WLAs are no longer interim in any manner and the Resolution is inaccurate and in need of the revision envisioned in 40 C.F.R. section 130.7(d)(2).

Appendix III

III. Design Storm Event and Other Provisions Are Proper to Add

A. Provisions Related to a Design Storm

In the June 6, 2012 Comment Letter, the Calciner sought time to perform a water retention study. Tesoro's predecessor, BP, conducted extensive hydrologic analyses, which were submitted to the RWQCB on March 21, 2013, to establish that the Facility has the capacity to retain water from a 50-year, 24-hour storm, and would discharge to receiving waters only for storm volumes larger than would be generated by this size storm. The Facility's retention capacity equates to 5.45 inches of rainfall and about 2,227,000 gallons of stormwater. The Facility has implemented innovative and extensive water management practices, including on-site recycling of most process and storm waters and the ability to discharge to a POTW, in order to minimize discharges to receiving waters. In light of the study, four changes to the Proposed WDRs are warranted.

First, Tesoro requests a design storm event provision and related provisions that include the following underscored additions:

[at II. Findings [at end of B. Facility Description]]

Design Storm Event. Section VI.C.3 of this Order establishes design storm standards that serve to measure compliance based on Discharger's demonstration of storm water retention capacity. The design storm event standards are specific to this Facility only and do not serve as that basis for any other design storm standards. The standards exceed the design standards of Order No. R8-2012-0012, NPDES Permit No. CAG 618001, related to the Santa Ana Regional Water Quality General Sector Permit for Scrap Metal Recycling. Although related to a different industry sector, Order No. R8-2012-0012, NPDES Permit No. CAG 618001 serves as the model for the compliance criteria because it is the only comparable industrial permit within the State of California that includes a design storm applicable to numeric effluent limits for discharges of stormwater related to industrial activity.

[at IV. Effluent Limitations and Discharge Specifications at A.1]

1. *The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001, as described in the attached Monitoring and Reporting Program (MRP) (Attachment E):), and far events smaller than the design storm event:*

[at VI. Provisions at C.3 as d]

d. *Design Storm for Treatment Control Measures: All treatment systems shall be sized and designed to treat the discharge resulting from a 50-year, 24-hour storm event based on historical daily rainfall information for the location where the regulated facility is located. An analytical result from flows exceeding a design storm shall not be used in determining any exceedances of effluent limits or other permit violations and shall not be used in calculations leading to revised effluent limits.*

[at VII. Compliance Determination]

A. Single Constituent Effluent Limitation.

If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported ML (see Reporting Requirement I.G. of the MRP), and the storm size is smaller than the design storm event, then the Discharger is out of compliance.

B. Effluent Limitations Expressed as a Sum of Several Constituents.

If the sum of the individual pollutant concentrations is greater than the effluent limitation, and the storm size is smaller than the design storm event, then the Discharger is out of compliance. In calculating the sum of the concentrations

. . .

H. Instantaneous Minimum Effluent Limitation.

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, and the storm size is smaller than the design storm event, a violation will be flagged . . .

I. Instantaneous Maximum Effluent Limitation.

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, and the storm size is smaller than the design storm event, a violation will be flagged . . .

[at Attachment A – Definitions]

Design Storm

A design storm is the rainfall depth or intensity to which the treatment systems shall be designed. For this Facility, the Design Storm Event is defined as a 50-year, 24-hour storm event. A 50-year, 24-hour storm event represents the 24-hour amount of precipitation that will occur once in a 50-year period, on average. An analytical result from flows exceeding a design storm shall not be used in determining any exceedances of effluent limits or other permit violations and shall not be used in calculations leading to revised effluent limits.

The addition of these provisions is well supported by the record. RWQCB staff indicated during our meetings that the RWQCB did not have the precedent of implementing design storms in NPDES permits, and that it would take a Board action to establish a design storm for the Facility's permit. Tesoro continues to believe that a design storm provision is appropriate for this Facility, and requests that the RWQCB direct Staff to include a Design Storm in the current permit, as detailed in this appendix.

Second, we do not believe that Average Monthly Effluent Limitations ("AMELs") in an NPDES permit can be applicable for discharges that occur on only one day (or less) in any given month. In late January 2013, we requested that paragraph 6 of Section VII of the tentative permit be revised to read as follows (with new language underscored):

> *If the average (or when applicable, the median determined by subsection E above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single vialation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31days of non-compliance in a 31-*

day month). If only a single sample is taken during the calendar month, quarter, or semi-annual or annual period, and the ~~analytical result for that sample exceeds~~ discharge was shorter than four (4) days in duration, the AMEL, ~~the Discharger will be considered out of compliance for that calendar month~~ shall not apply.

Tesoro continues to believe this is an appropriate revision for the permit. This is because, for aquatic life, the averaging period applicable to chronic water quality criteria, from which the effluent limitations were derived, is longer than the exposure period that occurs during a short-term (four days or less) discharge. In other words, a short-term exposure (shorter than the chronic toxicity exposure duration) does not have the potential to cause chronic toxicity. Similarly, the criteria intended to protect human health were developed assuming 70 years of human exposure, a scenario that clearly does not and will not occur for discharges from this Facility. (See also Appendix II for a discussion of the averaging periods established by the CTR for aquatic life and human health criteria.)

The addition of this provision is well supported by the record. Tesoro and its predecessor, BP, provided detailed engineering data and information to the RWQCB indicating that discharges from the Facility are infrequent and intermittent, and highly unlikely to occur for more than a 24-hour period. The language of the Proposed WDRs indicates that, under these circumstances, both the maximum daily effluent limit (MDEL) and the lower AMEL would apply to that discharge. Tesoro believes that this is technically inappropriate (for reasons provided in prior comments) and in effect would apply two different effluent limits to a single discharge event. Tesoro does not object to the use of AMELs for discharges that occur for more than four consecutive days per month. Tesoro requests that the RWQCB insert language previously provided to RWQCB staff to clarify that AMELs would not apply to a discharge that occurs for four consecutive days or less in any given month.

Third, Tesoro requests a provision related to the stormwater-only discharges. Based on the ability of the Facility to retain stormwater, in June 2013, Regional Board staff indicated that they could revise the AMEL if process water discharges were segregated from storm water discharges, such that any discharge to receiving water consisted only of storm water without a process water component. The Calciner is capable of retaining storm water for a 50-year, 24-hour storm and requests a provision that states:

Average Monthly Effluent Limitations (AMELs) shall not apply to discharges that consist of storm water only. If discharges consist of storm water only, only Maximum Daily Effluent Limits (MDELs) shall apply for all the constituents except bacteria, for which geometric mean limits shall apply, and acute toxicity, for which average monthly survival shall apply. The Discharger shall demonstrate discharges are storm water only in accordance with best management practices specified in an approved storm water segregation plan, which shall be submitted by the Facility for EO approval. The MDEL limits are included in Table XX.

Lastly, the stormwater study should be reflected in the Proposed WDRs, given that it was requested by staff and involved extensive manpower to prepare. Accordingly, Tesoro reiterates its January 31, 2013 request to change the Facility description to reflect stormwater runoff and the stormwater retention capacity. We request that the Findings (pp. 6-7) be revised as follows (with additions shown in underscore) and that conforming changes be made to Attachment F (pp. 5-6):

Tesoro Refining & Marketing Company, LLC (hereinafter Discharger) is currently discharging storm water associated with industrial activities as well as certain treated wastewater from

The remaining wastewaters generated by the Facility~~, which~~ consist of storm water ~~commingled~~ combined for recycling with process wastewaters (boiler safety relief system blowdown, boiler feed water pump seal flush, green coke drainage, miscellaneaus wash waters, and caoling tower overflaw)~~are discharged to surface waters only when the retention basin reaches full capacity~~. The ~~Facility's~~ Facility takes in storm water and is designed with impervious areas that are sloped to convey starm water associated with industrial activity and process waters to one of twa lift stations which pump collected water to the Facility's settling basins. The treatment system consists of two, concrete-lined, 2-compartment settling basins (eastern and western basin; 110,000 gallons each) which are used for removal af settleable solids. Following treatment in the settling basins, the waste stream flows into a 680,000-gallan retentian basin for additional settling and neutralization with sulfuric acid (as needed). The treated wastewater is recycled back to the Facility for use as cooling water ~~under normal, dry-weather operations~~. During normal operations, the Facility recycles all water from the large basin and uses it as cooling tawer make up water in all but extremely large starm events where rainfall is higher than the recycling rate.

Using this storm water intake and recycling system, the Facility has eliminated most discharge events from the Facility to the receiving water. In December 2010, the Facility encountered the largest amount of rainfall in the Lang Beach area since about 1984 and successfully managed all starm water an site without discharging. The December 2010 starm event enabled the Facility ta evaluate its retention capacity and starm water handling procedures and ta enhance its management of storm water significantly such that now the Facility ensures that 80 percent of its basin remains available for storm events. The Facility has alsa secured an increased discharge limit to the local LAC5D to enable it to discharge additional wastewater, including caoling tower blawdawn, if necessary, at all times (including during starm events) thereby enabling the Facility to recycle a higher amount of storm water through the cooling tower. Based on experience and recent engineering studies, the Facility canfirmed that its design enables the retention of a 50-year-starm 24-hour storm event (i.e. a 24-hour amount of precipitation that will occur once in a 50-year period, on average).

B. Other Provisions

Tesoro also has a few additional comments:

- **Effluent limitations for indicator bacteria.** Tesoro and its predecessor, BP, commented that the effluent limitations for indicator bacteria are duplicative of receiving water limitations for the same pollutants. Tesoro believes that these limitations are not required to be included in NPDES permits solely because of the Los Angeles Harbor Bacteria TMDL; as with effluent limitations derived from the Harbor Toxics TMDL, it is unknown whether discharges from the Facility would comply with these limitations. A bacteria limit is inappropriate absent information that bacteria are present at the Facility from Facility processes.

- **Effluent limitations for total petroleum hydrocarbons (TPH).** As stated in earlier comments, Tesoro believes that the proposed new effluent limitations for TPH are duplicative of existing effluent limitations for oil and grease. Further there is no reasonable potential for TPH in discharges. Staff's visit to the Facility on April 2, 2013 did not detect TPH and assumed, without data or other reliable information, that a sheen on the pond water could be TPH. Instead that sheen was associated with fine coke dust particles floating on top of the water in the pond, and was not an oil based sheen. A TPH limit is inappropriate absent information that TPH is present at the Facility from Facility processes.

Appendix IV

IV. Additional Technical Comments

Tesoro and its predecessor, BP, previously submitted several comments that were considered by RWQCB staff but that did not result in changes to the permit. Tesoro continues to believe that the Proposed WDRs should not contain any monitoring requirements or numeric effluent limits associated with lead, DDT, or PCBs. If these requirements and limits remain in the permit, Tesoro requests a Time Schedule Order and changes that are appropriate for the current permit. These requested changes are summarized briefly below.

- **Discharge sediment monitoring.** On page 15 of the Revised Tentative Permit, footnote 4 to Table 6 requires detailed sediment analyses only if both TSS limit is exceeded and a CTR TMDL-based limit for copper, lead, zinc, 4,4'-DDT, total PCBs, benzo(a)pyrene, or chrysene is exceeded. Tesoro supports this change. However, Tesoro is concerned that language specifying that, if this occurs, "then the Discharger has not demonstrated attainment with the interim sediment allocations stipulated by the Harbor Toxics TMDL" may be misinterpreted to mean that this occurrence (i.e., exceedance of both the TSS limit and a CTR TMDL-based limit) may itself constitute a permit violation, which we do not believe was the intention of this language. Tesoro requests that the footnote be modified to read as follows:

  > "[4] During each reporting period, if effluent monitoring results exceed both a TSS effluent limit and a CTR TMDL-based effluent limit or performance goal for copper, lead, zinc, 4,4-DDT, total PCBs, benzo(a)pyrene, or chrysene, ~~then the Discharger has not demonstrated attainment with the interim sediment allocations stipulated by the Harbor Toxics TMDL, Resolution No. R11-008, page 11, Item 3, and~~ implementation of the effluent sediment monitoring program is required for that pollutant. An effluent sediment monitoring result at or below the interim sediment allocation in Table 7, page ~~25~~ 23 of this Order, demonstrates attainment with the interim sediment allocation and additional sediment monitoring of the effluent is not required. A sediment monitoring result that exceeds the interim sediment allocation requires additional sediment monitoring of the effluent during discharge but not more frequently than once per year until the three-year average concentration for sediment monitoring results is at or below the interim sediment allocation."

- **Harbor TMDL monitoring**: Tesoro believes that it should not be required to undertake extensive receiving water monitoring in years in which it has no discharge. However, the special studies described on p. 23 require extensive sampling of the water column, sediment, and fish tissues, either individually or as part of a group. Tesoro requests that this requirement be deleted; alternately, if it is retained, Tesoro requests that language be added to the permit to specify that this monitoring is only required in years in which a discharge from the Facility to receiving waters occurs. In addition:
  - The requirement to submit a Monitoring Plan and QAPP **20 month**s after TMDL effective date (top of p. 24 of the Revised Tentative Permit) is unreasonable. The Harbor Toxics TMDL became effective in March 2012, so this language would require Tesoro to submit these documents in October 2013, before the effective date of permit. (Note that Tesoro does not yet know if it will be able to join a regional monitoring group, but is aware that a regional monitoring program was submitted to the Regional Board in June 2013 by the Ports of Los Angeles and Long Beach on behalf of a Regional Monitoring

Coalition.) Tesoro requests that this provision be modified to require "either that (a) a Monitoring Plan and QAPP shall be submitted, or (b) Tesoro shall represent to the Regional Board that it is participating in regional monitoring, within twelve (12) months after the permit effective date."

- **Harbor TMDL reporting**. The Monitoring and Reporting Program (MRP) at p. E-22 requires that "Within 20 months of the effective date of the Harbor Toxics **TMDL** and annually thereafter, the Discharger or the Responsible Parties shall submit annual [TMDL] implementation reports to the Regional Water Board. The reports shall describe the measures implemented and progress achieved toward meeting the assigned WLAs and LAs." Tesoro believes that this language may have been carried over from MS4 permit requirements, and that this requirement is not appropriate for a discharger that discharges only for a 50-year, 24-hour storm event or larger. Tesoro requests that this provision be deleted from the MRP.

- **Sediment monitoring requirements**. Footnote 1 to Table E-3 at p. E-9 reads as follows: "[1] Monitoring is only required during years in which a discharge occurs as specified in Footnote 4 to Table 6, page 16 of this Order. If monitoring is not triggered because of an exceedance, sediment monitoring must occur at least once during the permit term." Tesoro requests that the second sentence of this footnote be deleted, as it appears to contradict the first sentence, and because discharges are expected to occur far less frequently than once per permit term.

Tesoro Wilmington Calciner

9-9-13

Comment Letter Attachment A

CALIFORNIA
Water Boards

Los Angeles Regional Water Quality Control Board

August 31, 2012

Nancy Woo, Acting Water Division Director
Mail Code WTR-1
US EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

TOTAL MAXIMUM DAILY LOAD FOR TOXIC POLLUTANTS IN DOMINGUEZ CHANNEL AND GREATER LOS ANGELES AND LONG BEACH HARBOR WATERS

Dear Ms. Woo,

On February 14, 2012, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) requested U.S. Environmental Protection Agency (USEPA) approval of the Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters (hereinafter, Harbors Toxics TMDL or TMDL). At that time, the Los Angeles Water Board requested approval of the TMDL, and the associated implementation plan adopted as part of the State's action, pursuant to both sections 303(c)(2) and 303(d)(2) of the Clean Water Act (CWA). On March 23, 2012, USEPA approved the TMDL pursuant to only CWA section 303(d)(2). USEPA later requested clarification regarding which portions of the TMDL the Los Angeles Water Board seeks approval of pursuant to CWA section 303(c)(2).

The Los Angeles Water Board and the State Water Resources Control Board (State Water Board) (collectively, Water Boards) are seeking authority to provide compliance schedules consistent with the waste load allocations (WLAs), including interim WLAs, that are based on California Toxics Rule (CTR) criteria and the associated implementation schedule in the Harbors Toxics TMDL, and which will be included in NPDES permits pursuant to CWA section 301(b)(1)(C). Without CWA section 303(c)(2) approval, compliance schedules for CTR criteria are no longer authorized pursuant to the CTR or by the State Water Board's *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits* (Resolution No. 2008-0025) (hereinafter, Compliance Schedule Policy). Accordingly, this letter clarifies our submission dated February 14, 2012, to request that USEPA approve, pursuant to CWA section 303(c)(2), the request for compliance schedule granting authority contained in the implementation plan in the TMDL for CTR-based WLAs assigned to the following categories of NPDES dischargers and pollutants:

NPDES Dischargers	Pollutant
Non-MS4 Stormwater Dischargers - General Construction, General Industrial, and individual industrial permittees	Copper, Lead, Zinc, DDT, Dieldrin, Total PCBs, PAHs, Chlordane and Pyrene
Other Non-Stormwater dischargers	Copper, Lead, and Zinc

With respect to a municipal separate storm sewer (MS4) permit that contains effluent limitations pursuant to CWA sections 402(p)(3)(B) and/or 303(d), the Water Boards have concluded that CWA section 303(c)(2) approval for compliance schedule authorization is not required to allow a compliance schedule for water quality standards in a MS4 permit. This is because the Compliance Schedule Policy does not apply to MS4 permits, as the Policy expressly only applies to NPDES permits with effluent limitations established under CWA section 301(b)(1)(C). MS4 permits are not subject to CWA section 301(b)(1)(C). Rather, effluent limitations in MS4 permits are established pursuant to CWA section 402(p)(3)(B), and, if applicable, section 303(d). The Water Boards' conclusions about TMDL implementation plans and MS4 permits extend to all water quality standards, whether promulgated by USEPA or the State. Therefore, the Los Angeles Water Board does not believe CWA section 303(c)(2) approval of the implementation plan in the Harbors Toxics TMDL for CTR-based WLAs for MS4 dischargers, including the California Department of Transportation (Caltrans), is required to include compliance schedules in MS4 permits. However, if USEPA disagrees with this conclusion, the Los Angeles Water Board hereby requests CWA section 303(c)(2) approval for compliance schedule granting authority consistent with the implementation plan in the Harbors Toxics TMDL associated with CTR-based WLAs assigned to MS4 discharges as well, including those assigned to Caltrans. The Water Boards understand that the requirements of 40 Code of Federal Regulations (CFR) section 122.47 must be satisfied when including compliance schedules in any NPDES permit.

In adopting the Harbors Toxics TMDL, the Los Angeles Water Board analyzed the time necessary for all NPDES dischargers to achieve the WLAs established in the TMDL. The Los Angeles Water Board determined that a maximum of 20 years is needed for these dischargers to fully implement programs to achieve the CTR-based WLAs. In establishing the implementation schedule, the Los Angeles Water Board considered the technical challenges, complexities due to multiple responsible parties and the need for multi-party agreements, and the presence of Superfund sites, as well as the multitude of programs that are likely to be implemented to achieve the WLAs. The 20-year implementation schedule provides sufficient time for flexibility in compliance methods to deal with uncertainties and to allow for prioritization of actions while achieving water quality as soon as possible consistent with 40 CFR section 122.47. Section 7.2 of the Los Angeles Water Board's TMDL Staff Report details the development of the schedule. During the incorporation of WLAs into permits as water quality based effluent limitations, the Water Boards will provide justification supporting the compliance schedules, drawing upon this analysis and other information as necessary, to ensure the compliance schedules meet the requirements of 40 CFR section 122.47.

If you have any questions regarding this request, please do not hesitate to contact Renee Purdy, Section Chief of Regional Programs, at (213) 576-6622 or Jennifer Fordyce, Los Angeles Water Board Counsel, at (916) 342-6682.

Sincerely,

Chief Deputy Executive Officer

Samuel Unger, P.E.
Executive Officer

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

NOV 02 2012

Samuel Unger, Executive Officer
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Dear Mr. Unger:

The U.S. Environmental Protection Agency (the EPA) has reviewed your August 31, 2012 letter regarding the Los Angeles Regional Water Quality Control Board (LARWQCB) and the California State Water Resources Control Board (State Board) request for authority to provide compliance schedules consistent with the waste load allocations (WLAs) based on California Toxics Rule (CTR) criteria, pursuant to 303(c) of the Clean Water Act (CWA). I am pleased to inform you that we are approving the authorization.

The approval is based on the State's Total Maximum Daily Load (TMDL) for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters (Harbors Toxics TMDL) adopted by the LARWQCB as Resolution Number R11-008 on May 5, 2011, approved by the State Board as Resolution Number 2012-0008 on February 7, 2012, and approved by the Office of Administrative Law on March 22, 2012. The EPA approved the TMDL pursuant to CWA section 303(d)(2) on March 23, 2012, and noted that our approval did not include the TMDL implementation plan, as it is not required under current federal regulations.

Subsequently, on May 30, 2012, the EPA verbally requested clarification of the State Board and LARWQCB's intentions regarding a compliance schedule authorization request pursuant to 303(c)(2) because it was unclear from the TMDL what process would be implemented to assure compliance with 40 CFR 122.47 requirements for compliance schedules to be incorporated into National Pollutant Discharge Elimination System (NPDES) permits. The clarification was received by the EPA on August 31, 2012, and is the subject of this approval.

The Compliance Schedule Authorization Request

The request is for authority pursuant to 303(c)(2) to provide compliance schedules consistent with WLAs, including interim WLAs, that are based on CTR criteria and the associated implementation schedule in the Harbors Toxics TMDL, which will be included in NPDES permits pursuant to the CWA section 301(b)(1)(c).

The request specifies that the LARWQCB may authorize compliance schedules in NPDES permits for up to 20 years for Non-MS4 stormwater Dischargers (General Construction, General industrial and individual industrial permittees) for Copper, Lead, Zinc, DDT, Dieldrin, Total PCBs, Chlordane, and Pyrene, and for other Non-stormwater Dischargers, for Copper, Lead, and Zinc, consistent with the Implementation Plan in the Harbors Toxics TMDL.

Today's Action

Pursuant to CWA section 303(c) and the implementing federal regulations at 40 CFR 131, the EPA hereby approves this compliance schedule authorizing provision. Section 303(c) of the CWA requires the EPA to approve or disapprove new or revised state-adopted water quality standards. The State regulatory provisions subject to the EPA's approval authority under section 303(c) are those addressing antidegradation, beneficial uses, water quality criteria, and certain policies and procedures for the implementation of water quality standards for surface waters. Under the EPA's water quality standards regulations, a state has discretion to include in its standards "policies generally affecting their application and implementation, such as mixing zones, low flows and variances" 40 C.F.R. 131.13. Though discretionary with the state, the Administrator has stated that authorizing provisions for compliance schedules such as that described in this request are subject to the EPA's review under 40 CFR Section 131.13. In re Star-Kist Caribe, Inc., 3 E.A.D. 172, 182-183, n16 (Adm'r 1990) modification denied, 4 E.A.D. 35 (E.A.B. 1992); In re City of Ames, 6 E.A.D. 374 (EAB1996). As such, authorizing provisions for compliance schedules are subject to the EPA's review and approval under the EPA CWA section 303(c).

Basis for Approval

In regards to this request to approve a compliance schedule authorizing provision, the EPA based its decision on CWA section 303(c) and implementing regulations at 40 CFR 131.5 and 131.6 in conjunction with the approved Harbors Toxics TMDL (which included extensive public participation). Specifically, the EPA focused on the 20-year implementation plan and schedule in this Harbors Toxics TMDL.

The EPA also considered guidance regarding compliance schedule authorizing provisions and the requirements at 40 CFR 122.47 for incorporating compliance schedules in specific NPDES permits. In 2007, the EPA headquarters clarified how permitting authorities should incorporate compliance schedules in specific permits after the State has clearly indicated in its water quality standards or implementing regulations that it intends to allow them ("Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits," Memorandum from James A. Hanlon to Alexis Strauss, May 10, 2007, enclosed).

As discussed in the 2007 memorandum, the permitting authority should document the basis for its conclusions that the compliance schedule is necessary and appropriate for that permit and will result in compliance as soon as possible within the timeframe allowed by the compliance schedule authorizing provision. The compliance schedule must provide an enforceable sequence of actions or operations that will lead to compliance with the effluent limitation along with associated interim milestones and schedules. As explained in its clarifying letter of August 31, 2012, the LARWQCB understands that the requirements of 40 CFR section 122.47 must be satisfied and documented on a permit-by-permit basis when including compliance schedules in any NPDES permit and intends to follow this approach once authorized.

Under the current statewide compliance schedule policy, compliance schedules for implementing WLAs in TMDLs may exceed 10 years, as specified in an adopted TMDL Implementation Plan (State Water Resources Control Board Resolution No. 2008-0025, "Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits," ("Policy") paragraph (6)(c)). However, the Policy does not apply to CTR criteria; the CTR had a compliance schedule authorizing provision when

promulgated but that provision had a sunset date of May 2005. For this reason, the LARWQCB would not be able to include a compliance schedule in any specific NPDES permit for CTR criteria without an approved compliance schedule authorizing provision.

Under the Policy, any resulting schedule in a specific NPDES permit must be both as short as possible and within the timeframe set forth in the TMDL implementation plan. The LARWQCB considered the technical issues and complexities of the multi-party agreements and programs to be implemented to achieve the WLAs and concluded that the 20-year implementation schedule in this Harbor Toxics TMDL provides sufficient time for flexibility to deal with uncertainties while achieving water quality as soon as possible. While the compliance schedule authorization provision establishes an outer bound limit of 20 years, it does not presume or guarantee that a specific discharger may receive a 20 year compliance schedule. Rather, each specific permit containing a compliance schedule must document that the schedule in question will lead to attainment with the permit's water quality-based effluent limit (WQBEL) "as soon as possible" and no later than 20 years after the relevant TMDL with the WLA is issued.

Furthermore, the LARWQCB states that during the incorporation of WLAs into permits as WQBELs, the Water Boards will provide justification supporting the compliance schedules to ensure that the compliance schedules meet all of the requirements of 40 C.F.R. section 122.47.

Public Participation

The EPA compliments the State on its efforts to include the public in the development and review of new and revised water quality standards. Public involvement is an integral component of a successful water quality program. Based upon our review of the administrative record for the subject TMDL, the public review procedures followed by the State in the development of State Board Resolution Number 2012-0008 and the LARWQCB Resolution Number R11-008 were consistent with the procedural requirements for public participation in triennial reviews, adoption, and revision of state water quality standards.

Endangered Species Act Section 7

Section 7(a)(2) of the Endangered Species Act (ESA) states that each federal agency shall, in consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (the Services), ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species (listed species) or result in destruction or adverse modification of designated critical habitat of such species. Consistent with the requirements of Section 7(a)(2) and implementing regulations at 50 CFR Part 402, EPA has initiated consultation with the Services regarding our action approving the compliance schedule authorizing provision under the Clean Water Act. We anticipate concluding consultation in the near future. Although we do not believe our action will cause any impacts of concern on listed species or designated critical habitat, our approval is subject to the outcome of the ESA Section 7(a)(2) consultation process.

Conclusion

This approval action authorizes the LARWQCB to include compliance schedules, provided they are consistent with the CWA and the EPA regulations, in NPDES permits issued to existing dischargers for

more stringent WQBELS based on WLAs in the State's TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters.

In closing, the EPA commends the State Water Board staff for its excellent work on the TMDL and implementation schedule. If there are any questions regarding our action, please contact Janet Hashimoto at (415) 972-3452 or Suesan Saucerman at (415) 972-3522 of the Standards and TMDL Office. As always, we look forward to continued cooperation with the State in achieving our mutual environmental goals.

Sincerely,

Nancy Woo, Acting Director
Water Division

Enclosure

cc: Deborah Smith, Chief Deputy Director, LARWQCB
Renee Purdy, Section Chief of Regional Programs, LARWQCB
Tom Gardner, USEPA, Office of Water

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 10 2007

OFFICE OF
WATER

MEMORANDUM

SUBJECT: Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits

FROM: James A. Hanlon, Director
Office of Wastewater Management

TO: Alexis Strauss, Director
Water Division
EPA Region 9

Recently, in discussions with Region 9, questions have been raised concerning the use of compliance schedules in National Pollutant Discharge Elimination System (NPDES) permits consistent with the Clean Water Act (CWA) and its implementing regulations at 40 C.F.R. § 122.47. The use of compliance schedules in NPDES permits is also the subject of ongoing litigation in California. The purpose of this memo is to provide a framework for the review of permits consistent with the CWA and its implementing regulations.

When may a permitting authority include a compliance schedule in a permit for the purpose of achieving a water quality-based effluent limitation?

In *In The Matter of Star-Kist Caribe, Inc.*, 3 E.A.D. 172, 175, 177 (1990), the EPA Administrator interpreted section 301(b)(1)(C) of the CWA to mean that 1) after July 1, 1977, permits must require immediate compliance with *(i.e.,* may not contain compliance schedules for) effluent limitations based on water quality standards adopted before July 1, 1977, and 2) compliance schedules are allowed for effluent limitations based on standards adopted after that date only if the State has clearly indicated in its water quality standards or implementing regulations that it intends to allow them.

What principles are applicable to assessing whether a compliance schedule for achieving a water quality-based effluent limitation is consistent with the CWA and its implementing regulations?

1. "When appropriate," NPDES permits may include "a schedule of compliance leading to compliance with CWA and regulations ... as soon as possible, but not later than the applicable statutory deadline under the CWA." 40 C.F.R. § 122.47(a)(1). Compliance schedules that are longer than one year in duration must set forth interim requirements and dates for their achievement. 40 c.F.R. § 122.47(a)(3).

2. Any compliance schedule contained in an NPDES permit must be an "enforceable sequence of actions or operations leading to compliance with a [water quality-based] effluent limitation ["WQBEL"]" as required by the definition of "schedule of compliance" in section 502(17) of the CWA. *See also* 40 c.F.R. § 122.2 (definition of schedule of compliance).

3. Any compliance schedule contained in an NPDES pennit must include an enforceable final effluent limitation and a date for its achievement that is within the timeframe allowed by the applicable state or federal law provision authorizing compliance schedules as required by CWA sections 301(b)(1)(C); 502(17); the Administrator's decision in *Star-Kist Caribe, Inc.* 3 E.A.D. 172, 175, 177-178 (1990); and EPA regulations at 40 C.F.R. §§ 122.2, 122.44(d) and 122.44(d)(I)(vii)(A).

4. Any compliance schedule that extends past the expiration date of a pennit must include the final effluent limitations in the pennit in order to ensure enforceability of the compliance schedule as required by CWA section 502(17) and 40 C.F.R. § 122.2 (definition of schedule of compliance).

5. In order to grant a compliance schedule in an NPDES pennit, the pennitting authority has to make a reasonable finding, adequately supported by the administrative record, that the compliance schedule "willlead[] to compliance with an effluent limitation ... " "to meet water quality standards" by the end of the compliance schedule as required by sections 301(b)(I)(C) and 502(17) of the CWA. *See also 40* C.F.R. §§ 122.2, 122.44(d)(1)(vii)(A).

6. In order to grant a compliance schedule in an NPDES pennit, the permitting authority has to make a reasonable finding, adequately supported by the administrative record and described in the fact sheet (40 C.F.R. § 124.8), that a compliance schedule is "appropriate" and that compliance with the final WQBEL is required "as soon as possible." *See* 40 C.F.R. §§ 122.47(a), 122.47(a)(I).

7. In order to grant a compliance schedule in an NPDES pennit, the permitting authority has to make a reasonable finding, adequately supported by the administrative record, that the discharger cannot immediately comply with the WQBEL upon the effective date of the pennit. 40 C.F.R. §§ 122.47, 122.47(a)(1).

8. Factors relevant to whether a compliance schedule in a specific permit is "appropriate" under 40 C.F.R. § 122.47(a) include: how much time the discharger has already had to meet the WQBEL(s) under prior permits; the extent to which the discharger has made good faith efforts to comply with the WQBELs and other requirements in its prior permit(s); whether there is any need for modifications to treatment facilities, operations or measures to meet the WQBELs and if so, how long would it take to implement the modifications to treatment, operations or other measures; or whether the discharger would be expected to use the same treatment facilities, operations or other measures to meet the WQBEL as it would have used to meet the WQBEL in its prior permit.

9. Factors relevant to a conclusion that a particular compliance schedule requires compliance with the WQBEL "as soon as possible," as required by 40 C.F.R. § 122.47(a)(1) include: consideration of the steps needed to modify or install treatment facilities, operations or other measures and the time those steps would take. The permitting authority should not simply presume that a compliance schedule be based on the maximum time period allowed by a State's authorizing provision.

10. A compliance schedule based solely on time needed to develop a Total Maximum Daily Load is not appropriate, consistent with EPA's letter of October 23, 2006, to Celeste Cantu, Executive Director of the California State Water Resources Control Board, in which EPA disapproved a provision of the Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries for California.

11. A compliance schedule based solely on time needed to develop a Use Attainability Analysis is also not appropriate, consistent with EPA's letter of February 20, 2007, to Doyle Childers, Director Missouri Department of Natural Resources, nor is a compliance schedule based solely on time needed to develop a site specific criterion, for the same reasons as set forth in the October 23, 2006, (referenced in Paragraph 10) and February 20, 2007 letters.

If you have any questions, please contact me at (202) 564-0748 or have your staff contact Linda Boornazian at (202) 564-0221.

Tesoro Refining & Marketing Company LLC

In the Matter of Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit (Order No. R4-2013-0157, NPDES No. CA0059153) and Time Schedule Order (Order No. R4-2013-0158) Adopted by the Los Angeles Regional Water Quality Control Board

Exhibit 5

WDR Order

ORDER NO. R4-2013-0157
NPDES NO. CA0059153

WASTE DISCHARGE REQUIREMENTS
FOR
TESORO REFINING & MARKETING COMPANY LLC
TESORO WILMINGTON CALCINER

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576 - 6600 • Fax (213) 576 - 6640
http://www.waterboards.ca.gov

ORDER NO. R4-2013-0157
NPDES NO. CA0059153

WASTE DISCHARGE REQUIREMENTS FOR TESORO REFINING & MARKETING COMPANY LLC (FORMER BP WEST COAST PRODUCTS LLC) TESORO WILMINGTON CALCINER (FORMER BP WILMINGTON CALCINER)

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	Tesoro Refining & Marketing Company LLC (Former BP West Coast Products LLC)
Name of Facility	Tesoro Wilmington Calciner (Former BP Wilmington Calciner)
Facility Address	1175 Carrack Avenue
	Wilmington, CA 90744
	Los Angeles County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a minor discharge.	

The discharge by Tesoro Refining & Marketing Company LLC from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated wastewater consisting of green coke drainage and miscellaneous wash water, boiler safety relief system blowdown, boiler feed water pump seal flush, cooling tower overflow, and storm water runoff.	33° 46' 29" N	118° 13' 39" W	Cerritos Channel (Los Angeles-Long Beach Inner Harbors)

February 28, 2012
Revised: April 16, 2012
Revised: August 7, 2013
Revised: September 23, 2013

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	**October 3, 2013**
This Order shall become effective on:	**November 22, 2013**
This Order shall expire on:	**November 22, 2018**
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	**180 days prior to the Order expiration date**

IT IS HEREBY ORDERED, that Order No. R4-2007-0031 is terminated upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted pursuant thereto, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted pursuant thereto, the Discharger shall comply with the requirements in this Order.

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on October 3, 2013.

Samuel Unger

Samuel Unger, P.E.
Executive Officer

Table of Contents

List of Tables

List of Attachments

I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

Discharger	Tesoro Refining & Marketing Company LLC
Name of Facility	Tesoro Wilmington Calciner
Facility Address	1175 Carrack Avenue
	Wilmington, CA 90744
	Los Angeles County
Facility Contact, Title, and Phone	Adrian Rosu, Environmental Engineer, 562-499-3210
Mailing Address	P.O. Box 1028 Wilmington, CA 90748
Type of Facility	Petroleum Coke Calcining Facility (SIC 2999)
Facility Design Flow	1.1 million gallons per day (MGD)

II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board), finds:

A. Background. Tesoro Refining & Marketing Company LLC, Former BP West Coast Products LLC (hereinafter Discharger) is currently discharging storm water and wastewater associated with industrial activities from the Tesoro Wilmington Calciner, Former BP Wilmington Calciner (hereinafter Facility) pursuant to Order No. R4-2007-0031 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0059153. Order No. R4-2007-0031 was adopted by the Regional Water Board adopted on June 7, 2007, and expired on May 10, 2012. As per 40 CFR section 122.6, Order No. R4-2007-0031 has been administratively extended and remains in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.

The Discharger submitted a Report of Waste Discharge (ROWD), dated October 14, 2011, and applied for an NPDES permit renewal to discharge up to 1.1 million gallons per day (MGD) of treated wastewater from the Facility. Supplemental information was received on January 10, 2012, and January 26, 2012. The application was deemed complete on January 26, 2012.

On November 28, 2011, and April 2, 2013, PG Environmental, LLC (contractor with the U.S. Environmental Protection Agency) and Regional Water Board staff, respectively, conducted a site visit to review current site conditions and operations of the Facility.

For the purposes of this Order, references to the "Discharger" or "Permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Facility Description. The Facility is owned and operated by Tesoro Refining & Marketing Company LLC. The Facility is a petroleum coke calcining facility located at 1175 Carrack Avenue in Wilmington, California. The green coke comes from BP's Carson Refinery and is transported by truck and occasionally by rail car to the Facility. The green coke (petroleum coke from a refinery's coke unit) is run through a large rotary kiln to remove water and other impurities to produce calcined coke. The industrial and sanitary wastewaters generated by the Facility are discharged into a Los Angeles County sanitary sewer under an industrial pretreatment permit issued by the Sanitation Districts of Los Angeles County, California (Permit No. 015671).

The Facility has a reverse osmosis (RO) system utilized to treat potable water (from the City) to be used as boiler feed water. The potable water that is rejected by the RO system is conveyed to the cooling tower. The wastewater generated by the RO system is discharged to the sanitary sewer under Permit No. 015671.

The remaining wastewaters generated by the Facility, consist of storm water combined with process wastewaters (boiler safety relief system blowdown, boiler feed

water pump seal flush, green coke drainage, miscellaneous wash waters, and cooling tower overflow) are discharged to surface waters only when the retention basin reaches full capacity. The Facility's impervious areas are sloped to convey storm water and process waters to one of two lift stations which pump collected water to the Facility's settling basins. The treatment system consists of two, concrete-lined, 2-compartment settling basins (eastern and western basin; 110,000 gallons each) which are used for removal of settleable solids. Following treatment in the settling basins, the waste stream flows into a 680,000-gallon retention basin for additional settling and neutralization with sulfuric acid (as needed). The treated wastewater is recycled back to the Facility for use as cooling water. During normal operations, the Facility recycles all water from the forge basin and uses it as coolinq tower make up water in all but extremely large storm events where rainfall is higher than the recyclinq rate.

Using this storm water intake and recycling system, the Facility has eliminated most discharge events from the Facility to the receiving water. In December 2010, the Facility encountered the largest amount of rainfall in the Long Beach area since about 1984 and successfully managed all storm water on site without discharging. The December 2010 storm event enabled the Facility to evaluate its retention capacity and storm water handling procedures and to enhance its management of storm water significantly such that now the Facility ensures that 80 percent of its basin remains available for storm events. The Facility has also secured an increased discharge limit to the local LACSD to enable it to discharqe additional wastewater, including cooling tower blowdown, if necessary, at all times (including during storm events) thereby enabling the Facility to recycle a higher amount of storm water through the cooling tower. Based on experience and recent engineering studies, the Facility confirmed that its design enables the retention of a 50-year, 24-hour storm event (i.e. a 24-hour amount of precipitation that will occur once in a 50-year period, on average).

When the retention basin reaches full capacity, usually during or following significant storm events, the treated wastewater is discharged from Discharge Point No. 001 to the Cerritos Channel, a water of the United States and a tributary to Los Angeles-Long Beach Inner Harbor within the Dominguez Channel/Los Angeles-Long Beach Harbor Watershed.

No discharges occurred during the term of Order No. R4-2007-0031. The most recent discharge event occurred in January 2005.

C. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with Section 13260).

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact

Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through J are also incorporated into this Order.

E. California Environmental Quality Act (CEQA). Under Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21100-21177.

F. Technology-based Effluent Limitations. Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, Title 40 of the Code of Federal Regulations[1] (40 CFR), require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and 40 CFR section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

40 CFR section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA Section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR section 122.44(d)(1)(vi).

H. Watershed Management Approach and Total Maximum Daily Loads (TMDLs).

The Regional Water Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Water Board's many diverse programs, particularly NPDES with TMDLs, to better assess cumulative impacts of pollutants from all point and nonpoint sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable

[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental and economic impacts within the watershed. The TMDLs will establish waste load allocations (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.

The USEPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. Certain receiving waters in the Los Angeles and Ventura Counties' watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2010 303(d) list and have been scheduled for TMDL development. The 2010 State Water Resources Control Board (State Water Board) 303(d) List classifies the Los Angeles/Long Beach Inner Harbor, to which the Cerritos Channel is tributary, as impaired due to beach closures, benthic community effects, benzo(a)pyrene (3,4-benzopyrene-7-d), chrysene (C1-C4), copper, dichlorodiphenyltrichloroethane (DDT), polychlorinated biphenyls (PCBs), sediment toxicity, and zinc.

The following are summaries of the TMDLs for the Los Angeles/Long Beach Harbor Inner Harbor:

1. **Bacteria TMDL.** The Regional Water Board approved the Los Angeles Harbor Bacteria TMDL through Resolution 2004-011 on July 1, 2004. The State Water Board, Office of Administrative Law (OAL), and USEPA approved the TMDL on October 21, 2004, January 5, 2005, and March 1, 2005, respectively. The Bacteria TMDL became effective on March 10, 2005. The Bacteria TMDL addresses Inner Cabrillo Beach and the Main Ship Channel of the Los Angeles Inner Harbor. This Order includes bacteria limitations based on water quality standards (WQS) applicable to Cerritos Channel. These WQS (and WQBELs) are identical to the WQS used to develop the Bacteria TMDL that is applicable to the Main Ship Channel immediately downstream of Cerritos Channel.

2. **Harbor Toxics TMDL.** The Regional Water Board adopted Resolution No. R11-008 on May 5, 2011, that amended the Basin Plan to incorporate the *TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters* (Harbor Toxics TMDL). The Harbor Toxic TMDL was approved by the State Water Board on February 7, 2012, the OAL on March 21, 2012, and the USEPA on March 23, 2012. The Harbor Toxics TMDL contains requirements applicable to this discharge. Therefore, this Order contains effluent limitations and monitoring requirements based on the TMDL. The provisions of this permit implement and are consistent with the assumptions and requirements of all waste load allocations (WLAs) established in the Harbor Toxics TMDLs.

   For Cerritos Channel which is located within the Long Beach Inner Harbor the Harbor Toxics TMDL included:

a. Sediment interim concentration-based allocations (in mg/kg sediment) for copper, lead, zinc, DDT, PAHs, and PCBs (Attachment A to Resolution No. R11-008, p. 11).

b. Water column final concentration-based waste load allocations (WLAs) (ug/L) for copper, lead, zinc, 4,4'-DDT and total PCBs (Attachment A to Resolution No. R11-008, pp. 13-14).

c. Provisions for monitoring discharges and/or receiving waters during the TMDL's 20 year implementation schedule to determine attainment with waste load and load allocations as appropriate.

I. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

The Basin Plan on Page 2-4 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. The Basin Plan does not specifically identify beneficial uses for the Cerritos Channel, but does identify present and potential uses for Los Angeles-Long Beach Harbor (all other inner areas), to which the Cerritos Channel, via the Los Angeles-Long Beach Inner Harbor, is tributary. Thus, the beneficial uses applicable to the Cerritos Channel are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Cerritos Channel Within Los Angeles/Long Beach Inner Harbor	Existing: Industrial service supply (IND); navigation (NAV); non-contact water recreation (REC-2); commercial and sport fishing (COMM); marine habitat (MAR); rare, threatened, or endangered species (RARE). Potential: Water contact recreation (REC-1); shellfish harvesting (SHELL).

Requirements of this Order implement the Basin Plan.

J. Thermal Plan. The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of* California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland and coastal surface waters. Requirements of this Order implement the Thermal Plan.

K. Ammonia Basin Plan Amendement. The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Table 3-1 through Table 3-4. However, those ammonia objectives were revised on March 4, 2004, by the Regional Water Board with the adoption of Resolution No. 2004-022, *Amendment to the Water Quality Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including enclosed bays, estuaries and wetlands)* with the Beneficial Use designations for protection of "Aquatic Life". The ammonia Basin Plan amendment was approved by OAL on September 14, 2004, and by USEPA on May 19, 2005. The amendment revised the Basin Plan by updating the ammonia objectives for inland surface waters not characteristic of freshwater such that they are consistent with the USEPA "Ambient Water Quality Criteria for Ammonia (Saltwater) – 1989." The amendment revised the regulatory provisions of the Basin Plan by adding language to Chapter 3, "Water Quality Objectives."

The amendment contains objectives for a 4-day average concentration of un-ionized ammonia of 0.035 mg/L, and a 1-hour average concentration of un-ionized ammonia of 0.233 mg/L. These objectives are fixed concentrations of un-ionized ammonia, independent of pH, temperature, or salinity. The amendment also contains an implementation procedure to convert un-ionized ammonia objectives to total ammonia effluent limitations.

L. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

M. State Implementation Policy. On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

N. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect

and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

O. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD), oil and grease, total suspended solids (TSS), settleable solids, turbidity, and total petroleum hydrocarbons. Restrictions on these constituents are discussed in section IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

The WQBELs consist of restrictions on pH, acute toxicity, temperature, copper, lead, nickel, thallium, zinc, cyanide, 4,4'-DDT, and total PCBs. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR Section 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR Section 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order (specifically bacteria and ammonia) were approved by USEPA on September 25, 2002, and May 19, 2005, respectively. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

P. Antidegradation Policy. 40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution No. 68-16.

Q. Anti-Backsliding Requirements. Section 402(o) of the CWA establishes statutory language prohibiting the backsliding of effluent limits. Sections 402(o) of the CWA and federal regulations at title 40, Code Federal Regulations section 122.44(l) outlines specific exceptions to the general prohibition against establishment of less stringent effluent limitations.

These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent limitations included in this Order for copper, and zinc are less stringent than in the previous Order. As discussed in the Fact Sheet, this relaxation of effluent limitations is consistent with exceptions identified under Section 402(o).

R. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code Sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

S. Monitoring and Reporting. 40 CFR section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code Sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

T. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

U. Notification of Interested Parties. The Regional Water Board has notified the Discharger and 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 comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

V. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order No. R4-2007-0031 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the Water Code (commencing with Section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

A. Wastes discharged shall be limited to a maximum of 1.1 MGD of treated wastewater consisting of storm water, boiler safety relief system blowdown, boiler feed water pump seal flush, green coke drainage, and miscellaneous wash waters from Discharge Point No. 001. The discharge of wastes from accidental spills or other sources is prohibited.

B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to the Cerritos Channel, or other waters of the State, are prohibited.

C. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or a nuisance as defined by Section 13050 of the Water Code.

D. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.

E. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

F. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

G. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. Final Effluent Limitations – <u>Discharge Point No. 001:</u>

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001, as described in the attached Monitoring and Reporting Program (MRP) (Attachment E):

Table 6. Effluent Limitations for Discharge Point No. 001

Parameter	Units	Effluent Limitations				Performance Goals
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Conventional Pollutants						
pH	s.u.	--	--	6.5	8.5	--
Biochemical Oxygen Demand (5-day @ 20 deg. C) (BOD)	mg/L	20	30	--	--	--
	lbs/day[1]	183	275	--	--	--
Oil and Grease	mg/L	10	15	--	--	--
	lbs/day[1]	92	138	--	--	--
Total Suspended Solids (TSS)[4]	mg/L	30	75	--	--	--
	lbs/day[1]	275	688	--	--	--
Non-Conventional Pollutants						
Settleable Solids	ml/L	0.1	0.2	--	--	--
Temperature	°F	--	--	--	86	--
Total Petroleum Hydrocarbons (TPH)[2]	µg/L	--	100	--	--	--
	lbs/day[1]	--	0.92	--	--	--
Turbidity	NTU	50	75	--	--	--
Priority Pollutants						
Copper, Total Recoverable[3,4]	µg/L	3.1	6.1	--	--	--
	lbs/day[1]	0.03	0.1	--	--	--
Lead, Total Recoverable[3,4]	µg/L	7	14	--	--	--
	lbs/day[1]	0.1	0.1	--	--	--
Nickel, Total Recoverable	µg/L	7	14	--	--	--
	lbs/day[1]	0.1	0.1	--	--	--
Thallium, Total Recoverable	µg/L	6.3	13	--	--	--
	lbs/day[1]	0.1	0.1	--	--	--
Zinc, Total Recoverable[3,4]	µg/L	70	141	--	--	--
	lbs/day[1]	0.6	1.3	--	--	--
Cyanide, Total (as CN)	µg/L	0.5	1.0	--	--	--
	lbs/day[1]	0.005	0.01	--	--	--
4,4'-DDT[3,4, A]	µg/L	0.0006	0.001	--	--	--
	lbs/day[1]	5.4E-06	1.1E-05	--	--	--
Total PCBs[3,4,5]	µg/L	0.0002	0.0003	--	--	--
	lbs/day[1]	1.6E-06	3.1E-06	--	--	--
PAHs						
Benzo(a)pyrene[4,A]	µg/L	--	--	--	--	0.049[6]
Chrysene[4,A]	µg/L	--	--	--	--	0.049[6]

[1] Mass (lbs/day) limitations are based on a maximum flow of 1.1 MGD and calculated as follows:

Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

[2] TPH equals the sum of TPH gasoline (C_4-C_{12}), TPH diesel (C_{13}-C_{22}), and TPH oil (C_{23+}).

[3] The effluent limitations are based on the USEPA approved Harbor Toxics TMDL WLAs and calculated using the CTR-SIP procedures.

[4] During each reporting period, if effluent monitoring results exceed both a TSS effluent limit and a CTR TMDL-based effluent limit or performance goal for copper, lead, zinc, 4,4-DDT, total PCBs, benzo(a)pyrene, or chrysene, implementation of the effluent sediment monitoring program is required for that priority pollutant. Sediment monitoring of the effluent shall begin during the first discharge event following the effluent exceedances. An effluent sediment monitoring result at or below the interim sediment allocation in Table 7, page 24 of this Order, demonstrates attainment with the interim sediment allocation and additional sediment monitoring of the effluent is not required. A sediment monitoring result that exceeds the interim sediment allocation requires additional sediment monitoring of the effluent during discharge but not more frequently than once per year until the three-year average concentration for sediment monitoring results is at or below the interim sediment allocation.

[5] Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resembles those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

[6] CTR human health criteria are not promulgated for total PAHs. Therefore, performance goals are based on CTR human health criteria for the individual PAHs, benzo(a)pyrene and chrysene. Benzo(a)pyrene and chrysene are selected because the State's 2010 303(d) List classifies the Los Angeles/Long Beach Inner Harbor as impaired for these PAH compounds. These performance goals are not enforceable effluent limitations. Rather, they act as triggers to determine when sediment monitoring is required for these compounds.

[A] Samples analyzed must be unfiltered samples.

b. Bacteria Limitations Requirements.

1. Rolling 30-day Geometric Mean Limits

   i. Total coliform density shall not exceed 1,000/100 ml.
   ii. Fecal coliform density shall not exceed 200/100 ml.
   iii. Enterococcus density shall not exceed 35/100 ml.

2. Single Sample Limits

   i. Total coliform density shall not exceed 10,000/100 ml.
   ii. Fecal coliform density shall not exceed 400/100 ml.
   iii. Enterococcus density shall not exceed 104/100 ml.
   iv. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to total coliform exceeds 0.1.

c. Acute Toxicity Limitation Requirements. There shall be no acute toxicity in the discharge. The acute toxicity of the effluent shall be such that:

1. The average monthly survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and
2. No single test shall produce less than 70% survival.

Compliance with the toxicity objectives will be determined by the method described in section V of the MRP No. 6571 (Attachment E). The Discharger shall conduct acute toxicity monitoring as specified in the MRP.

B. Land Discharge Specifications

Not Applicable

C. Reclamation Specifications

Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitation

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the Cerritos Channel.

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.2 units.

2. SufaceSurface water temperature to rise greater than 5^{o} F above the natural temperature of the receiving waters at any time or place. At no time the temperature be raised above 80°F as a result of waste discharged.

3. State/Regional Water Board Water Contact Standards

In marine waters designated for Water Contact Recreation (REC-1), the waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water:

a. Geometric Mean Limits

i. Total Coliform density shall not exceed 1,000/100 ml.
ii. Fecal coliform density shall not exceed 200/100 ml.
iii. Enterococcus density shall not exceed 35/100 ml.

b. Single Sample Maximum (SSM)

i. Total Coliform density shall not exceed 10,000/100 ml
ii. Fecal coliform density shall not exceed 400/100 ml
iii. Enterococcus density shall not exceed 104/100 ml
iv. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1

4. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.

5. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution No. 2004-022. Resolution No. 2004-022 revised the ammonia water quality objectives for inland surface waters not characteristic of freshwater in the 1994 Basin Plan, to be consistent with USEPA's *"Ambient Water Quality Criteria for Ammonia (Saltwater) - 1989"*. Adopted on March 4, 2004, Resolution No. 2004-022

was approved by State Water Board, OAL and USEPA on July 22, 2004, September 14, 2004, and May 19, 2005, respectively and is now in effect.

6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.

7. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.

8. Suspended or settleable materials, chemical substances, or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.

9. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

10. Accumulation of bottom deposits or aquatic growths.

11. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

12. The presence of substances that result in increases of BOD that adversely affect beneficial uses.

13. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.

14. Alteration of turbidity, or apparent color beyond present natural background levels.

15. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.

16. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.

17. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.

18. Create nuisance, or adversely affect beneficial uses of the receiving water.

19. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

B. Groundwater Limitations

Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. Federal Standard Provisions. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order**.**

2. Regional Water Board Standard Provisions. The Discharger shall comply with the following provisions**:**

a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

c. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.

d. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the Federal CWA and amendments thereto.

e. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

f. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried

off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.

g. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.

h. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

i. Violation of any term or condition contained in this Order;

ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;

iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

i. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

j. The Discharger shall notify the Regional Water Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.

k. The Discharger shall file with the Regional Water Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

l. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.

m. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board.

n. The Water Code provides that any person who violates a waste discharge requirement or a provision of the Water Code is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $25 per gallon per day of violation; or some

combination thereof, depending on the violation, or upon the combination of violations.

Violation of any of the provisions of the NPDES program or of any of the provisions of this Order may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

o. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.

p. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.

q. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to the planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

i. Name and general composition of the chemical,

ii. Frequency of use,

iii. Quantities to be used,

iv. Proposed discharge concentrations, and

v. USEPA registration number, if applicable.

r. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

s. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, Average Monthly Effluent Limitation (AMEL), Maximum Daily Effluent Limitation (MDEL), instantaneous, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (216)-576-6600 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and,

prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

t. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Water Code § 1211.)

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

C. Special Provisions

1. Reopener Provisions

a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the reasonable potential analysis.

c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new Minimum Levels (MLs).

d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Cerritos Channel and/or the Los Angeles/Long Beach Inner Harbor.

e. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for a design storm, dilution credits or a mixing zone, as may be appropriate.

f. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for a site-specific translator for any metal (which is not TMDL-based constituent) to evaluate the dissolved to total concentration ratios, as may be appropriate. For any TMDL-based limitations, any changes to

the limitations require TMDL amendment prior to implementation of the requested change.

g. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

2. Special Studies, Technical Reports, and Additional Monitoring Requirements

a. Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan. The Discharger shall submit to the Regional Water Board an Initial Investigation TRE workplan (1-2 pages) **within 90 days** of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:

i. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;

ii. A description of the facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility;

iii. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor) (section V of the MRP, Attachment E provides references for the guidance manuals that should be used for performing TIEs).

b. Monitoring Thresholds based on Sediment Interim Concentration-based Allocations in the Harbor Toxics TMDL for Sediment Monitoring of Effluent

The monitoring thresholds in Table 7 of this Order are based on the TMDL's interim sediment allocations for copper, lead, zinc, DDT, PAHs, and PCBs. Attainment with these thresholds shall be demonstrated in accordance with Footnote 4 to Table 6, page 16 of this Order. Regardless of these monitoring thresholds, the Discharger 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. This monitoring is only required in years in which a discharge from the Facility to receiving waters occurs.

Table 7. Monitoring Thresholds

Pollutant	Monitoring Thresholds (mg/kg sediment)
Copper	142.3
Lead	50.4
Zinc	240.6
PAHs	4.58
DDT	0.070
PCBs	0.060

c. Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for the Greater Los Angeles and Long Beach Harbor Waters Compliance Monitoring Program. As defined in the Harbor Toxics TMDL, the Discharger is a "responsible party" because it is an "Individual Industrial Permittee". As such, either individually or with a collaborating group, the Discharger shall develop a monitoring and reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in the Greater Los Angeles and Long Beach Harbor. These plans shall follow the "TMDL Element - Monitoring Plan" provisions in Attachment A to Resolution No. R11-008. The Discharger must inform the Regional Board if they plan to join a collaborative monitoring effort or develop a site specific plan **90 days** after the effective date of the permit. If Calciner is joining a collaborative effort that notification must include documentation of such. If developing a site specific Monitoring Plan, the plan must be submitted **12 months** after the effective date of the permit for public review and, subsequently, Executive Officer approval. Monitoring shall begin **6 months** after a monitoring plan is approved by the Executive Officer.

The Compliance Monitoring Program shall include:

i. **Water Column Monitoring.** At the Station IDs in Table 8, parameters in the water column shall be monitored three times per year, during two wet weather events and one dry weather event. During wet weather events, water column samples shall be collected at several depths. Wet weather monitoring must include the first large storm event of the wet season. Sampling shall be designed to collect sufficient volumes of TSS for analyses of bulk sediment priority pollutants in Table 8.

ii. **Sediment Monitoring.** Sediment quality objective evaluation monitoring, as detailed in SQO Part 1 (sediment triad sampling), shall be performed if discharge occurs during the five year permit term and shall include the full chemical suite, two sediment toxicity tests, and four benthic indicies. At the Station IDs in Table 8, and between sediment triad monitoring events,

sediment chemistry parameters shall be monitored if discharge occurs during the five year permit term.

Table 8.Sedment Chemistry Monitoring Requirements

Water Body Name	Station ID[1]	Station Location	Sample Media and Parameters	
			Water Column	Sediment
Long Beach Inner Harbor	12	Cerritos Channel between the Heim Bridge and the Turning Basin	Flow, Temperature, DO, pH, Salinity, TSS, Copper, Lead, Zinc, PCBs, DDT	Copper, Lead, Zinc, Toxicity, Benthic Community Effect
	13	Back Channel between Turning Basin and West Basin		
	14	Center of West Basin		
	15	Center of Southeast Basin		

[1] Based on Harbor Toxics TMDL.

iii. **Fish Tissue Monitoring.** In Long Beach Inner Harbor, fish tissue shall be monitored once per two years for chlordane, dieldrin, toxaphene, DDT, and PCBs. The three target species shall include white croaker, a sport fish, and a prey fish.

3. Storm Water Pollution Prevention Plan, Best Management Practices, and Spill Contingency Plan

The Discharger shall submit to the Regional Water Board, **within 90 days** of the effective date of this Order:

a. An updated Storm Water Pollution Prevention Plan (SWPPP) that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The SWPPP shall be developed in accordance with the requirements in Attachment G.

b. An updated Best Management Practices Plan (BMPP) that will be implemented to reduce the discharge of pollutants to the receiving water. The BMPP shall include site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. Further, the Discharger shall assure that the storm water discharges from the Facility would neither cause, nor contribute to the exceedance of water quality standards and objectives, nor create conditions of nuisance in the receiving water, and that the unauthorized discharges (i.e., spills) to the receiving water have been effectively prohibited. In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters. The BMPP shall be developed in accordance with requirements in Attachment G.

c. An updated Spill Contingency Plan that includes a technical report on the preventive (failsafe) and contingency (cleanup) plans for controlling accidential discharges, and for minimizing the effect of such events at the site. The Spill Contingency Plan shall be reviewed at a minimum once per year and updated as needed.

Plans shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge points. The Discharger shall describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material.

The Discharger shall implement the SWPPP, BMPP, and Spill Contingency Plan **within 10 days** of the approval by the Executive Officer or **no later than 90 days** after submission to the Regional Water Board, whichever comes first. The plans shall be reviewed annually and at the same time. Updated information shall be submitted to the Regional Water Board within **30 days** of revision.

4. Construction, Operation and Maintenance Specifications

a. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this order.

5. Special Provisions for Municipal Facilities (POTWs Only)

Not Applicable

6. Other Special Provisions

Not Applicable

7. Compliance Schedules

Not Applicable

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

A. Single Constituent Effluent Limitation.

If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported ML (see Reporting Requirement I.G. of the MRP), then the Discharger is out of compliance.

B. Effluent Limitations Expressed as a Sum of Several Constituents.

If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as Not Detected (ND) or Detected, but Not Quantified (DNQ) to have concentrations equal to zero, provided that the applicable ML is used.

C. Effluent Limitations Expressed as a Median.

In determining compliance with a median limitation, the analytical results in a set of data will be arranged in order of magnitude (either increasing or decreasing order); and

1. If the number of measurements (n) is odd, then the median will be calculated as = $X_{(n+1)/2}$, or

2. If the number of measurements (n) is even, then the median will be calculated as = $[X_{n/2} + X_{(n/2)+1}]$, i.e. the midpoint between the n/2 and n/2+1 data points.

D. Mass and Concentration Limitations.

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be "Not Detected" (ND) or "Detected, but Not Quantified" (DNQ), the corresponding mass emission rate determined from that sample concentration shall also be reported as ND or DNQ.

E. Multiple Sample Data.

When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

F. Average Monthly Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by subsection E above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

In determining compliance with the AMEL, the following provisions shall also apply to all constituents:

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for that month;

2. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later.

When all sample results are greater than or equal to the reported ML (see Reporting Requirement I.G. of the MRP), the numerical average of the analytical results of these five samples will be used for compliance determination.

When one or more sample results are reported as ND or DNQ (see Reporting Requirement I.G. of the MRP), the median value of these four samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

3. In the event of noncompliance with an AMEL, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

4. If only one sample was obtained for the month or more than a monthly period and the result exceeds the AMEL, then the Discharger is in violation of the AMEL.

G. Maximum Daily Effluent Limitations (MDEL).

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

H. Instantaneous Minimum Effluent Limitation.

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

I. Instantaneous Maximum Effluent Limitation.

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)
Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$
where:
Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)
The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Best Management Practices (BMPs)
BMPs are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including storm water. BMPs include structural and non-structural control, and operation maintenance procedures, which can be applied before, during, and/or after pollution-producing activities.

Bioaccumulative
Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic
Pollutants are substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV)
CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge
Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)
DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Dilution Credit
Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effluent Concentration Allowance (ECA)
ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration
The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries
Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Existing Discharger
Any discharger that is not a new discharger. An existing discharger includes an "increasing discharger" (i.e., any existing facility with treatment systems in place for its current discharge that is or will be expanding, upgrading, or modifying its permitted discharge after the effective date of this Order).

Inland Surface Waters
All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation
The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation
The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL)
The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median
The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL)
MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in Title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)
ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone
Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND)
Sample results which are less than the laboratory's MDL.

Ocean Waters
The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

Persistent Pollutants
Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)
PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention
Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code Section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

Reporting Level (RL)
RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with Section 2.4.2 of the SIP or established in accordance with Section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Satellite Collection System
The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Source of Drinking Water
Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

Standard Deviation (σ)
Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:
x is the observed value;
μ is the arithmetic mean of the observed values; and
n is the number of samples.

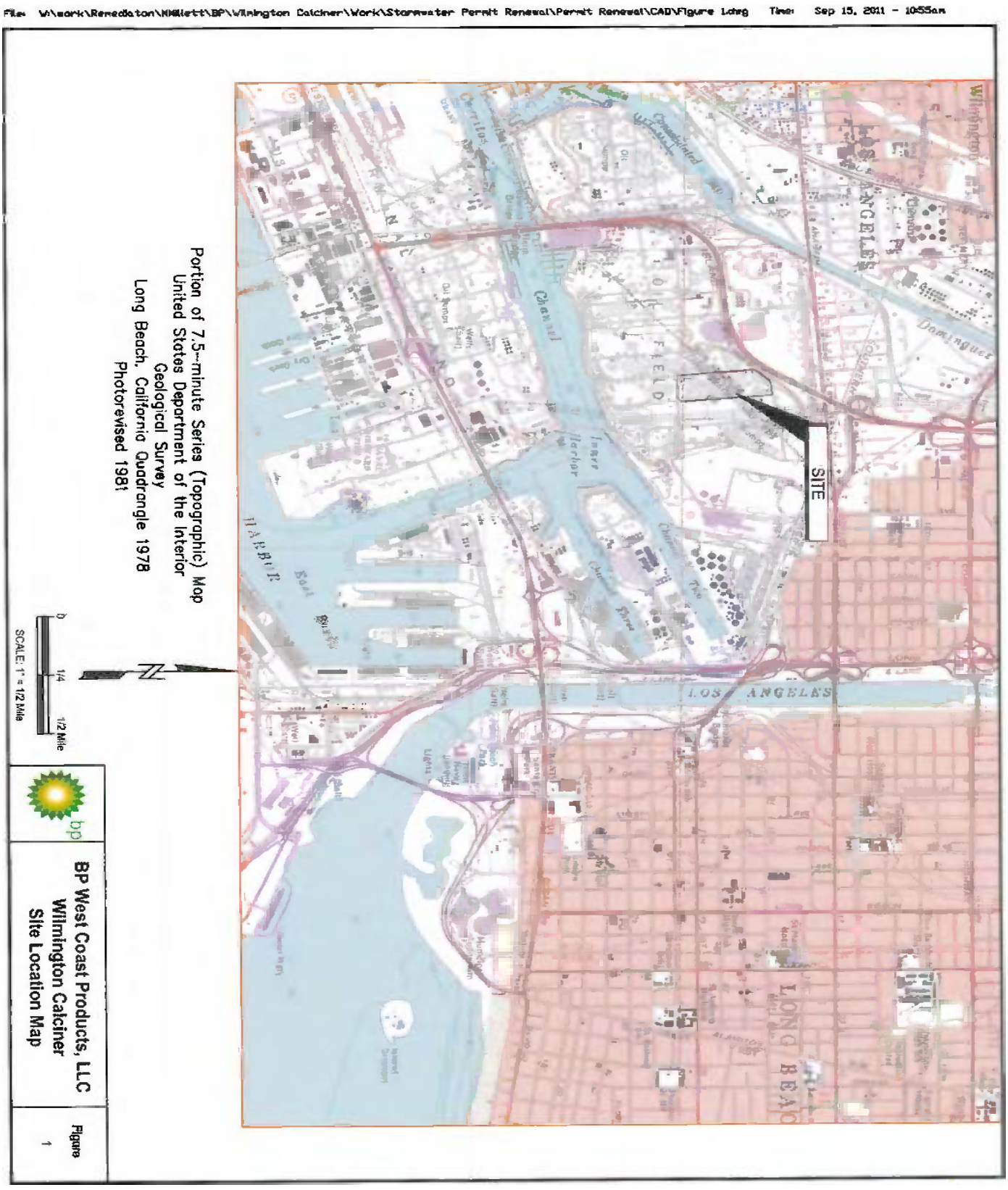
Toxicity Reduction Evaluation (TRE)
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

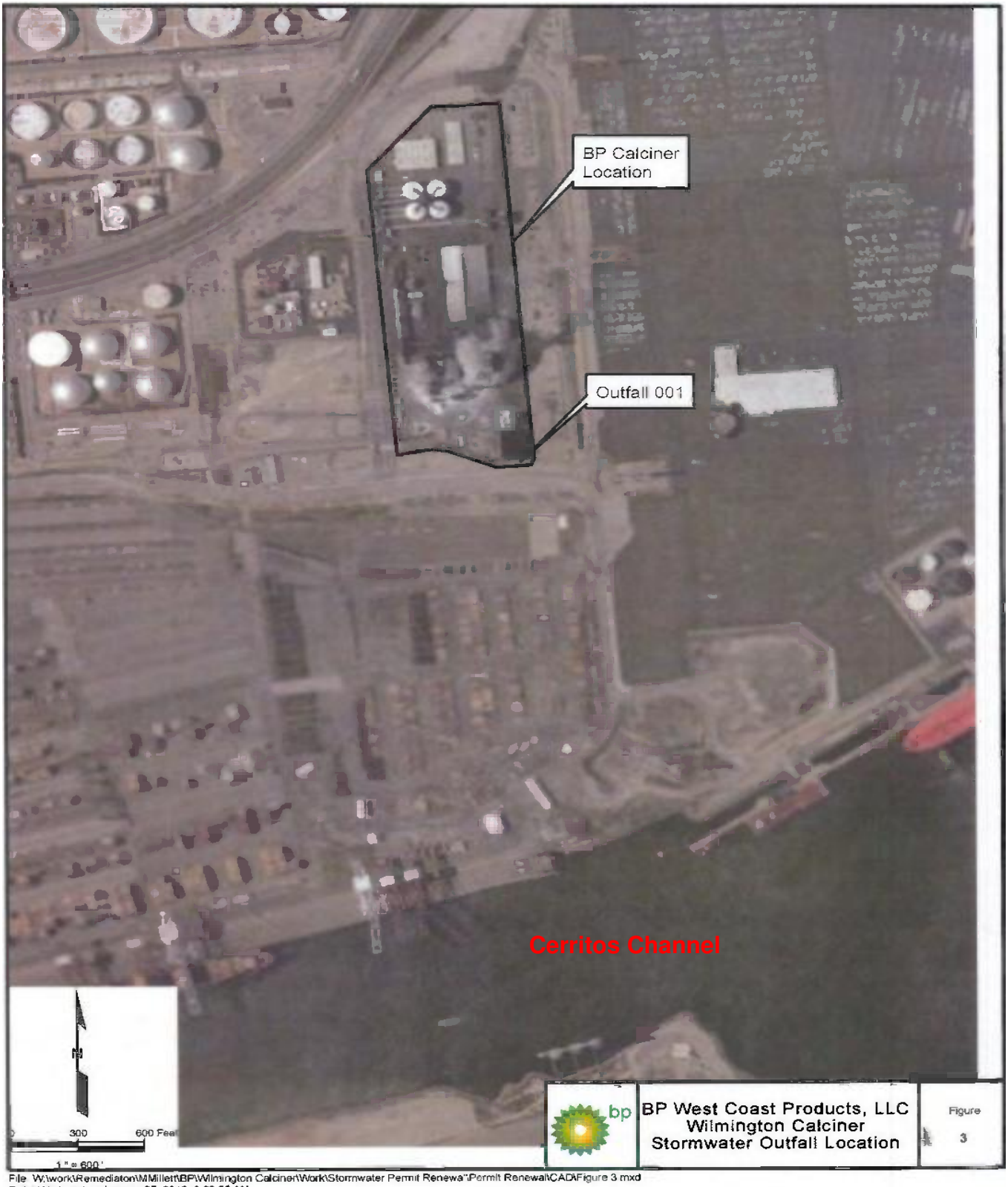
ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	*Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 ℃
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	Tesoro Refining & Marketing Company LLC
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Public Health Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	Tesoro Wilmington Calciner
gpd	gallons per day
IC	Inhibition Coefficient
IC_{15}	Concentration at which the organism is 15% inhibited
IC_{25}	Concentration at which the organism is 25% inhibited
IC_{40}	Concentration at which the organism is 40% inhibited
IC_{50}	Concentration at which the organism is 50% inhibited
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
µg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards

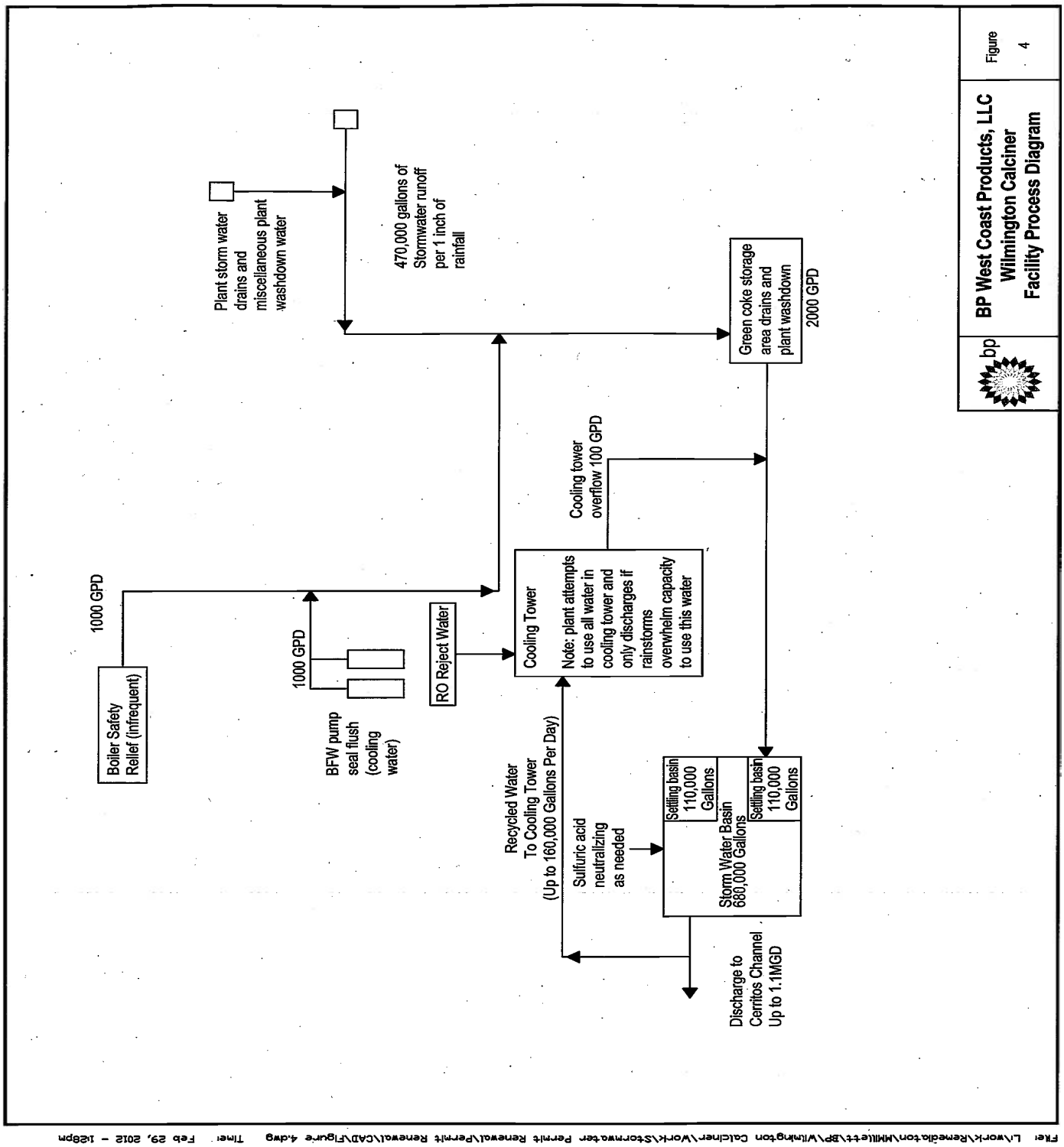
NTR	National Toxics Rule
OAL	Office of Administrative Law
PMEL	Proposed Maximum Daily Effluent Limitation
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
Ocean Plan	*Water Quality Control Plan for Ocean Waters of California*
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
Sediment Quality Plan	*Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality*
SIP	State Implementation Policy (*Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)*
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	Test Acceptability Criteria
Thermal Plan	*Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California*
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solid
TU_c	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

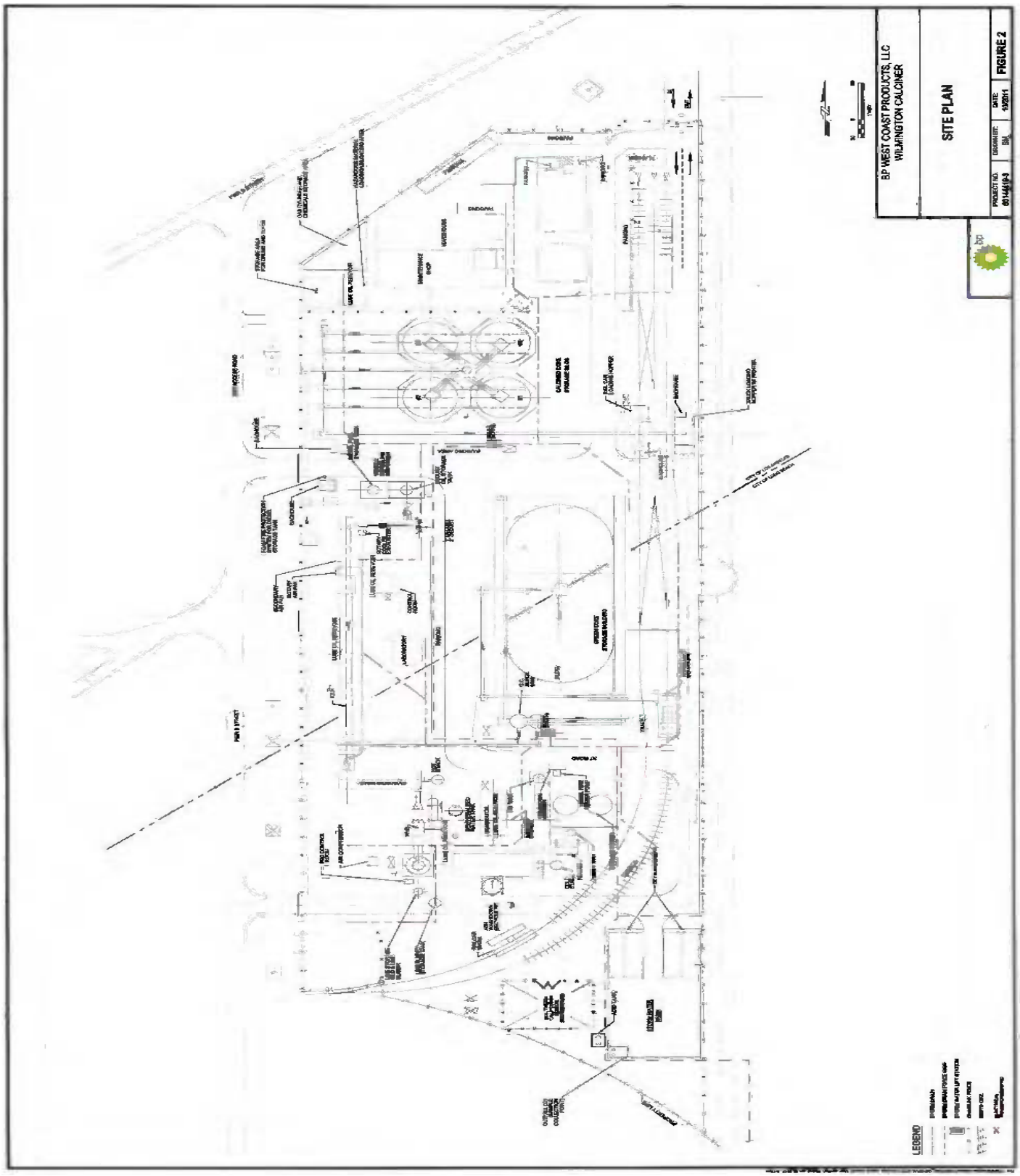
ATTACHMENT B – MAP




BP Calciner Location
Outfall 001
Cerritos Channel
N
300
600 Feet
1 " = 600 '
bp
BP West Coast Products, LLC
Wilmington Calciner
Stormwater Outfall Location
Figure
3
File: W:\work\Remediation\MMillett\BP\Wilmington Calciner\Work\Stormwater Permit Renewal\Permit Renewal\CAD\Figure 3.mxd
Date: Wednesday, January 25, 2012 9:23:50 AM

ATTACHMENT C – FLOW SCHEMATIC




BP WEST COAST PRODUCTS, LLC
WILMINGTON CALCINER
SITE PLAN
FIGURE 2
LEGEND

ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [40 CFR section 122.41(a)].

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement [40 CFR section 122.41(a)(1)].

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [40 CFR section 122.41(c)].

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [40 CFR section 122.41(d)].

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [40 CFR section 122.41(e)].

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges [40 CFR section 122.41(g)].

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations [40 CFR section 122.5(c)].

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR section 122.41(i)] [Water Code section 13383]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [40 CFR section 122.41(i)(1)];

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [40 CFR section 122.41(i)(2)];

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [40 CFR section 122.41(i)(3)]; and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location [40 CFR section 122.41(i)(4)].

G. Bypass

1. Definitions

a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR section 122.41(m)(1)(i)].

b. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR section 122.41(m)(1)(ii)].

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below [40 CFR section 122.41(m)(2)].

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR section 122.41(m)(4)(i)]:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR section 122.41(m)(4)(i)(A)];

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR section 122.41(m)(4)(i)(B)]; and

c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below [40 CFR section 122.41(m)(4)(i)(C)].

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR section 122.41(m)(4)(ii)].

5. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR section 122.41(m)(3)(i)].

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice) [40 CFR section 122.41(m)(3)(ii)].

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR section 122.41(n)(1)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was

caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 CFR section 122.41(n)(2)].

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR section 122.41(n)(3)]:

a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR section 122.41(n)(3)(i)];

b. The permitted facility was, at the time, being properly operated [40 CFR section 122.41(n)(3)(ii)];

c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) [40 CFR section 122.41(n)(3)(iii)]; and

d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR section 122.41(n)(3)(iv)].

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 CFR section 122.41(n)(4)].

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [40 CFR section 122.41(f)].

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [40 CFR section 122.41(b)].

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code [40 CFR sections 122.41(l)(3) and 122.61].

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR section 122.41(j)(1)].

B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order [40 CFR sections122.41(j)(4) and 122.44(i)(1)(iv)].

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 CFR section 122.41(j)(2)].

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements [40 CFR section 122.41(j)(3)(i)];

2. The individual(s) who performed the sampling or measurements [40 CFR section 122.41(j)(3)(ii)];

3. The date(s) analyses were performed [40 CFR section 122.41(j)(3)(iii)];

4. The individual(s) who performed the analyses [40 CFR section 122.41(j)(3)(iv)];

5. The analytical techniques or methods used [40 CFR section 122.41(j)(3)(v)]; and

6. The results of such analyses [40 CFR section 122.41(j)(3)(vi)].

C. Claims of confidentiality for the following information will be denied [40 CFR section 122.7(b)]:

1. The name and address of any permit applicant or Discharger [40 CFR section 122.7(b)(1)]; and

2. Permit applications and attachments, permits and effluent data [40 CFR section 122.7(b)(2)].

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order [40 CFR section 122.41(h)] [Water Code section 13267].

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below [40 CFR section 122.41(k)].

2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. [40 CFR section 122.22(a)(1)].

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above [40 CFR section 122.22(b)(1)];

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative

may thus be either a named individual or any individual occupying a named position.) [40 CFR section 122.22(b)(2)]; and

c. The written authorization is submitted to the Regional Water Board and State Water Board [40 CFR section 122.22(b)(3)].

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR section 122.22(c)].

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [40 CFR section 122.22(d)].

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [40 CFR section 122.22(l)(4)].

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices [40 CFR section 122.41(l)(4)(i)].

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [40 CFR section 122.41(l)(4)(ii)].

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [40 CFR section 122.41(l)(4)(iii)].

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [40 CFR section 122.41(l)(5)].

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR section 122.41(l)(6)(i)].

2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR section 122.41(l)(6)(ii)]:

a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR section 122.41(l)(6)(ii)(A)].

b. Any upset that exceeds any effluent limitation in this Order [40 CFR section 122.41(l)(6)(ii)(B)].

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR section 122.41(l)(6)(iii)].

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR section 122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR section 122.29(b) [40 CFR section 122.41(l)(1)(i)]; or.

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order [40 CFR section 122.41(l)(1)(ii)].

The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements

under 40 CFR section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR section 122.41(l)(1)(ii)].

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [40 CFR section 122.41(l)(2)].

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above [40 CFR section 122.41(l)(7)].

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information [40 CFR section 122.41(l)(8)].

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

B. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or

any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions [*40 CFR section 122.41(a)(2)*] [*Water Code sections 13385 and 13387*].

C. Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000 [*40 CFR section 122.41(a)(3)*].

D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both [*40 CFR section 122.41(j)(5)*].

E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both [*40 CFR section 122.41(k)(2)*].

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe [40 CFR section 122.42(a)]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [40 CFR section 122.42(a)(1)]:

a. 100 micrograms per liter (µg/L) [40 CFR section 122.42(a)(1)(i)];

b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 CFR section 122.42(a)(1)(ii)];

c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR section 122.42(a)(1)(iii)]; or

d. The level established by the Regional Water Board in accordance with 40 CFR section 122.44(f) [40 CFR section 122.42(a)(1)(iv)].

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" [40 CFR section 122.42(a)(2)]:

a. 500 micrograms per liter (µg/L) [40 CFR section 122.42(a)(2)(i)];

b. 1 milligram per liter (mg/L) for antimony [40 CFR section 122.42(a)(2)(ii)];

c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR section 122.42(a)(2)(iii)]; or

d. The level established by the Regional Water Board in accordance with 40 CFR section 122.44(f) [40 CFR section 122.42(a)(2)(iv)].

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP NO. 6571)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 6571

The Code of Federal Regulations 40 CFR section 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. An effluent sampling station shall be established for Discharge Point No. 001 and shall be located where representative samples of that effluent can be obtained.

B. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.

C. The Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.

D. Pollutants shall be analyzed using the analytical methods described in 40 CFR sections 136.3, 136.4, and 136.5 (revised May 18, 2012); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.

E. For any analyses performed for which no procedure is specified in the United States Environmental Protection Agency (USEPA) guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.

F. Each monitoring report must affirm in writing that “all analyses were conducted at a laboratory certified for such analyses by the Department of Public Health or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP”.

G. The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water

limitations, analytical data shall be reported by one of the following methods, as appropriate:

1. An actual numerical value for sample results greater than or equal to the ML; or

2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or,

3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

Analytical data reported as "less than" for the purpose of reporting compliance with permit limitations shall be the same or lower than the permit limit(s) established for the given parameter.

Current MLs (Attachment H) are those published by the State Water Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, February 24, 2005.

H. Where possible, the MLs employed for effluent analyses shall be lower than the permit limitations established for a given parameter. If the ML value is not below the effluent limitation, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.

The Regional Water Board, in consultation with the State Water Board Quality Assurance Program, shall establish a ML that is not contained in Attachment H to be included in the Discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Attachment H;

2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in 40 CFR Part 136 (revised May 18, 2012);

3. When the Discharger agrees to use an ML that is lower than that listed in Attachment H;

4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment H, and proposes an appropriate ML for their matrix; or,

5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Regional Water Board, and the State Water Board shall agree

on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

I. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.

J. All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.

K. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.

L. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. Unless otherwise specified in the analytical method, duplicate samples must be analyzed at a frequency of 5% (1 in 20 samples) with at least one if there is fewer than 20 samples in a batch. A batch is defined as a single analytical run encompassing no more than 24 hours from to finish. A similar frequency shall be maintained for analyzing spiked samples.

M. When requested by the Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.

N. For parameters that both average monthly and daily maximum limits are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limit, the Discharger shall collect four additional samples at approximately equal intervals during the month, until compliance with the average monthly limit has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limit.

O. In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:

1. Types of wastes and quantity of each type;

2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and

3. Location of the final point(s) of disposal for each type of waste.

If no wastes are transported off-site during the reporting period, a statement to that effect shall be submitted.

P. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.

Q. Laboratories analyzing monitoring samples shall be certified by the Department of Public Health, in accordance with the provision of Water Code Section 13176, and must include quality assurance/quality control data with their reports.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	At the discharge point of the retention basin (Latitude 33° 46' 29" N, Longitude 118° 13' 39" W).
--	RSW-001	A sampling station shall be established at a location outside the influence of the effluent discharge location, and at least 50 feet upstream, relative to tidal flow in the Cerritos Channel.
--	RSW-002	A sampling station shall be established at a location 50 feet downstream from the effluent discharge location, relative to tidal flow in the Cerritos Channel.

III. INFLUENT MONITORING REQUIREMENTS

Not Applicable

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. The Discharger shall monitor treated storm water mixed with wastewaters associated with industrial activites at Monitoring Location EFF-001 as follows.

Table E-2. Effluent Monitoring at Monitoring Location EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD[1]	Calculated	1/Day	--
Total Waste Flow	million gallons	Calculated	1/Discharge Event	--
Conventional Pollutants				
pH	std. units	Grab	1/Discharge Event[2]	[4]
Biochemical Oxygen Demand (BOD) (5-day @ 20 deg. C)[3]	mg/L	Grab	1/Discharge Event[2]	[4]
Chemical Oxygen Demand (COD)[3]	mg/L	Grab	1/Discharge Event[2]	[4]
Fecal Coliform	MPN/ 100 mL	Grab	1/Discharge Event[2]	[4]
Oil and Grease[3]	mg/L	Grab	1/Discharge Event[2]	[4]
Total Suspended Solids (TSS)[3]	mg/L	Grab	1/Discharge Event[2]	[4]
Non-Conventional Pollutants				
Aluminum, Total Recoverable	mg/L	Grab	1/Discharge Event[2]	[4]
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Discharge Event[2]	[4]
Acute Toxicity	% survival	Grab	1/Discharge Event[2]	[4,5]
Barium, Total Recoverable	mg/L	Grab	1/Discharge Event[2]	[4]
Boron, Total Recoverable	mg/L	Grab	1/Discharge Event[2]	[4]
Bromide	mg/L	Grab	1/Discharge Event[2]	[4]
Color	std. units	Grab	1/Discharge Event[2]	[4]
Elemental Sulfur	mg/L	Grab	1/Discharge Event[2]	[4]
Fluoride, Total	mg/L	Grab	1/Discharge Event[2]	[4]
Hardness, Total (as $CaCO_3$)	mg/L	Grab	1/Discharge Event[2]	[4]
Iron, Total Recoverable	mg/L	Grab	1/Discharge Event[2]	[4]
Magnesium, Total Recoverable	mg/L	Grab	1/Discharge Event[2]	[4]
Manganese, Total Recoverable	mg/L	Grab	1/Discharge Event[2]	[4]
Mercaptan	mg/L	Grab	1/Discharge Event[2]	[4]
Methylene Blue Active Substance (MBAS)	mg/L	Grab	1/Discharge Event[2]	[4]
Molybdenum, Total Recoverable	mg/L	Grab	1/Discharge Event[2]	[4]
Nitrite Plus Nitrate (as N)	mg/L	Grab	1/Discharge Event[2]	[4]
Organic Nitrogen, Total (as N)	mg/L	Grab	1/Discharge Event[2]	[4]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Phosphorus, Total (as P)	mg/L	Grab	1/Discharge Event[2]	[4]
Sulfate, Total (as SO_4)	mg/L	Grab	1/Discharge Event[2]	[4]
Sulfide	mg/L	Grab	1/Discharge Event[2]	[4]
Settleable Solids	ml/L	Grab	1/Discharge Event[2]	[4]
Specific Conductivity	µmhos/cm	Grab	1/Discharge Event[2]	[4]
Temperature	°F	Grab	1/Discharge Event[2]	[4]
Enterococcus	MPN/ 100 ml	Grab	1/Discharge Event[2]	[4]
Total Coliform	MPN/ 100 ml	Grab	1/Discharge Event[2]	[4]
Total Petroleum Hydrocarbons (TPH) as Gasoline (C_4-C_{12})[3]	µg/L	Grab	1/Discharge Event[2]	EPA Method 503.1 or 8015B
TPH as Diesel (C_{13}-C_{22})[3]	µg/L	Grab	1/Discharge Event[2]	EPA Method 503.1, 8015B, or 8270
TPH as Waste Oil (C_{23+})[3]	µg/L	Grab	1/Discharge Event[2]	EPA Method 503.1, 8015B, or 8270
Turbidity	NTU	Grab	1/Discharge Event[2]	[4]
Vanadium, Total Recoverable	mg/L	Grab	1/Discharge Event[2]	[4]
Xylene	µg/L	Grab	1/Discharge Event[2]	[4]
Priority Pollutants				
Antimony, Total Recoverable	µg/L	Grab	1/Year[6]	[4]
Arsenic, Total Recoverable	µg/L	Grab	1/Year[6]	[4]
Beryllium, Total Recoverable	µg/L	Grab	1/Year[6]	[4]
Cadmium, Total Recoverable	µg/L	Grab	1/Year[6]	[4]
Chromium (III)	µg/L	Grab	1/Year[6]	[4]
Chromium (VI)	µg/L	Grab	1/Year[6]	[4]
Copper, Total Recoverable[3]	µg/L	Grab	1/Discharge Event[2]	[4]
Lead, Total Recoverable[3]	µg/L	Grab	1/Discharge Event[2]	[4]
Mercury, Total Recoverable	µg/L	Grab	1/Year[6]	[4]
Nickel, Total Recoverable[3]	µg/L	Grab	1/Discharge Event[2]	[4]
Selenium, Total Recoverable	µg/L	Grab	1/Year[6]	[4]
Silver, Total Recoverable	µg/L	Grab	1/Year[6]	[4]
Thallium, Total Recoverable[3]	µg/L	Grab	1/Discharge Event[2]	[4]
Zinc, Total Recoverable[3]	µg/L	Grab	1/Discharge Event[2]	[4]
Cyanide, Total (as CN)[3]	µg/L	Grab	1/Discharge Event[2]	[4]
4,4'-DDT, Total[3,6]	µg/L	Grab	1/Discharge Event[2]	[4]
Total PCBs[3,6,7]	µg/L	Grab	1/Discharge Event[2]	[4]
Benzo(a)pyrene, Total[6]	µg/L	Grab	1/Discharge Event[2]	[4]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Crysene, Total[6]	µg/L	Grab	1/Discharge Event[2]	[4]
Remaining Priority Pollutants[8]	µg/L	Grab	1/Year[9]	[4]
TCDD Equivalents[10]	µg/L	Grab	1/Year[9]	[4]

[1] MGD= million gallons per day.

[2] During periods of extended discharge, no more than **one sample per week** (or a 7-day period) is required. For acute toxicity, no more than **one sample per month** is required during extended discharge. Sampling shall be performed during the first hour of discharge. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included in the report. If there is no discharge to surface waters, then no monitoring is required. In the corresponding monitoring report, the Discharger will indicate under statement of perjury that no effluent was discharged to surface water during the reporting period.

[3] The mass emission (lbs/day) for the discharge shall be calculated and reported using the limitation concentration and the actual flow rate measured at the time of discharge, using the formula.

$$M = 8.34 \times Ce \times Q$$

where: M = mass discharge for a pollutant, lbs/day

Ce = limitation concentration for a pollutant, mg/L

Q = actual discharge flow rate, MGD

[4] Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants, the methods must meet the lowest MLs specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.

[5] Refer to section V, Whole Effluent Toxicity Testing Requirements.

[6] Water samples analyzed for these pollutants shall not be filtered.

[7] Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical chanracteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

[8] Priority Pollutants as defined by the CTR defined in Finding II.I of the Limitations and Discharge Requirements of this Order, and included as Attachment I.

[9] Monitoring is only required during years in which discharge occurs. Annual samples shall be collected during the first discharge of the year. If there is no discharge to surface waters, the Discharger will indicate in the corresponding monitoring report, understatement of perjury that no effluent was discharged to surface water during the reporting period.

[10] TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

$$\text{Dioxin-TEQ (TCDD equivalents)} = \Sigma(C_x \times TEF_x)$$

where: C_X = concentration of dioxin or furan congener x

TEF_X = TEF for congener x

Toxicity Equivalency Factors

Congeners	Minimum Level (pg/L)	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	10	1.0
1,2,3,7,8 - penta CDD	50	1.0
1,2,3,4,7,8 - hexa CDD	50	0.1
1,2,3,6,7,8 - hexa CDD	50	0.1
1,2,3,7,8,9 - hexa CDD	50	0.1
1,2,3,4,6,7,8 - hepta CDD	50	0.01
Octa CDD	100	0.0001
2,3,7,8 - tetra CDF	10	0.1
1,2,3,7,8 - penta CDF	50	0.05
2,3,4,7,8 - penta CDF	50	0.5
1,2,3,4,7,8 - hexa CDF	50	0.1
1,2,3,6,7,8 - hexa CDF	50	0.1
1,2,3,7,8,9 - hexa CDF	50	0.1
2,3,4,6,7,8 - hexa CDF	50	0.1
1,2,3,4,6,7,8 - hepta CDFs	50	0.01
1,2,3,4,7,8,9 - hepta CDFs	50	0.01
Octa CDF	100	0.0001

2. Sediment Monitoring of Effluent at Monitoring Location EFF-001

The Discharger must sample the discharge at the point following final treatment, prior to entering the receiving water. The exact location of the sampling point must be stipulated in the initial self-monitoring report. All samples shall be tested in accordance with USEPA or ASTM methodologies where such methods exist. Where no USEPA or ASTM methods exist, the State Water Board or Regional Water Board (collectively Water Boards) shall approve the use of other methods. Analytical tests shall be conducted by laboratories certified by the California Department of Public Health in accordance with Water Code Section 13176.

Table E-3. Sediment Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
Copper	mg/kg	Grab	1/Year[1]
Lead	mg/kg	Grab	1/Year[1]
Zinc	mg/kg	Grab	1/Year[1]
PAHs	mg/kg	Grab	1/Year[1]
DDT	mg/kg	Grab	1/Year[1]
PCBs	mg/kg	Grab	1/Year[1]

1. Monitoring is only required during years in which a discharge occurs as specified in Footnote 4 to Table 6, page 15-16 of this Order. If monitoring is not triggered because of an exceedance, sediment monitoring must occur at least once during the five year permit term,if a discharge from the facility occurs..

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity

1. Definition of Acute Toxicity

Acute toxicity is a measure of primarily lethal effects that occur over a 96-hour period. Acute toxicity shall be measured in percent survival measured in undiluted (100%) effluent.

a. The average monthly survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and

b. No single test shall produce less than 70% survival.

2. Acute Toxicity Effluent Monitoring Program

a. Method. The Discharger shall conduct acute toxicity tests (96-hour static renewal toxicity tests) on effluent grab samples, by methods specified in 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, October 2002, USEPA, Office of Water, Washington D.C. (EPA/821/R-02/012) or a more recent edition to ensure compliance. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.

b. Test Species. The fathead minnow, *Pimephales promelas* (Acute Toxicity Test Method 2000.0), shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish effluent. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), the Discharger may have the option of using the inland silverside, *Menidia beryllina* (Acute Toxicity Test Method 2006.0), instead of the topsmelt. The method for topsmelt (Larval Survival and Growth Test Method 1006.0) is found in USEPA's *Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995* (EPA/600/R-95/136).

c. Alternate Reporting. For the acute toxicity testing with topsmelt, the Discharger may elect to report the results or endpoint from the first 96 hours of the chronic toxicity test as the results of the acute toxicity test, using USEPA's August 1995 method (EPA/600/R-95/136) to conduct the chronic toxicity test.

d. Acute Toxicity Accelerated Monitoring. If either of the above requirements (sections 1.a and 1.b) is not met, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period (or over the next six discharge events). The Discharger shall ensure that they receive results of a failing toxicity test within 24 hours of the close of the test and the additional tests

shall begin within 5 business days of the receipt of the result. If the additional tests indicate compliance with the toxicity limitation, the Discharger may resume regular testing.

e. Toxicity Identification Evaluation

i. If the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall immediately begin a Toxicity Identification Evaluation (TIE) and implement the Initial Investigation Toxicity Reduction Evaluation (TRE) workplan. The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

ii. If the initial test and any of the additional six acute toxicity bioassay tests results are less than 70% survival, the Discharger shall immediately begin a TIE and implement Initial Investigation TRE workplan. Once the sources are identified the Discharger shall take all reasonable steps to reduce toxicity to meet the requirements.

B. Quality Assurance

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).

2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002 and EPA/821-R-02-014), then the Discharger must re-sample and re-test at the earliest time possible.

3. Control and dilution water should be receiving water (if non-toxic) or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the water the test species are grown in (culture water), a second control using culture water shall be used.

C. Preparation of an Initial Investigation TRE Workplan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE workplan to the Executive Officer of the Regional Water Board for approval within **90 days** of the effective date of this permit. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

1. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

2. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the facility; and,

3. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section V.E.3 for guidance manuals.

D. Steps in TRE and TIE Procedures

1. If results of the implementation of the facility's initial investigation TRE workplan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of completion of the initial investigation TRE. The detailed workplan shall include, but not be limited to:

   a. Further actions to investigate and identify the cause of toxicity;

   b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;

   c. A schedule for these actions.

2. The following section summarizes the stepwise approach used in conducting the TRE

   a. Step 1 includes basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE;

   b. Step 2 evaluates optimization of the treatment system operation, facility housekeeping, and the selection and use of in-plant process chemicals;

   c. If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity;

   d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;

   e. Step 5 evaluates in-plant treatment options; and,

   f. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity (six consecutive chronic toxicity test results are less than or equal to 1.0 TUc or six consecutive acute toxicity test results are greater than 90% survival).

3. The Discharger shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic manual, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.

4. If a TRE/TIE is initiated prior to completion of the accelerated testing required in section V.A.2.d and V.B.2.b of this program, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

5. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance determination, if appropriate.

6. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based, in part, on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

E. Ammonia Removal

1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia *because of* increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.

b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.

c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.

d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.

F. Reporting

The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this permit. Test results shall be reported as % survival for acute toxicity test results with the self monitoring reports (SMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to section V.A.2.d., then those results also shall be submitted with the SMR for the period in which the investigation occurred.

1. The full report shall be submitted on or before the end of the month in which the SMR is submitted.

2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the acute toxicity average limit or chronic toxicity limit or trigger; and (4) the printout of the ToxCalc or CETIS (Comprehensive Environmental Toxicity Information System) program results.

3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test:

a. Sample date(s);

b. Test initiation date;

c. Test species;

d. End point values for each dilution (e.g., number of young, growth rate, percent survival);

e. LC_{50} value(s) in percent effluent;

f. TU_a values $\left(TU_a = \frac{100}{LC_{50}} \right)$;

g. IC_{15}, IC_{25}, IC_{40} and IC_{50} values in percent effluent;

h. NOEC value(s) in percent effluent;

i. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);

j. NOEC and LOEC values for reference toxicant test(s);

k. IC_{25} value for reference toxicant test(s);

l. Any applicable charts; and

m. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).

4. The Discharger shall provide a compliance summary, which includes a summary table of toxicity data from all samples collected during that year.

5. The Discharger shall notify by telephone or electronically, this Regional Water Board of any toxicity exceedance of the limit or trigger within 24 hours of receipt of the results followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

Not Applicable

VII. RECLAMATION MONITORING REQUIREMENTS

Not Applicable

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

A. Monitoring Location RSW-001

1. Receiving water sampling shall be conducted at the same time as the effluent monitoring when there is discharge to surface water. The Discharger shall monitor the Cerritos Channel, at Monitoring Location RSW-001, within 50 feet upstream of Discharge Point No. 001, relative to tidal flow, as follows:

Table E-4. Receiving Water Monitoring Requirements at Monitoring Location RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia, Total (as N)	mg/L	Grab	1/Year	[1]
pH	s.u.	Grab	1/Year	[1]
Salinity	mg/L	Grab	1/Year	[1]
Temperature	ºF	Grab	1/Year	[1]
Priority Pollutants[2]	µg/L	Grab	1/Year	[1]
TCDD Equivalents[3]	µg/L	Grab	1/Year	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants the methods must meet the lowest MLs specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.

[2] Priority Pollutants as defined by the CTR, defined in Finding II.I of the Limitations and Discharge Requirements of this Order, and included as Attachment I.

[3] To determine compliance with effluent limitations or to conduct Reasonable Potential Analysis (RPA), this Order requires the Discharger to calculate and report dioxin-toxicity equivalencies (TEQs) using the following formula, where the toxicity equivalency factors (TEFs) are as listed in the Table below. USEPA method 1613 may be used to analyze dioxin and furan congeners.

$$\text{Dioxin-TEQ} = \Sigma(C_x \times TEF_x)$$

where:

C_X = concentration of dioxin or furan congener x

TEF_X = TEF for congener x

Toxicity Equivalency Factors

Congeners	Minimum Level (pg/L)	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	10	1.0
1,2,3,7,8 - penta CDD	50	1.0
1,2,3,4,7,8 - hexa CDD	50	0.1
1,2,3,6,7,8 - hexa CDD	50	0.1
1,2,3,7,8,9 - hexa CDD	50	0.1
1,2,3,4,6,7,8 - hepta CDD	50	0.01
Octa CDD	100	0.0001
2,3,7,8 - tetra CDF	10	0.1
1,2,3,7,8 - penta CDF	50	0.05
2,3,4,7,8 - penta CDF	50	0.5
1,2,3,4,7,8 - hexa CDF	50	0.1
1,2,3,6,7,8 - hexa CDF	50	0.1
1,2,3,7,8,9 - hexa CDF	50	0.1
2,3,4,6,7,8 - hexa CDF	50	0.1
1,2,3,4,6,7,8 - hepta CDFs	50	0.01
1,2,3,4,7,8,9 - hepta CDFs	50	0.01
Octa CDF	100	0.0001

B. Monitoring Location RSW-002

1. Receiving water sampling shall be conducted at the same time as the effluent monitoring when there is discharge to surface water. The Discharger shall monitor the Cerritos Channel, at Monitoring Location RSW-002, within 50 feet downstream of Discharge Point No. 001, relative to tidal flow, as follows:

Table E-5. Receiving Water Monitoring Requirements at Monitoring Location RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	s.u.	Grab	1/Year	[1]
Dissolved Oxygen	mg/L	Grab	1/Year	[1]
Salinity	mg/L	Grab	1/Year	[1]
Temperature	ºF	Grab	1/Year	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants the methods must meet the lowest MLs specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.

IX. OTHER MONITORING REQUIREMENTS

A. Visual Monitoring of Upstream and Downstream Receiving Water Sampling Points

1. A visual observation station shall be established in the vicinity of the discharge point of the storm drain to the receiving water, the Cerritos Channel.

2. General observations of the receiving water shall be made at each discharge point when discharges occur. During months of no discharge, the receiving water observations shall be made on a monthly basis. All receiving water observations shall be reported in the quarterly monitoring report. If no discharge occurred during the observation period, this shall be reported. Observations shall be descriptive where applicable, such that colors, approximate amounts, or types of materials are apparent. The following observations shall be made:

a. Tidal stage, time, and date of monitoring
b. Weather conditions
c. Color of water
d. Appearance of oil films or grease, or floatable materials
e. Extent of visible turbidity or color patches
f. Direction of tidal flow
g. Description of odor, if any, of the receiving water
h. Presence and activity of California Least Tern and California Brown Pelican.

B. Storm Water Monitoring

1. **Rainfall Monitoring.** The Discharger shall measure and record the rainfall on each day of the month. This information shall be included in the monitoring report for that month. In lieu of measuring rainfall, the Discharger may report rainfall data collected at the Long Beach Airport. If no effluent discharge to surface waters occurred during a rainfall event, no rainfall data is required to be reported in the corresponding monitoring report.

2. **Visual Observation.** The Discharger shall make visual observations of all storm water discharge locations on at least one storm event per month that produces a significant storm water discharge to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor. A "significant storm water discharge" is a continuous discharge of storm water for a minimum of one hour, or the intermittent discharge of storm water for a minimum of 3 hours in a 12-hour period.

C. Storm Water Pollution Prevention Plan (SWPPP), Best Management Practices Plan (BMPP) and Spill Contingency Plan (SCP)

1. As required under Special Provision VI.C.3 of this Order, the Discharger shall submit an updated SWPPP, BMPP, and SCP to the Regional Water Board within 90 days of the effective date of this permit.

   Annually the Discharger shall report the status of the implementation and the effectiveness of the SWPPP, BMPP, and SCP Status required under Special Provision VI.C.3 of this Order. The SWPPP, BMPP, and SCP Status shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of pollutants in wastewater and storm water discharged from the facility are addressed in the SWPPP, BMPP, and SCP Status. All changes or revisions to the SWPP, BMPP, and SCP Status will be summarized in the annual report required under Attachment E, Monitoring and Reporting, section XI.D.

D. Regional Monitoring

The Discharger may be required to participate in the development of Regional Monitoring program(s) to address pollutants as specified in the Harbor Toxics TMDL.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

2. If there is no discharge to surface waters during any reporting period, the Discharger will indicate under statement of perjury that no effluent was discharged to surface water during the reporting period in the corresponding monitoring report.

3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.

4. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

5. The Discharger shall report the results of acute and chronic toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting, Section V.F.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit SMRs as searchable PDF documents. SMR documents that are less than 10 megabytes (MB) should be emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed in section XI.B.8.c of this MRP. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit quarterly SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-6. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
1/Day	On permit effective date.	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	August 1 November 1 February 1 May 1
1/Discharge Event	On permit effective date.	1st day of calendar month through last day of calendar month	August 1 November 1 February 1 May 1
1/Year	On permit effective date.	January 1 through December 31	February1

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in Part 136.

5. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

b. Sample results less than the Reporting Limit (RL), but greater than or equal to the laboratory's MDL, shall be reported as DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

c. Sample results less than the laboratory's MDL shall be reported as ND.

d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

6. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and

Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.

7. Multiple Sample Data. When determining compliance with an Average Monthly Effluent Limitation (AMEL) or Maximum Daily Effluent Limitation (MDEL) for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

8. The Discharger shall submit SMRs in accordance with the following requirements:

a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements (WDRs); discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

c. SMRs must be submitted to the Regional Water Board, signed and certified as required in Item X.B.1. If a disk that contains a document that is 10MB or larger is required, submit it to the address listed below:

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

C. Discharge Monitoring Reports (DMRs)

Not Applicable

D. Other Reports

1. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Regional Water Board:

d. Initial Investigation TRE workplan

e. Updated SWPPP

f. Updated BMPP

g. Updated SCP

2. Within **20 months** of the effective date of the Harbor Toxics TMDL **and annually thereafter,** the Discharger or the Responsible Parties shall submit annual implementation reports to the Regional Water Board. The reports shall describe the measures implemented and the progress achieved toward meeting the assigned WLAs and LAs.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4B192208003
Discharger	Tesoro Refining & Marketing Company LLC (Former BP West Coast Products LLC)
Name of Facility	Tesoro (Former BP) Wilmington Calciner
Facility Address	1175 Carrack Avenue
	Wilmington, CA 90744
	Los Angeles County
Facility Contact, Title and Phone	Adrian Rosu, Environmental Engineer, 562-499-3210
Authorized Person to Sign and Submit Reports	Jody Hanson, Plant Manager, 562-499-3201
Mailing Address	P.O. Box 1028 Wilmington, CA 90748
Billing Address	Same as Mailing Address
Type of Facility	Petroleum Coke Calcining Facility (SIC 2999)
Major or Minor Facility	Minor
Threat to Water Quality	Category 2
Complexity	Category B
Pretreatment Program	No
Reclamation Requirements	Not Applicable
Facility Permitted Flow	1.1 million gallons per day (MGD)
Facility Design Flow	Not Applicable
Watershed	Los Angeles/Long Beach Harbor
Receiving Water	Cerritos Channel, within the Los Angeles-Long Beach Inner Harbor
Receiving Water Type	Coastal Water

A. Tesoro Refining & Marketing Company LLC, Former BP West Coast Products LLC (hereinafter Discharger or Tesoro) is the owner and operator of the Tesoro Wilmington Calciner, Former BP Wilmington Calciner Facility (hereinafter Facility) located at 1175 Carrack Avenue, Wilmington, California. Tesoro purchased the Facility on June 1, 2013.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. The Facility discharges wastewater to the Cerritos Channel within the Los Angeles-Long Beach Inner Harbor, a water of the United States, and is currently regulated by Order No. R4-2007-0031. The Order No. R4-2007-0031 was adopted on June 7, 2007, and expired on May 10, 2012. As per 40 CFR section 122.6, Order No. R4-2007-0031 has been administratively extended and remains in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.

C. The Discharger submitted a Report of Waste Discharge (ROWD), dated October 14, 2011, and applied for renewal of the waste discharge requirements (WDR) and National Pollutant Discharge Elimination System (NPDES) permit to discharge up to 1.1 million gallons per day (MGD) from the Facility. Supplemental information were received on January 10, 2012, and January 26, 2012. The application was deemed complete on January 26, 2012.

On November 28, 2011, and April 2, 2013, PG Environmental, LLC (contractor with the U.S. Environmental Protection Agency) and Regional Water Board staff, respectively, conducted a site visit to review current site conditions and operations of the Facility.

II. FACILITY DESCRIPTION

The Discharger owns and operates the Tesoro Wilmington Calciner facility, a petroleum coke calcining facility. The Facility receives green coke that is produced at Tesoro's Carson Refinery (NPDES No. CA0000680; hereinafter Refinery) located at 2350 E. 223rd Street, Carson, California. The Refinery is located approximately 2.1 miles north of the Facility. The Refinery processes approximately 275,000 barrels per day of crude oil to produce gasoline, diesel fuel, jet fuel, sulfur, coke, liquefied petroleum gas (LPG), and polypropylene. The green coke from the Refinery is transported by truck and occasionally by rail car to the Facility. The green coke is stored in a covered structure referred to as Coke Barn prior to calcining. The Facility processes green coke (i.e., petroleum coke from an oil refinery's coking unit) by running it through a large rotary kiln to remove residual moisture and other impurities to produce calcined coke. The impurities generated from the Facility's calcining process include residual hydrocarbons, which are captured and used to fuel an on-site 34- megawatt (MW) power generation unit.

The Facility's industrial process waters including boiler blowdown, cooling tower blowdown, plant air sump, acid sump, wastewater from maintenance activities, air compressor condensate, and all other normal calciner wastewater flows to the publicly owned treatment works (POTW) regulated under Permit No. 015671 issued by Los Angeles County Sanitation Department (LACSD) Industrial Wastewater Discharge Program. This Order covers discharges of the remaining treated storm water and wastewater associated with industrial acitivities only after the retention basin is filled to capacity during or immediately following large storm events, to the Cerritos Channel, a water of the United States..

A. Description of Wastewater and Biosolids Treatment or Controls

The ROWD identifies the following wastewater contributions (long term average flow) to the discharge.

- Green coke drainage and miscellaneous wash water – 2,000 gallons per day (gpd) (0.002 MGD)
- Boiler safety relief system blowdown – 1,000 gpd (0.001 MGD)
- Boiler feed water pump seal flush – 1,000 gpd (0.001 MGD)
- Storm Water Runoff – up to 680,000 gallons

Following submittal of the ROWD, the Discharger provided supplemental information that listed contributions of cooling tower overflow at 100 gpd, on rare occasions. The Discharger requested a total permitted flow of 1.1 MGD.

The Facility has a reverse osmosis (RO) system utilized to treat potable water (from the City) to be used as boiler feed water. The potable water that is rejected by the RO system is conveyed to the cooling tower. The RO system generates a salt-free water for use as cooling water. The RO unit concentrates the removed salts into a softener flush water stream, which is discharged to the industrial sewer under CSDLAC Permit No. 015671.

The Facility consists of paved or concreted areas which are contained by a concrete berm, approximately 4 inches tall. The berm encompasses the entire site except for rail and roadway entrances and exits. The Facility's impervious areas are sloped to convey storm water and process waters to one of two lift stations (i.e., North and South Lift Stations) that pump collected water to the Facility's settling basins.

The storm water and wastewater associated with industrial activities passes through a treatment system consisting of two, concrete-lined, 2-compartment settling basins (eastern and western basin; 110,000 gallons each) for removal of settleable solids. Runoff from coke storage and handling areas is generally routed to the eastern settling basin. Wash water from ash storage and handling areas is generally routed to the western settling basin.

Following treatment in the settling basins, the waste stream then flows into a 680,000-gallon, concrete-lined, retention basin (known as the main storm water basin) for additional settling and neutralization with sulfuric acid (as needed). Solids that accumulate within the settling basins and the retention basin are routinely removed and disposed of off-site to a legal disposal facility. From the retention basin, treated, commingled storm water and process waters are either recycled for use as cooling water or discharged to the Cerritos Channel.

During normal operations, the Facility recycles all water from the forge basin and uses it as coolinq tower make up water in all but storm events where rainfall is higher than the recyclinq rate.

Using this storm water intake and recycling system, the Facility has eliminated most discharge events from the Facility to the receiving water. In December 2010, the Facility encountered the largest amount of rainfall in the Long Beach area since about 1984 and successfully managed all storm water on site without discharging. The December 2010 storm event enabled the Facility to evaluate its retention capacity and storm water handling procedures and to enhance its management of storm water significantly such that now the Facility ensures that 80 percent of its basin remains available for storm events. The Facility has also secured an increased discharge limit to the local LACSD to enable it to discharqe additional wastewater, including cooling tower blowdown, if necessary, at all times (including during storm events) thereby enabling the Facility to recycle a higher amount of storm water through the cooling tower. Based on experience and recent engineering studies, the Facility confirmed that its design enables the retention of a 50-year, 24-hour storm event (i.e. a 24-hour amount of precipitation that will occur once in a 50-year period, on average).

During significant storm events when the retention basin reaches full capacity, the treated storm water mixed with wastewater associated with industrial activities is discharged through Discharge Point No. 001 to the Cerritos Channel, a water of the United States.

No discharges occurred during the term of Order No. R4-2007-0031. The most recent discharge event occurred in January 2005.

B. Discharge Points and Receiving Waters

The Discharger proposes to discharge up to 1.1 MGD of treated storm water mixed with wastewater associated with industrial activites from the Facility into the Cerritos Channel, within the Los Angeles-Long Beach Inner Harbor, a water of the United States via Discharge Point No. 001 (Latitude 33º 46’ 29” N, Longitude 118º 13’ 39” W).

Attachment B depicts a topographic map of the area around the Facility. Attachment C depicts the schematic diagram of the wastewater flow.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

No discharges occurred through Discharge Point No. 001 during the term of the existing Order No. R4-2007-0031.

D. Compliance Summary

During the term of Order No. R4-2007-0031, no discharges occurred. Therefore, there were no violations of effluent limitations.

E. Planned Changes

The Discharger does not currently have any planned changes to the Facility.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to Section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with Section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with Section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21100 through 21177.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

   The Basin Plan does not specifically identify beneficial uses for the Cerritos Channel, but does identify existing and potential uses for the Los Angeles-Long Beach Inner Harbor, to which the Cerritos Channel is tributary. The Los Angeles-Long Beach Inner Harbor is not designated as MUN. Thus, beneficial uses applicable to the Cerritos Channel are as follows:

Table F-2. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Cerritos Channel Within Los Angeles/Long Beach Inner Harbor	Existing: Industrial service supply (IND); navigation (NAV); non-contact water recreation (REC-2); commercial and sport fishing (COMM); marine habitat (MAR); rare, threatened, or endangered species (RARE) Potential: Water contact recreation (REC-1); shellfish harvesting (SHELL)

Requirements of this Order implement the Basin Plan.

Enclosed Bays and Estuaries Policy. The Water Quality Control Policy for the Enclosed Bays and Estuaries of California (Enclosed Bay and Estuaries Policy), adopted by the State Water Resources Control Board (State Water Board) as Resolution No. 95-84 on November 16, 1995, states that:

> *"It is the policy of the State Water Board that the discharge of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries, other than the San Francisco Bay-Delta system, shall be phased out at the earliest practicable date. Exceptions to this provision may be granted by a Regional Water Board only when the Regional Water Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge."*

The discharge from the Tesoro Wilmington Calciner Facility is comprised primarily of storm water runoff mixed with a small amount of wastewater. Discharges to the Cerritos Channel, within the Los Angeles-Long Beach Inner Harbor, would only occur during significant storm events. Since the discharge is not municipal wastewater or industrial process wastewater which are prohibited, this discharge is permitted. This Order also contains provisions necessary to protect all beneficial uses of the receiving water.

2. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan. Additionally, a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region,* evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life and is included in this Order.

3. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Table 3-1 through Table 3-4. However, those ammonia objectives were revised on March 4, 2004, by the Regional Water Board with the adoption of Resolution No. 2004-022, *Amendment to the Water Quality Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including enclosed bays, estuaries and wetlands) with the Beneficial Use designations for protection of "Aquatic Life"*. The ammonia Basin Plan amendment was approved by the State Water Board on July 22, 2004, Office of Administrative Law on September 15, 2004, and by USEPA on May 19, 2005. The amendment revised the Basin Plan by updating the ammonia objectives for inland surface waters not

characteristic of freshwater such that they are consistent with USEPA's *"Ambient Water Quality Criteria for Ammonia (Saltwater) – 1989."* The amendment revised the regulatory provisions of the Basin Plan by adding language to Chapter 3, "Water Quality Objectives."

For inland surface waters not characteristic of freshwater (including enclosed bays, estuaries, and wetlands), the objectives are a 4-day average concentration of unionized ammonia of 0.035 mg/L, and a one-hour average concentration of unionized ammonia of 0.233 mg/L. The objectives are fixed concentrations of unionized ammonia, independent of pH, temperature, or salinity. The amendment includes an implementation procedure to convert unionized ammonia objectives to total ammonia effluent limits. The amendment also simplifies the implementation procedures for translating ammonia objectives into effluent limits in situations where a mixing zone has been authorized by the Regional Water Board. Finally, the amendment revises the implementation procedure for determining saltwater, brackish or freshwater conditions, to be consistent with the objectives. The objectives will apply only to inland surface waters not characteristic of freshwater (including enclosed bays, estuaries and wetlands) and do not impact the Ammonia Water Quality Objectives for ocean waters contained in the California Ocean Plan.

4. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

5. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

6. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 CFR § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect

and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

7. **Antidegradation Policy.** 40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution No. 68-16.

8. **Anti-Backsliding Requirements.** Section 402(o) of the CWA establishes statutory language prohibiting the backsliding of effluent limits. Sections 402(o) of the CWA and federal regulations at title 40, Code Federal Regulations (CFR) section 122.44(l) outlines specific exception to the general prohibition against establishment of less stringent effluent limitations.

   These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent limitations included in this Order for copper, and zinc are less stringent than in the previous Order. As discussed in this Fact Sheet, this relaxation of effluent limitations is consistent with this relaxation is consistent with exceptions identified under Section 402(o).

D. Impaired Water Bodies on CWA 303(d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Water Board plans to develop and adopt total maximum daily loads (TMDLs) that will specify waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources, as appropriate.

The USEPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. Certain receiving waters in the Los Angeles watershed do not fully support beneficial uses and therefore have been classified as impaired on the 2010 303(d) list and have been scheduled for TMDL development.

The Facility discharges to the Cerritos Channel, within the Los Angeles-Long Beach Inner Harbor. The 2010 State Water Resources Control Board (State Water Board) California 303(d) List includes the classification of the Los Angeles-Long Beach Inner Harbor. The pollutants of concern include beach closures due to bacteria, benthic community effects, benzo(a)pyrene (3,4-benzopyrene-7-d), chrysene, copper, dichlorodiphenyltrichloroethane (DDT), polychlorinated biphenyls (PCBs), sediment toxicity, and zinc.

The following are summaries of the TMDLs for the Los Angeles/Long Beach Harbor Inner Harbor:

1. **Bacteria TMDL.** The Regional Water Board approved the Los Angeles Harbor Bacteria TMDL through Resolution 2004-011 on July 1, 2004. The State Water Board, Office of Administrative Law (OAL), and USEPA approved the TMDL on October 21, 2004, January 5, 2005, and March 1, 2005, respectively. The Bacteria TMDL became effective on March 10, 2005. The Bacteria TMDL addresses Inner Cabrillo Beach and the Main Ship Channel of the Los Angeles Inner Harbor. This Order includes bacteria limitations based on WQS applicable to Cerritos Channel. These WQS (and WQBELs) are identical to the WQS used to develop the Bacteria TMDL that is applicable to the Main Ship Channel immediately downstream of Cerritos Channel.

2. **Harbor Toxics TMDL.** The Regional Water Board adopted Resolution No. R11-008 on May 5, 2011, that amended the Basin Plan to incorporate the *TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters* (Harbor Toxics TMDL). The Harbor Toxic TMDL was approved by the State Water Board on February 7, 2012, the OAL on March 21, 2012, and the USEPA on March 23, 2012. The Harbor Toxics TMDL contains requirements applicable to this discharge. Therefore, this Order contains effluent limitations and monitoring requirements based on the TMDL.

   For Cerritos Channel which is located within the Long Beach Inner Harbor the Harbor Toxics TMDL included:

   a. Sediment interim concentration-based allocations (in mg/kg sediment) for copper, lead, zinc, DDT, PAHs, and PCBs (Attachment A to Resolution No. R11-008, p. 11).

   b. Water column final concentration-based waste load allocations (WLAs) (ug/L) for copper, lead, zinc, 4,4'-DDT and total PCBs (Attachment A to Resolution No. R11-008, pp. 13-14).

   c. Provisions for monitoring discharges and/or receiving waters during the TMDL's 20 year implementation schedule to determine attainment with waste load and load allocations as appropriate.

   Implementation of the Harbor Toxics TMDL

   The provisions of this Order implement and are consistent with the assumptions and requirements of all waste load allocations (WLAs) established in the Harbor Toxics TMDLs. This Order requires final WQBELs that are statistically-calculated based on salt water column final concentration-based WLAs (in µg/L, total metal) for copper (3.73), lead (8.52), zinc (85.6), 4,4'-DDT (0.00059), and total PCBs (0.00017) (referred to in this Order as CTR TMDL-based WLAs), converted from saltwater CTR criteria using CTR saltwater default translators, and relevant implementation provisions in section 1.4 of the State Implementation Policy. The TMDL includes provisions for a 20-year implementation schedule when warranted. However, this

Order requires final WQBELs (referred to in this Order as CTR TMDL-based effluent limits). Historical data indicates that the Discharger may not be able to comply with the final effluent limitations for the pollutants targeted in the water column that are specified in the Harbor Toxics TMDL (i.e., lead, DDT, and PCBs). On March 28, 2013, the Discharger requested the Regional Water Board issue a Time Schedule Order (TSO) with interim limits for lead, DDT, and PCBs. A TSO has been issued with this Order.

This Order also includes monitoring thresholds based on the TMDL's interim sediment allocations (in mg/kg sediment) for copper (142.3), lead (50.4), zinc (240.6), PAHs (4.58), DDT (0.070), and PCBs (0.060), and associated sediment monitoring requirements for the effluent. Regardless of these monitoring thresholds, the Discharger 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. The TMDL's interim sediment allocations were developed to ensure that the beneficial uses of the Cerritos Channel within the Los Angeles/Long Beach Inner Harbor are protected.

The water column CTR TMDL-based WLAs for copper, lead, zinc, 4,4'-DDT, and total PCBs were developed to ensure that the beneficial uses of the Cerritos Channel are protected. However, no water column CTR TMDL-based WLAs were assigned for PAHs in the Greater Harbor Waters (includes Los Angeles/Long Beach Inner and Outer Harbors). Therefore, this Order sets performance goals for the PAHs; benzo(a)pyrene and chrysene, to ensure proper implementation of the TMDL's interim sediment allocations for this discharge. During each reporting period, if effluent monitoring results exceed both a TSS effluent limit and a CTR TMDL-based effluent limit or performance goal for copper, lead, zinc, 4,4-DDT, total PCBs, benzo(a)pyrene, or chrysene, and implementation of the effluent sediment monitoring program is required for that priority pollutant. Sediment monitoring of the effluent shall begin during the first discharge event following the effluent exceedances. An effluent sediment monitoring result at or below the monitoring thresholds in Table 7, page 24 of this Order, demonstrates attainment with the monitoring thresholds and additional sediment monitoring of the effluent is not required. A sediment monitoring result that exceeds the monitoring thresholds requires additional sediment monitoring of the effluent during discharge, but not more frequently than once per year, until the three-year average concentration for sediment monitoring results is at or below the monitoring thresholds.

Performance Goals for Individual PAHs: Benzo(a)pyrene and Chrysene

The performance goals for benzo(a)pyrene and chrysene are intended to 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. These performance goals are not enforceable effluent limitations. They act as triggers to determine when sediment monitoring of the effluent is required for these compounds.

CTR human health criteria are not promulgated for total PAHs. Therefore, performance goals are based on CTR human health criteria for the individual PAHs, benzo(a)pyrene (0.049 µg/L) and chrysene (0.049 µg/L). Benzo(a)pyrene and chrysene are selected because the State's 2010 303(d) List classifies the Los Angeles/Long Beach Inner Harbor as impaired for these PAH compounds. See also the May 5, 2011, Final Staff Report for the Harbor Toxics TMDL (Staff Report).

Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for Greater Los Angeles and Long Beach Harbor Waters Compliance Monitoring Program

The TMDL's implementation schedule to demonstrate attainment of WLAs and load allocations is 20 years after the TMDL effective date for a Discharger who justifies the need for an associated time included in a compliance plan. During this period, the Discharger is required, either individually or with a collaborating group, to develop a monitoring and reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in the Greater Los Angeles and Long Beach Harbor. These plans shall follow the "TMDL Element – Monitoring Plan" provisions in Attachment A to Resolution No. R11-008. The Discharger must inform the Regional Board if they plan to join a collaborative monitoring effort or develop a site specific plan **90 days** after the effective date of the permit. If Calciner is joining a collaborative effort that notification must include documentation of such. If developing a site specific Monitoring Plan, the plan must be submitted **12 months** after the effective date of the permit for public review and, subsequently, Executive Officer approval. Monitoring shall begin **6 months** after a monitoring plan is approved by the Executive Officer. The compliance monitoring program shall include water column, sediment, and fish tissue monitoring.

E. Other Plans, Polices and Regulations

Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

The existing Order established effluent limitations for a number of pollutants believed to be present in the discharge of storm water from a calcining facility. Effluent limitations in the existing permit were established for biochemical oxygen demand (BOD), oil and grease, pH, total suspended solids (TSS), acute toxicity, settleable solids, turbidity, copper, nickel, thallium, zinc, and cyanide. These constituents were identified based on a review of

pollutants commonly found in discharges from calcining operations, materials stored or used on-site, and/or were historically detected in the effluent. Therefore, these constituents remain pollutants of concern. Storm water runoff and process waters that come into contact with green coke may become contaminated with various petroleum hydrocarbons, thus total petroleum hydrocarbons is a pollutant of concern. Pollutants included on the 303(d) list for the Los Angeles-Long Beach Inner Harbor, specified in Section III.D of this Fact Sheet, are considered pollutants of concern. Storm water and process water may carry a combination of pollutants that may contribute to acute toxicity. Therefore, toxicity, an indicator of the presence of toxic pollutants, is also considered a pollutant of concern.

Generally, mass-based effluent limitations ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. 40 CFR section 122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit limitations on a case-by-case basis limitations based on mass are infeasible because the mass or pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment. This Order includes mass-based effluent limitations, where appropriate, to comply with 40 CFR section 122.45(f)(1).

A. Discharge Prohibitions

The discharge prohibitions are based on the requirements of the Basin Plan, State Water Board's plans and policies, the Water Code, and previous permit provisions, and they are consistent with the requirements set for other discharges to the Cerritos Channel that are regulated by NPDES permits.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR section 122.44, Title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR section 125.3.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR section 125.3 of the Code of Federal Regulations authorize the use of BPJ to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR section 125.3.

2. Applicable Technology-Based Effluent Limitations

Discharges from the Facility are not subject to the federal ELGs in Part 419, that are applicable to the discharges of wastewater from petroleum refining operations. Part 419 defines feedstocks for petroleum refining as "crude oil and natural gas liquids". This facility uses green coke, a petroleum refinery by-product, as a feedstock to the calcining operations. Further, the petroleum refining industry is defined by Standard Industrial Classification (SIC) code 2911, and this facility is classified under SIC code 2999 (manufacture of calcined petroleum coke). For these reasons, the Regional Water Board has determined that this facility is not subject to Part 419.

The technology-based requirements in the Order are based on case-by-case numeric limitations using BPJ. The technology-based effluent limitations are based on the existing Order No. R4-2007-0031 for BOD, TSS, oil and grease, settleable solids, and turbidity utilizing BPJ. The Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility.

Because green coke contains residual hydrocarbons that may enter wash water and storm water runoff, this Order establishes a new effluent limitation based on BPJ for total petroleum hydrocarbons (TPH) equal to 100 µg/L. This limitation has been achievable through source control and treatment at facilities engaged in various petroleum operations and is consistent with permits for similar facilities within the Los Angeles Region.

Order No. R4-2007-0031 requires the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This Order requires the Discharger to update the SWPPP. The revised SWPPP will reflect current operations, treatment activities, and staff responsible for implementing and supporting the SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water contamination and for preventing contaminated storm water from being discharged directly into the storm drain.

This Order also requires that the Discharger update and continue to implement a Best Management Practices Plan (BMPP). The BMPP shall include a summary of BMPs aimed at controlling the potential exposure of pollutants to storm water, inspection practices, schedules of preventive maintenance, housekeeping procedures, vehicle management practices, and spill containment and cleanup procedures.

This Order will also require the Discharger to update and continue to implement their Spill Contingency (SCP).

Table F-3 summarizes the technology-based effluent limitations for Discharge Point No. 001.

Table F-3. Summary of Technology-based Effluent Limitations

Parameter	Units	Average Monthly	Maximum Daily
Biochemical Oxygen Demand (BOD) (5-day@20 Deg. C)	mg/L	20	30
	lbs/day[1]	183	275
Oil and Grease	mg/L	10	15
	lbs/day[1]	92	138
Total Suspended Solids (TSS)	mg/L	30	75
	lbs/day[1]	275	688
Settleable Solids	mL/L	0.1	0.2
Turbidity	NTU	50	75
Total Petroleum Hydrocarbons (TPH)	µg/L	--	100
	lbs/day[1]		0.92

[1] The mass (lbs/day) limitations are based on a maximum flow of 1.1 MGD and is calculated as follows:
Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor).

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and 40 CFR 40 CFR section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

40 CFR section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable

potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR section 122.44(d)(1)(vi). Permit WQBELs must also be consistent with TMDL WLAs approved by USEPA.

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan. It is also intended to achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

The specific procedures for determining reasonable potential for discharges from the Facility, and if necessary for calculating WQBELs, are contained in the SIP.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in section II of the Limitations and Discharge Requirements, the Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to the Cerritos Channel are summarized in Section III.C.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving water.

Priority pollutant water quality criteria in the CTR are applicable to the Cerritos Channel. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, and in accordance with part 131.38(c)(3), saltwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. As indicated in the Harbor Toxics TMDL, the salinity in the Los Angeles-Long Beach Inner Harbor at the location of the discharge supports marine aquatic life. Therefore, the CTR criteria for saltwater aquatic life or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the Cerritos Channel, within the Los Angeles-Long Beach Inner Harbor, a water of the United States, in the vicinity of the discharge.

3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Regional Water Board conducts a Reasonable Potential Analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. If there is a

TMDL WLAs approved by USEPA, then WQBELs are developed using these WLAs. Otherwise, the Regional Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and the B are then compared with the applicable water quality objectives (C) outlined in the CTR, NTR, as well as the Basin Plan. For all pollutants that have a reasonable potential to cause or contribute to an excursion above a state water quality standard, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board identifies the MEC and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

1) Trigger 1 – If the MEC ≥ C, a limit is needed.

2) Trigger 2 – If the background concentration (B) > C and the pollutant is detected in the effluent, a limit is needed.

3) Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and receiving water data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

There have been no discharges from the Facility to surface waters since January 2005, and insufficient data are available to characterize potential discharges from the Facility. Therefore, the RPA was not performed for the priority pollutants regulated in the CTR. Monitoring requirements for CTR parameters have been included to provide sufficient data to perform a RPA. Based on best professional judgement (BPJ) in accordance with 40 CFR section 125.3 the effluent limitations from Order No. R4-2007-0031 for nickel, thallium, and cyanide have been included in this Order. This Order included final WQBELs for copper, lead, zinc, 4-4'-DDTs and total PCBs based on the TMDL WLAs approve by USEPA.

4. WQBEL Calculations

a. If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:

i. If applicable and available, use of the WLA established as part of a TMDL.

ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.

b. WQBELs for copper, lead, zinc, 4,4-DDT, and total PCBs are based on Harbor Toxics TMDL WLAs approved by USEPA that are calculated following procedures in Section 1.4 of the SIP.

c. Since no discharges occurred during the term of Order No. R4-2007-0031, no RPA was performed. The WQBELs for nickel, thallium, and cyanide have been carried over from Order No. R4-2007-0031. These WQBELs were based on previous effluent monitoring results and follow the procedures based on the steady-state model, available in Section 1.4 of the SIP.

d. Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is allowed. However, in accordance with the reopener provision in section VI.C.1.e in the Order, this Order may be reopened upon the submission by the Discharger of adequate information to establish appropriate dilution credits or a mixing zone, as determined by the Regional Water Board.

e. WQBELs Calculation Example

Using total recoverable copper as an example, the following demonstrates how WQBELs were established for this Order. The tables in Attachment J summarize the development and calculation of all WQBELs using the process described below.

The process for developing these limits is in accordance with the Harbor Toxics TMDL and Section 1.4 of the SIP.

Calculation of aquatic life AMEL and MDEL:

Step 1: For each constituent requiring an effluent limit, identify the applicable water quality criteria or objective. For each criterion, determine the effluent concentration allowance (ECA) using the following steady state equation:

$$ECA = C + D(C-B) \quad \text{when } C > B, \text{ and}$$
$$ECA = C \quad \text{when } C \leq B,$$

Where C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. For discharges from the Facility, criteria for saltwater are independent of hardness and pH.
D = The dilution credit, and
B = The ambient background concentration

When a WLA has been established through a TMDL for a parameter, the WLA is set equal to the ECA. The Harbor Toxics TMDL establishes the copper water column concentration-based WLA as equal to the saltwater chronic aquatic life criterion.

For total recoverable copper, the applicable WLA identified for the Cerritos Channel within the Long Beach Harbor is

$$ECA = WLA_{chronic} = 3.73 \mu g/L$$

Step 2: For each ECA based or aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

$$LTA_{acute} = ECA_{acute} \times Multiplier_{acute\ 99}$$

$$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic\ 99}$$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6. Since there are less than 10 samples, the CV is equal to 0.6 for all constituents.

For total recoverable copper, based on the Harbor Toxics TMDL, the following data were used to develop the chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

No. of Samples	CV	ECA Multiplier$_{acute}$	ECA Multiplier$_{chronic}$
0	0.60	Not Applicable	0.527

Since the WLA for total recoverable copper is based on the chronic criterion (i.e., no WLA was established as equal to the acute criterion), the chronic multiplier will be used to develop the LTA and effluent limitations.

$$LTA_{copper} = 3.73 \mu g/L \times 0.527 = 1.97 \mu g/L$$

Step 3: Select the most limiting (lowest) of the LTA.

$$LTA = \text{most limiting of } LTA_{acute} \text{ or } LTA_{chronic}$$

For total recoverable copper, based on the Harbor Toxics TMDL, since there is only one LTA,

LTA_{copper} = 1.97 µg/L

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as AMELs and MDELs. The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives. The value of the multiplier varies depending on the probability basis, the CV of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$AMEL_{aquatic\ life} = LTA \times AMEL_{multiplier\ 95}$

$MDEL_{aquatic\ life} = LTA \times MDEL_{multiplier\ 99}$

AMEL multipliers are based on a 95th percentile occurrence probability, and the MDEL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

For total recoverable copper, based on the Harbor Toxics TMDL, the following data were used to develop the AMEL and MDEL for effluent limitations using equations provided in Section 1.4, Step 5 of the SIP:

No. of Samples Per Month	CV	$Multiplier_{MDEL\ 99}$	$Multiplier_{AMEL\ 95}$
4	0.6	3.11	1.55

Total Recoverable Copper:

AMEL = 1.97 µg/L x 1.55 = 3.1 µg/L

MDEL= 1.97 µg/L x 3.11 = 6.1 µg/L

Step 5: For the ECA based on human health, set the AMEL equal to the $ECA_{human\ health}$

$AMEL_{human\ health} = ECA_{human\ health}$

Copper does not have human health criteria for the consumption of organisms only defined in the CTR or in the Harbor Toxics TMDL. The Harbor Toxics TMDL includes WLAs for 4,4-DDT and total PCBs, that are set equal to CTR human health criteria for the consumption of organisms only. For demonstration,

the calculated effluent limitations for 4,4-DDT, stemming from the Harbor Toxics TMDL, are shown.

For 4,4-DDT:

$AMEL_{human\ health}$ = 0.00059 µg/L

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of the $Multiplier_{MDEL}$ to the $Multiplier_{AMEL}$. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

$$MDEL_{human\ health} = AMEL_{human\ health} \times (Multiplier_{MDEL} / Multiplier_{AMEL})$$

For 4,4-DDT, the following data were used to develop the $MDEL_{human\ health}$:

No. of Samples Per Month	CV	$Multiplier_{MDEL\ 99}$	$Multiplier_{AMEL\ 95}$	Ratio
4	0.6	3.11	1.55	2.0

For 4,4-DDT:

$MDEL_{human\ health}$= 0.00059 µg/L x 2.0 = 0.00118 µg/L

Step 7: Select the lower of the AMEL and MDEL based on aquatic life and human health as the WQBEL for the Order. Since the Harbor Toxics TMDL established single value WLAs, this step is unnecessary.

For copper, lead, and zinc, there are no human health (Consumption of Organism Only) criteria, and WLAs have been established based on the Harbor Toxics TMDL, therefore the established effluent limitations are based on aquatic life criteria used for the Harbor Toxics TMDL WLAs. For 4-4'DDT and total PCBs, there are no aquatic life criteria and WLAs have been established based on the Harbor Toxics TMDL, therefore the established effluent limitations are based on human health criteria used for the Harbor Toxics TMDL WLAs. These limitations are expected to be protective of the beneficial uses.

5. WQBELS based on Basin Plan Objectives

The Basin Plan Objectives applicable to the Discharger are identified in Table F-4. These objectives were evaluated with respect to effluent monitoring data and Facility operations.

Table F-4. Applicable Basin Plan Numeric Water Quality Objectives

Constituent	Units	Water Quality Objectives
pH	s.u.	The pH of bays and estuaries shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.2 units from natural conditions as a result of waste discharge.
Bacteria	MPN/ 100ml	Marine Waters Designated for Water Contact Recreation (REC-1) Geometric Mean Limits **i.** Total coliform density shall not exceed 1,000/100 ml. **ii.** Fecal coliform density shall not exceed 200/100 ml. **iii.** Enterococcus density shall not exceed 35/100 ml. Single Sample Limits **i.** Total coliform density shall not exceed 10,000/100 ml. **ii.** Fecal coliform density shall not exceed 400/100 ml. **iii.** Enterococcus density shall not exceed 104/100 ml. **iv.** Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.
Dissolved Oxygen	mg/L	For all waters, the mean annual dissolved oxygen concentration shall be greater than 7 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.
Turbidity	NTU	Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU increases shall not exceed 10%.

a. pH. This Order includes effluent and receiving water limitations for pH to ensure compliance with Basin Plan Objectives for pH.

b. Ammonia. No effluent or receiving water data were available to evaluate the discharge with respect to ammonia concentrations in the receiving water. This Order carries over monitoring requirements for ammonia and includes receiving water limitations to ensure compliance with Basin Plan Objectives for ammonia

c. Bacteria. The Discharger does not engage in activities that are likely to contribute bacteria to the effluent. However, the Cerritos Channel, within the Los Angeles-Long Beach Inner Harbor is identified on the 2010 303(d) list as impaired for bacteria. In addition, a Bacteria TMDL has been developed for the Inner Cabrillo Beach and the Main Ship Channel of the Los Angeles Inner Harbor. Therefore, this Order includes bacteria limitations based on water quality standards (WQS) applicable to Cerritos Channel. These WQS (and WQBELs) are identical to the WQS used to develop the Bacteria TMDL that is applicable to the Main Ship Channel immediately downstream of Cerritos Channel.

d. Dissolved Oxygen. No effluent or receiving water data were available to evaluate the discharge with respect to dissolved oxygen concentrations in the effluent or receiving water. This Order applies the water quality objective for dissolved oxygen as a receiving water limitation to ensure compliance with Basin

Plan Objectives for dissolved oxgen. This Order requires continued monitoring for dissolved oxygen in the receiving water.

e. Turbidity. This Order applies the water quality objective for turbidity as a receiving water limitation in addition to the technology-based effluent limitation. At times the WQO may be more stringent than the numeric technology-based effluent limitation.

f. Temperature. The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. Based on the requirements of the Thermal Plan and a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, a maximum effluent temperature limitation of 86°F is included in the permit. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel.

6. Whole Effluent Toxicity

Consistent with Basin Plan requirements, this Order caries over the acute monitoring requirements in the existing order, and expresses the acute toxicity limitations as average monthly and maximum daily limitations. Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative “no toxics in toxic amounts” criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses by aquatic organisms. Detrimental response includes, but is not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. This existing Order contains acute toxicity limitations and monitoring requirements in accordance with the Basin Plan, in which the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Consistent with Basin Plan requirements, this Order carries over the acute toxicity limitations and monitoring requirements from the existing Order, and expresses the acute toxicity limtations as average monthly and maximum daily limitations.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause,

have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Because the discharge is of short duration and infrequent in nature (emergency-only nature of the discharge), no chronic toxicity limitations or monitoring requirements are included in this Order.

7. Final WQBELs

Based on the RPA, pollutants that demonstrate reasonable potential are copper, nickel, thallim, zinc, and cyanide. Approved Harbor Toxics TMDL WLAs for copper, lead, zinc, DDT, and PCBs are also available for the discharge. Therefore, effluent limitations for copper, lead, nickel, thallium, zinc, cyanide, DDT and PCBs are included in this Order. Refer to Attachment J for a summary of the RPA and associated effluent limitation calculations.

Table F-5. Summary of Final WQBELs for Discharge Point No. 001

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	s.u.	--	--	6.5	8.5
Acute Toxicity	% Survival	[1]			
Temperature	°F	--	--	--	86
Copper, Total Recoverable[2]	µg/L	3.1	6.1	--	--
	lbs/day[3]	0.03	0.1	--	--
Lead, Total Recoverable[5]	µg/L	7	14	--	--
	lbs/day[3]	0.1	0.13	--	--
Nickel, Total Recoverable[4]	µg/L	7	14	--	--
	lbs/day[3]	0.1	0.13	--	--
Thallium, Total Recoverable[4]	µg/L	6.3	13	--	--
	lbs/day[3]	0.1	0.12	--	--
Zinc, Total Recoverable[2]	µg/L	70	141	--	--
	lbs/day[3]	0.6	1.3	--	--
Cyanide, Total (as CN)[4]	µg/L	0.5	1.0	--	--
	lbs/day[3]	0.005	0.01	--	--
4,4'-DDT[5]	µg/L	0.0006	0.001	--	--
	lbs/day[3]	5.4E-06	1.1E-05	--	--
Total PCBs[5]	µg/L	0.0002	0.0003	--	--
	lbs/day[3]	1.6E-06	3.1E-06	--	--

[1] The acute toxicity of the effluent shall be such that:

- **i.** The average monthly survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and
- **ii.** No single test shall produce less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in section V of the MRP (Attachment E).

[2] The newly calculated limitations for copper and zinc are based on the USEPA approved Harbor Toxics TMDL WLAs and calculated using the CTR/SIP procedures. The exception to anti-backsliding is appropriate under CWA sections 404(o)(1) and 303(d)(4)(A).

[3] The mass limitations are based on a maximum flow of 1.1 MGD and is calculated as follows:

Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day

[4] Original limitations were based on CTR-SIP procedures and are carried over from Order No. R4-2007-0031.

[5] The new effluent limitations are based on the USEPA approved Harbor Toxics TMDL WLAs and calculated using the CTR-SIP procedures.

Bacteria Limitations Requirements.

1. Rolling 30-day Geometric Mean Limits
   i. Total coliform density shall not exceed 1,000/100 ml.
   ii. Fecal coliform density shall not exceed 200/100 ml.
   iii. Enterococcus density shall not exceed 35/100 ml.

2.. Single Sample Limits
   i. Total coliform density shall not exceed 10,000/100 ml.
   ii. Fecal coliform density shall not exceed 400/100 ml.
   iii. Enterococcus density shall not exceed 104/100 ml.
   iv. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to total coliform exceeds 0.1.

D. Final Effluent Limitations

Section 402(o) of the CWA and 40 CFR section 122.44(l) require final effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders based on the submitted sampling data. Effluent limitations for biochemical oxygen demand, oil and grease, pH, total suspended solids, acute toxicity, settleable solids, turbidity, nickel, thallium, and cyanide are being carried over from Order No. R4-2007-0031. The Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility.

This Order includes effluent limitations for copper, lead, zinc, 4,4'-DDT, and total PCBs based on the approved Harbor Toxics TMDL WLAs. All permits authorizing discharges to the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters adopted after the effective date of Harbors Toxics TMDL must "include effluent limitations developed consistent with assumptions of any WLA that has been assigned to the discharge as part of an approved TMDL." See 40 C.F.R § 122.44(d)(1)(Vii)(B) Hence, the applicable requirements of the Harbor Toxics TMDL have been included in the Tesoro Wilmington Calciner permit.

A technology-based effluent limitation is included for TPH, based on BPJ.

1. Satisfaction of Anti-Backsliding Requirements

Section 402(o) of the CWA establishes statutory language prohibiting the backsliding of effluent limits. Sections 402(o) of the CWA and federal regulations at title 40, Code Federal Regulations section 122.44(l) outlines specific exception to the general prohibition against establishment of less stringent effluent limitations.

These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where

limitations may be relaxed. The effluent limitations included in this Order for copper, and zinc are less stringent than in the previous Order. As discussed below, this relaxation of effluent limitations authorized under CWA section 402(o)(1) because it is in compliance with CWA section 303(d)(4)(A) is permissible.

In this case, backsliding from the existing effluent limitations for copper, and zinc is authorized because the revised effluent limitations are based on the Harbor Toxics TMDL WLAs which will assure the attainment of water quality standards. The new effluent limitations for copper and zinc were established based on a final concentration-based WLA converted from the saltwater CTR chronic criterion using the CTR saltwater default translator, and relevant implementation provisions in section 1.4 of the State Implementation Policy.

2. Satisfaction of Antidegradation Policy

40 CFR section 131.12 requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

This Order does not provide for an increase in the permitted design flow or allow for a reduction in the level of treatment. The limits included hold the Discharger to performance levels that will not cause or contribute to water quality impairment or water quality degradation. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Therefore, the issuance of this permit is consistent with the state's antidegradation policy.

3. Mass-based Effluent Limitations

Generally, mass-based effluent limitations ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. 40 CFR section 122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit limitation on a case-by-case basis limitation based on mass are infeasible because the mass or pollutant cannot be related to a measure of production.

Mass-based effluent limitations are established using the following formula:

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L)
where: Mass = mass limitation for a pollutant (lbs/day)
Effluent limitation = concentration limit for a pollutant (mg/L)
Flow rate = discharge flow rate (MGD)

4. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD, TSS, oil and grease, settleable solids, turbidity, and TPH at Discharge Point No. 001. Restrictions on these parameters are discussed in section IV.B.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

This Order includes WQBELs for pH, acute toxicity, temperature, copper, lead, nickel, thallium, zinc, 4,4'-DDT, total PCBs, and cyanide at Discharge Point No. 001. WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. The remaining water quality objectives and beneficial uses implemented by this Order (specifically bacteria) were approved by USEPA on September 25, 2002. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

Table F-6 provides a summary of the final effluent limitations with the associated basis.

Table F-6. Summary of Final Effluent Limitations for Discharge Point No. 001

Parameter	Units	Effluent Limitations				Performance Goals[8]	Basis[1]
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum		
Conventional Pollutants							
pH	s.u.	--	--	6.5	8.5	---	BP, E
BOD	mg/L	20	30	--	--	---	BPJ, E
	lbs/day[2]	183	275	--	--	---	
Oil and Grease	mg/L	10	15	--	--	---	BPJ, E
	lbs/day[2]	92	138	--	--	---	
TSS[6]	mg/L	30	75	--	--	---	BPJ, E
	lbs/day[2]	275	688	--	--	---	
Non-conventional Pollutants							
Acute Toxicity	% Survival	[3]				---	BP, E
Settleable Solids	ml/L	0.1	0.2	--	--	---	BPJ, E
Temperature	°F	--	--	--	86	---	BP, TP,WP, E

Parameter	Units	Effluent Limitations				Performance Goals[8]	Basis[1]
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum		
TPH[4]	µg/L	--	100	--	--	---	BPJ
	lbs/day[2]	--	0.92	--	--	---	
Turbidity	NTU	50	75	--	--	---	BPJ, E
Priority Pollutants							
Copper, Total Recoverable[5,6]	µg/L	3.1	6.1	--	--	---	TMDL, CTR- SIP
	lbs/day[2]	0.03	0.1	--	--	---	
Lead, Total Recoverable[5,6]	µg/L	7	14	--	--	---	TMDL, CTR- SIP
	lbs/day[2]	0.1	0.13	--	--	---	
Nickel, Total Recoverable[6,7]	µg/L	7	14	--	--	---	BPJ, E, CTR- SIP
	lbs/day[2]	0.1	0.13	--	--	---	
Thallium, Total Recoverable[6,7]	µg/L	6.3	13	--	--	---	BPJ, E, CTR- SIP
	lbs/day[2]	0.1	0.12	--	--	---	
Zinc, Total Recoverable[5,6]	µg/L	70	141	--	--	---	TMDL, CTR- SIP
	lbs/day[2]	0.6	1.3	--	--	---	
Cyanide, Total (as CN)[6,7]	µg/L	0.5	1.0	--	--	---	BPJ, E, CTR- SIP
	lbs/day[2]	0.005	0.01	--	--	---	
4,4'-DDT [5,6]	µg/L	0.0006	0.001	--	--	---	TMDL, CTR- SIP
	lbs/day[2]	5.4E-06	1.1E-05	--	--	---	
Total PCBs [5,6,9]	µg/L	0.0002	0.0003	--	--	---	TMDL, CTR- SIP
	lbs/day[2]	1.6E-06	3.1E-06	--	--	---	
PAHs							
Benzo(a)pyrene[6]	µg/L	--	--	--	--	0.049[10]	CTR
Chrysene[6]	µg/L	--	--	--	--	0.049[10]	CTR

1 BP = Basin Plan; TP = Thermal Plan; E = Existing Order; BPJ = Best Professional Judgment; CTR = California Toxic Rule; SIP = State Implementation Policy; TMDL= Total Maximum Daily Load; and WP = White Paper.

2 Mass limitations are based on a maximum flow of 1.1 MGD and calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

3 The acute toxicity of the effluent shall be such that:

a. The average monthly survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and

b. No single test shall produce less than 70% survival.

4 TPH equals the sum of TPH gasoline (C_4-C_{12}), TPH diesel (C_{13}-C_{22}), and TPH oil (C_{23+}).

5 The effluent limitations are based on the USEPA approved Harbor Toxics TMDL WLAs and calculated using the CTR-SIP procedures.

The new limitations for copper and zinc are less stringent than the existing Order No. R4-2007-0031. However, the exception to anti-backsliding is appropriate under CWA sections 402(o)(1) ans 303(d)(4)(A).

6 During each reporting period, if effluent monitoring results exceed both a TSS effluent limit and a CTR TMDL-based effluent limit or performance goal for copper, lead, zinc, 4,4-DDT, total PCBs, benzo(a)pyrene, or chrysene, implementation of the effluent sediment monitoring program is required for that priority pollutant. Sediment monitoring of the effluent shall begin during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the interim sediment allocation in Table 7, page 24 of this Order, demonstrates attainment with the interim sediment allocation and additional sediment monitoring of the effluent is not required. A sediment

monitoring result that exceeds the interim sediment allocation requires additional sediment monitoring of the effluent during discharge but not more frequently than once per year until the three-year average concentration for sediment monitoring results is at or below the interim sediment allocation.

[7] The effluent limitations from Order No. R4-2007-0031 were calculated based on CTR-SIP procedures and are carried over in this permit.

[8] Performance goals are intended to ensure that effluent concentrations and mass discharges do not exceed levels currently achieved by the permitted facility. These performance goals are not considered as limitations or standards for the regulation of the facility. They act as triggers to determine when sediement monitoring is required for this category of pollutants.

[9] Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resembles those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

[10] CTR human health criteria were not established for total PAHs. Therefore, the performance goals are based on the CTR human health criteria for the individual PAHs; benzo(a)pyrene and chrysene. The benzo(a)pyrene and chrysene were selected because the State's 2010 303(d) List classifies the Los Angeles/Long Beach Inner Harbor as impaired for these PAH compounds.

Bacteria Limitation Requirements:

1. Rolling 30-day Geometric Mean Limits

   i. Total coliform density shall not exceed 1,000/100 ml.
   ii. Fecal coliform density shall not exceed 200/100 ml.
   iii. Enterococcus density shall not exceed 35/100 ml.

2.. Single Sample Limits

   i. Total coliform density shall not exceed 10,000/100 ml.
   ii. Fecal coliform density shall not exceed 400/100 ml.
   iii. Enterococcus density shall not exceed 104/100 ml.
   iv. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to total coliform exceeds 0.1.

The bacteria limitations were based on WQS applicable to Cerritos Channel. These WQS (and WQBELs) are identical to the WQS used to develop the Bacteria TMDL that is applicable to the Main Ship Channel immediately downstream of Cerritos Channel.

E. Land Discharge Specifications

Not Applicable

F. Reclamation Specifications

Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in the proposed order are based upon the water quality objectives contained in the Basin Plan. As such, they are a required part of the proposed order.

A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 CFR section 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water. If there is reasonable potential (RP) or a U.S. EPA-approved TMDL WLA, then WQBELs are included in this Order to ensure protection of WQS.

B. Groundwater

Not Applicable

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

40 CFR section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code Sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Facility.

A. Influent Monitoring

Not Applicable

B. Effluent Monitoring

Monitoring for pollutants expected to be present in the discharge will be required as established in the MRP (Attachment E). To demonstrate compliance with established effluent limitations, the Order includes similar monitoring requirements from Order No. R4-2007-0031, with the exception of total organic carbon (TOC). The list of pollutants for which monitoring is required was developed based on Parts V and VI of the USEPA Form 2C in the Discharger's report of waste discharge (ROWD), as well as pollutants commonly associated with similar operations. The monitoring requirement for TOC was removed in this Order as it is redundant with monitoring for more targeted pollutants: TPH, oil and grease, and individual organic compounds.

Since the discharge is infrequent, collection of more samples over the duration of a discharge is needed to adequately characterize the effluent quality. This Order includes

a maximum frequency during extended discharge of once per week for most of the pollutants.

Monitoring for once per discharge event for lead, 4,4'-DDT, total PCBs, fecal coliform, enterococcus, and TPH has been included to determine compliance with newly established effluent limitations.

The SIP states that the Regional Water Board will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established. This Order requires the Discharger to conduct annual monitoring for the remaining CTR priority pollutants and TCDD Equivalents. The Regional Water Board will use the additional data to conduct an RPA and determine if additional WQBELs are required. The Regional Water Board may reopen the permit to incorporate additional effluent limitations and requirements, if necessary.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

This Order includes limitations for acute toxicity and therefore, monitoring requirements are included in the MRP to determine compliance with the effluent limitations established in Limitations and Discharge Requirements, Effluent Limitations, Section IV.A.

Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. The discharges from the Facility are short and infrequent in nature; therefore, chronic toxicity testing will not be required.

D. Receiving Water Monitoring

1. Surface Water

Surface water monitoring requirements established in Order No. R4-2006-0082 have been included in this Order to provide data to determine compliance with the receiving water limitations established. Monitoring has been established at Monitoring Locations RSW-001 (upstream), and RSW-002 (downstream) for pH, ammonia, salinity, dissolved oxygen, and temperature. At the downstream location (Monitoring Location RSW-002) the Discharger must monitor for salinity which is necessary to adjust the ammonia water quality objective, expressed as un-ionized ammonia, to total ammonia.

According to the SIP, the Discharger is required to monitor the upstream receiving water for the CTR priority pollutants, to determine reasonable potential. Accordingly, the Regional Water Board is requiring that the Discharger conduct upstream receiving water monitoring of the CTR priority pollutants, TCDD equivalents, and

ammonia at Monitoring Location RSW-001. Additionally, the Discharger must analyze pH and salinity of the upstream receiving water at the same time as the samples are collected for priority pollutant analysis.

2. Groundwater

Not Applicable

E. Sediment Monitoring of the Effluent

The Harbor Toxics TMDL requires attainment with the TMDL's interim sediment allocations. This Order implements this requirement in a framework of effluent limits, effluent performance goals, sediment monitoring thresholds, and effluent monitoring requirements. Attainment with the interim sediment allocations shall be demonstrated, as specified in Footnote 4 to Table 6, page 16 of this Order. These requirements will ensure that discharges from Tesoro Wilmington Calciner do not contribute significantly to contaminant sediment concentrations in Cerritos Channel within the Los Angeles/Long Beach Inner Harbor.

F. Other Monitoring Requirements

1. Storm Water Monitoring Requirements

In order to evaluate the effectiveness of the SWPPP, rainfall monitoring and visual storm water monitoring are required during discharge events.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42.

40 CFR section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code Section 13387(e).

B. Special Provisions

1. Reopener Provisions

These provisions are based on part 123 and Order R4-2007-0031. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan or revisions to the Harbor Toxics TMDL.

2. Special Studies and Additional Monitoring Requirements

a. Initial Investigation Toxicity Reduction Evaluation Workplan. This provision is based on section 4 of the SIP, Toxicity Control Provisions.

3. Best Management Practices and Pollution Prevention

a. Storm Water Pollution Prevention Plan (SWPPP). Order No. R4-2007-0031 required the Discharger to develop and implement a SWPPP. This Order will require the Discharger to update and continue to implement a SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into the storm drain and/or the Cerritos Channel. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water. SWPPP requirements are included as Attachment G, based on 40 CFR section 122.44(k).

b. Best Management Practices Plan (BMPP). Order No. R4-2007-0031 required the Discharger to develop and implement BMPs in order to reduce the amount of pollutants entering the discharge. This Order requires the Discharger to update and continue to implement the BMPP. The BMPP may be included as a component of the SWPPP. The purpose of the BMPP is to establish site-specific procedures that ensure proper operation and maintenance of equipment, to ensure that unauthorized non-storm water discharges (i.e., spills) do not occur at the Facility.

The Harbor Toxics TMDL addresses BMPs as follows:

> *"When permits for responsible parties are revised, the permits should provide mechanisms to make adjustments to the required BMPs as necessary to ensure their adequate performance. If proposed structural and non-structural BMPs adequately implement the waste load allocations then additional controls will not be necessary. Alternatively, if the proposed structural and non-structural BMPs selected prove to be inadequate then additional structural and non-structural BMPs or additional controls may be required."*

Special Provision VI.C.3 requires the Discharger to update and maintain a BMPP, as a component of the SWPPP, that incorporates requirements contained in Appendix G. Appendix G requires a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Considering that discharges are infrequent, Special Provision VI.C.3 and Appendix G requirements satisfy the TMDL component to address BMP performance for this Facility.

c. **Spill Contingency Plan (SCP).** This Order requires the Discharger to update and continue to implement a SCP to control the discharge of pollutants. The SCP shall include a technical report on the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events at the site. This provision is included in this Order to minimize and control the amount of pollutants discharged in case of a spill. The SCP shall be site specific and shall cover all areas of the Facility.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 CFR section 122.41(e) and the previous Order.

5. Special Provisions for Municipal Facilities (POTWs Only)

Not Applicable

6. Other Special Provisions

Not Applicable

7. Compliance Schedules

Not Applicable

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of waste discharge requirements (WDRs) that will serve as an NPDES permit for Tesoro Refining & Marketing Company LLC, Tesoro Wilmington Calciner Facility. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and 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 comments and recommendations.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on August 30, 2013.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: October 3, 2013
Time: 9:00 a.m.
Location: Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, California

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is **http://www.waterboards.ca.gov/losangeles** where you can access the current agenda for changes in dates and locations.

D. Nature of Hearing

This will be a formal adjudicative hearing pursuant to section 648 et seq. of Title 23 of the California Code of Regulations. Chapter 5 of the California Administrative Procedure Act (commencing with Section 11500 of the Government Code) will not apply to this proceeding.

Ex Parte Communications Prohibited: As a quasi-adjudicative proceeding, no board member may discuss the subject of this hearing with any person, except during the public hearing itself. Any communications to the Regional Water Board must be directed to staff.

E. Parties to the Hearing

The following are the parties to this proceeding:

1. The applicant/permittee

Any other persons requesting party status must submit a written or electronic request to staff not later than 20 business days before the hearing. All parties will be notified if other persons are so designated.

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to losangeles@waterboards.ca.gov with a copy submitted to Rosario Aston at raston@waterboards.ca.gov. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be received no later than close of business on August 30, 2013. Comments or evidence received after that date will be submitted, ex agenda, to the Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar, and approved without an oral testimony.

G. Hearing Procedure

The meeting, in which the hearing will be a part of, will start at 9:00 a.m. Interested persons are invited to attend. Staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Board will include in the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to 3 minutes maximum or less for each speaker, depending on the number of persons wishing to be heard. Parties or persons with similar concerns or opinions are encouraged to choose one representative to speak. At the conclusion of testimony, the Board will deliberate in open or close session, and render a decision.

Parties or persons with special procedural requests should contact staff. Any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the California Code of Regulations. Objections to any procedure to be used during this hearing must be submitted in writing not later than close of 15 business days prior to the date of the hearing. Procedural objections will not be entertained at the hearing.

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on November 7, 2013. A continuance will not extend any time set forth herein.

H. Waste Discharge Requirements Petitions

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board

by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:
http://www.waterboards.ca.gov/public_notices/petitions/water_quality
or will be provided upon request.

The State Water Board's mailing address is the following:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

I. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576 – 6600.

J. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

K. Additional Information

Requests for additional information or questions regarding this order should be directed to Rosario Aston at (213) 576-6653**.**

ATTACHMENT G – STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

I. Implementation Schedule

A storm water pollution prevention plan (SWPPP) shall be developed and submitted to the Regional Water Board within 90 days following the adoption of this Order. The SWPPP shall be implemented for each facility covered by this Permit within 10 days of approval from the Regional Water Board, or 6-months from the date of the submittal of the SWPPP to the Regional Water Board (whichever comes first).

II. Objectives

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site- specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost and pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, over-head coverage.) To achieve these objectives, facility operators should consider the five phase process for SWPPP development and implementation as shown in Table A.

The SWPPP requirements are designed to be sufficiently flexible to meet the needs of various facilities. SWPPP requirements that are not applicable to a facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans. The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

III. Planning and Organization

A. Pollution Prevention Team

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in Attachment E of this Permit. The SWPPP shall clearly identify the Permit related responsibilities, duties, and activities of each team member. For small facilities, storm water pollution prevention teams may consist of one individual where appropriate.

B. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. Facility operators should review all local, State, and Federal requirements that impact, complement, or are consistent with the requirements of this General permit. Facility operators should identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of this Permit. As examples, facility operators whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, facility operators whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

IV. Site Map

The SWPPP shall include a site map. The site map shall be provided on an 8-½ x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, facility operators may provide the required information on multiple site maps.

TABLE A
FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL STORM WATER POLLUTION PREVENTION PLANS

PLANNING AND ORGANIZATION
Form Pollution Prevention Team
Review other plans

ASSESSMENT PHASE
Develop a site map
Identify potential pollutant sources
Inventory of materials and chemicals
List significant spills and leaks
Identify non-storm water discharges
Assess pollutant risks

BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE
Non-structural BMPs
Structural BMPs
Select activity and site-specific BMPs

IMPLEMENTATION PHASE

Train employees
Implement BMPs
Conduct recordkeeping and reporting

EVALUATION / MONITORING

Conduct annual site evaluation
Review monitoring information
Evaluate BMPs
Review and revise SWPPP

The following information shall be included on the site map:

A. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, and ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.

B. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.

C. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.

D. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section A.6.a.iv. below have occurred.

E. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

V. List of Significant Materials

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials

shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

VI. Description of Potential Pollutant Sources

A. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section A.4.e above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

1. **Industrial Processes.** Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

2. **Material Handling and Storage Areas.** Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

3. **Dust and Particulate Generating Activities.** Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

4. **Significant Spills and Leaks.** Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 CFR, Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (USEPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 Code of Federal Regulations [CFR], Parts 110, 117, and 302).

   The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spill or leaks do not reoccur. Such list shall be updated as appropriate during the term of this Permit.

5. **Non-Storm Water Discharges.** Facility operators shall investigate the facility to identify all non-storm water discharges and their sources. As part of this

investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions provided in Special Conditions D of the storm water general permit are prohibited by this Permit (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, rinse water, wash water, etc.). Non-storm water discharges that meet the conditions provided in Special Condition D of the general storm water permit are authorized by this Permit. The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

6. **Soil Erosion.** Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

B. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B. The last column of Table B, "Control Practices", should be completed in accordance with Section A.8. below.

VII. Assessment of Potential Pollutant Sources

A. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in A.6. above to determine:

1. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and

2. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. Facility operators shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.

B. Facility operators shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

Facility operators are required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in section VIII below.

VIII. Storm Water Best Management Practices

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections A.6. and 7. above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

TABLE B

EXAMPLE
ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND CORRESPONDING BEST MANAGEMENT PRACTICES
SUMMARY

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Vehicle & Equipment Fueling	Fueling	Spills and leaks during delivery. Spills caused by topping off fuel tanks. Hosing or washing down fuel oil fuel area. Leaking storage tanks. Rainfall running off fuel oil, and rainfall running onto and off fueling area.	fuel oil	Use spill and overflow protection. Minimize run-on of storm water into the fueling area. Cover fueling area. Use dry cleanup methods rather than hosing down area. Implement proper spill prevention control program. Implement adequate preventative maintenance program to preventive tank and line leaks. Inspect fueling areas regularly to detect problems before they occur. Train employees on proper fueling, cleanup, and spill response techniques.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

Facility operators shall consider the following BMPs for implementation at the facility:

A. Non-Structural BMPs

Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. Facility operators should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section A.8.b. below). Below is a list of non-structural BMPs that should be considered:

1. **Good Housekeeping.** Good housekeeping generally consists of practical procedures to maintain a clean and orderly facility.

2. **Preventive Maintenance.** Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.

3. **Spill Response.** This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.

4. **Material Handling and Storage.** This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.

5. **Employee Training.** This includes training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.

6. **Waste Handling/Recycling.** This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

7. **Recordkeeping and Internal Reporting.** This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.

8. **Erosion Control and Site Stabilization.** This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.

9. **Inspections.** This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.

10. **Quality Assurance.** This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

B. Structural BMPs.

Where non-structural BMPs as identified in Section A.8.a. above are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

1. **Overhead Coverage.** This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

2. **Retention Ponds.** This includes basins, ponds, surface impoundments, bermed areas, etc. that do not allow storm water to discharge from the facility.

3. **Control Devices.** This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

4. **Secondary Containment Structures.** This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

5. **Treatment.** This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc. that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

IX. Annual Comprehensive Site Compliance Evaluation

The facility operator shall conduct one comprehensive site compliance evaluation (evaluation) in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

A. A review of all visual observation records, inspection records, and sampling and analysis results.

B. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.

C. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.

D. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in Section A.10.e, for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions V.D.5 of Attachment D.

X. SWPPP General Requirements

A. The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.

B. The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.

C. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.

D. The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirement(s) of this Permit.

E. When any part of the SWPPP is infeasible to implement due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or

modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.

F. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

ATTACHMENT H – STATE WATER BOARD MINIMUM LEVELS (µg/L)

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the State Water Board and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs.

Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethylene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Methyl Bromide	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethylene	0.5	2
Toluene	0.5	2
Trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Benzo (a) Anthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
Benzo (b) Fluoranthene		10	10	
3-Methyl-Chlorophenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.

** Phenol by colorimetric technique has a factor of 1.

Table 2c – INORGANICS*	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1,000
Arsenic		2	10	2	2	1		20	1,000
Beryllium	20	0.5	2	0.5	1				1,000
Cadmium	10	0.5	10	0.25	0.5				1,000
Chromium (total)	50	2	10	0.5	1				1,000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1,000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1,000
Selenium		5	10	2	5	1			1,000
Silver	10	1	10	0.25	2				1,000
Thallium	10	2	10	1	5				1,000
Zinc	20		20	1	10				1,000

* The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
alpha-BHC	0.01
Aldrin	0.005
b-Endosulfan	0.01
Beta-BHC	0.005
Chlordane	0.1
Delta-BHC	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01

Table 2d – PESTICIDES – PCBs*	GC
Gamma-BHC (Lindane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

* The normal method-specific factor for these substances is 100; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

Techniques:

GC - Gas Chromatography
GCMS - Gas Chromatography/Mass Spectrometry
HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
LC - High Pressure Liquid Chromatography
FAA - Flame Atomic Absorption
GFAA - Graphite Furnace Atomic Absorption
HYDRIDE - Gaseous Hydride Atomic Absorption
CVAA - Cold Vapor Atomic Absorption
ICP - Inductively Coupled Plasma
ICPMS - Inductively Coupled Plasma/Mass Spectrometry
SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR – Colorimetric

ATTACHMENT I – LIST OF PRIORITY POLLUTANTS

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
1	Antimony	7440360	[1]
2	Arsenic	7440382	[1]
3	Beryllium	7440417	[1]
4	Cadmium	7440439	[1]
5a	Chromium (III)	16065831	[1]
5a	Chromium (VI)	18540299	[1]
6	Copper	7440508	[1]
7	Lead	7439921	[1]
8	Mercury	7439976	[1]
9	Nickel	7440020	[1]
11	Selenium	7782492	[1]
11	Silver	7440224	[1]
12	Thallium	7440280	[1]
13	Zinc	7440666	[1]
14	Cyanide	57125	[1]
15	Asbestos	1332214	[1]
16	2,3,7,8-TCDD	1746016	[1]
17	Acrolein	117028	[1]
18	Acrylonitrile	117131	[1]
19	Benzene	71432	[1]
20	Bromoform	75252	[1]
21	Carbon Tetrachloride	56235	[1]
22	Chlorobenzene	118907	[1]
23	Chlorodibromomethane	124481	[1]
24	Chloroethane	75003	[1]
25	2-Chloroethylvinyl Ether	111758	[1]
26	Chloroform	67663	[1]
27	Dichlorobromomethane	75274	[1]
28	1,1-Dichloroethane	75343	[1]
29	1,2-Dichloroethane	117062	[1]
30	1,1-Dichloroethylene	75354	[1]
31	1,2-Dichloropropane	78875	[1]
32	1,3-Dichloropropylene	542756	[1]
33	Ethylbenzene	110414	[1]
34	Methyl Bromide	74839	[1]
35	Methyl Chloride	74873	[1]
36	Methylene Chloride	75092	[1]
37	1,1,2,2-Tetrachloroethane	79345	[1]
38	Tetrachloroethylene	127184	[1]
39	Toluene	118883	[1]
40	1,2-Trans-Dichloroethylene	156605	[1]
41	1,1,1-Trichloroethane	71556	[1]
42	1,12-Trichloroethane	79005	[1]
43	Trichloroethylene	79016	[1]
44	Vinyl Chloride	75014	[1]

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
45	2-Chlorophenol	95578	[1]
46	2,4-Dichlorophenol	120832	[1]
47	2,4-Dimethylphenol	115679	[1]
48	2-Methyl-4,6-Dinitrophenol	534521	[1]
49	2,4-Dinitrophenol	51285	[1]
50	2-Nitrophenol	88755	[1]
51	4-Nitrophenol	110027	[1]
52	3-Methyl-4-Chlorophenol	59507	[1]
53	Pentachlorophenol	87865	[1]
54	Phenol	118952	[1]
55	2,4,6-Trichlorophenol	88062	[1]
56	Acenaphthene	83329	[1]
57	Acenaphthylene	208968	[1]
58	Anthracene	120127	[1]
59	Benzidine	92875	[1]
60	Benzo(a)Anthracene	56553	[1]
61	Benzo(a)Pyrene	50328	[1]
62	Benzo(b)Fluoranthene	205992	[1]
63	Benzo(ghi)Perylene	191242	[1]
64	Benzo(k)Fluoranthene	207089	[1]
65	Bis(2-Chloroethoxy)Methane	111911	[1]
66	Bis(2-Chloroethyl)Ether	111444	[1]
67	Bis(2-Chloroisopropyl)Ether	118601	[1]
68	Bis(2-Ethylhexyl)Phthalate	117817	[1]
69	4-Bromophenyl Phenyl Ether	111553	[1]
70	Butylbenzyl Phthalate	85687	[1]
71	2-Chloronaphthalene	91587	[1]
72	4-Chlorophenyl Phenyl Ether	7005723	[1]
73	Chrysene	218019	[1]
74	Dibenzo(a,h)Anthracene	53703	[1]
75	1,2-Dichlorobenzene	95501	[1]
76	1,3-Dichlorobenzene	541731	[1]
77	1,4-Dichlorobenzene	116467	[1]
78	3,3'-Dichlorobenzidine	91941	[1]
79	Diethyl Phthalate	84662	[1]
80	Dimethyl Phthalate	131113	[1]
81	Di-n-Butyl Phthalate	84742	[1]
82	2,4-Dinitrotoluene	121142	[1]
83	2,6-Dinitrotoluene	606202	[1]
84	Di-n-Octyl Phthalate	117840	[1]
85	1,2-Diphenylhydrazine	122667	[1]
86	Fluoranthene	206440	[1]
87	Fluorene	86737	[1]
88	Hexachlorobenzene	118741	[1]
89	Hexachlorobutadiene	87863	[1]
90	Hexachlorocyclopentadiene	77474	[1]
91	Hexachloroethane	67721	[1]
92	Indeno(1,2,3-cd)Pyrene	193395	[1]

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
93	Isophorone	78591	[1]
94	Naphthalene	91203	[1]
95	Nitrobenzene	98953	[1]
96	N-Nitrosodimethylamine	62759	[1]
97	N-Nitrosodi-n-Propylamine	621647	[1]
98	N-Nitrosodiphenylamine	86306	[1]
99	Phenanthrene	85018	[1]
110	Pyrene	129000	[1]
111	1,2,4-Trichlorobenzene	120821	[1]
112	Aldrin	309002	[1]
113	alpha-BHC	319846	[1]
114	beta-BHC	319857	[1]
115	gamma-BHC	58899	[1]
116	delta-BHC	319868	[1]
117	Chlordane	57749	[1]
118	4,4'-DDT	50293	[1]
119	4,4'-DDE	72559	[1]
111	4,4'-DDD	72548	[1]
111	Dieldrin	60571	[1]
112	alpha-Endosulfan	959988	[1]
113	beta-Endosulfan	33213659	[1]
114	Endosulfan Sulfate	1131178	[1]
115	Endrin	72208	[1]
116	Endrin Aldehyde	7421934	[1]
117	Heptachlor	76448	[1]
118	Heptachlor Epoxide	1124573	[1]
119	PCB-1116	12674112	[1]
120	PCB-1221	11114282	[1]
121	PCB-1232	11141165	[1]
122	PCB-1242	53469219	[1]
123	PCB-1248	12672296	[1]
124	PCB-1254	11197691	[1]
125	PCB-1260	11196825	[1]
126	Toxaphene	8001352	[1]

[1] Pollutants shall be analyzed using the methods described in 40 CFR Part 136.

ATTACHMENT J – REASONABLE POTENTIAL ANALYSIS AND CALCULATION OF EFFLUENT LIMITATIONS

Fact Sheet Attachment J-1
Calculation of Effluent Limitations Based on TMDL (Per Sections 1.3 and 1.4 of SIP)
Copper, Lead, Zinc, 4,4'-DDT, and Total PCBs
For All Discharge Points

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)						TMDL (WLA)	Lowest C	REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater		Saltwater		Human Health for consumption of:				MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only										
1	Antimony	ug/L								4300.00		4300.00			N					No detected value of B, Step 7	
2	Arsenic	ug/L						36.00				36.00			N					No detected value of B, Step 7	
3	Beryllium	ug/L		No Criteria						Narrative		No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
4	Cadmium	ug/L						9.36		Narrative		9.36			N					No detected value of B, Step 7	
5a	Chromium (III)			No Criteria						Narrative		No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
5b	Chromium (VI)	ug/L						50.35		Narrative		50.35			N					No detected value of B, Step 7	
6	Copper	ug/L	0.6					3.10			3.73	3.73			N					No detected value of B, Step 7	TMDL
7	Lead	ug/L	0.6					8.10		Narrative	8.52	8.52			N					No detected value of B, Step 7	TMDL
8	Mercury	ug/L	0.6					Reserved		0.051		0.051			N					No detected value of B, Step 7	
9	Nickel	ug/L	0.6					8.28		4600.00		8.28			N					No detected value of B, Step 7	
10	Selenium	ug/L						71.14		Narrative		71.14			N					No detected value of B, Step 7	
11	Silver	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
12	Thallium	ug/L								6.30		6.30			N					No detected value of B, Step 7	
13	Zinc	ug/L	0.6					81.00			85.60	85.62			N					No detected value of B, Step 7	TMDL
14	Cyanide	ug/L						1.00		220000.00		1.00			N					No detected value of B, Step 7	
15	Asbestos	Fibers/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
16	2,3,7,8 TCDD	ug/L	0.6							0.000000014		0.000000014			N					No detected value of B, Step 7	
	TCDD Equivalents	ug/L	0							0.000000014		0.000000014			N					No detected value of B, Step 7	
17	Acrolein	ug/L								780		780			N					No detected value of B, Step 7	
18	Acrylonitrile	ug/L								0.66		0.660			N					No detected value of B, Step 7	
19	Benzene	ug/L								71		71.0			N					No detected value of B, Step 7	
20	Bromoform	ug/L								360		360.0			N					No detected value of B, Step 7	
21	Carbon Tetrachloride	ug/L								4.4		4.40			N					No detected value of B, Step 7	
22	Chlorobenzene	ug/L								21000		21000			N					No detected value of B, Step 7	
23	Chlorodibromomethane	ug/L								34		34.00			N					No detected value of B, Step 7	
24	Chloroethane	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
25	2-Chloroethylvinyl ether	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
26	Chloroform	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
27	Dichlorobromomethane	ug/L								46		46.00			N					No detected value of B, Step 7	
28	1,1-Dichloroethane	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
29	1,2-Dichloroethane	ug/L								99		99.00			N					No detected value of B, Step 7	
30	1,1-Dichloroethylene	ug/L								3.2		3.200			N					No detected value of B, Step 7	
31	1,2-Dichloropropane	ug/L								39		39.00			N					No detected value of B, Step 7	
32	1,3-Dichloropropylene	ug/L								1700		1700			N					No detected value of B, Step 7	
33	Ethylbenzene	ug/L								29000		29000			N					No detected value of B, Step 7	
34	Methyl Bromide	ug/L								4000		4000			N					No detected value of B, Step 7	
35	Methyl Chloride	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
36	Methylene Chloride	ug/L								1600		1600.0			N					No detected value of B, Step 7	
37	1,1,2,2-Tetrachloroethane	ug/L								11		11.00			N					No detected value of B, Step 7	
38	Tetrachloroethylene	ug/L								8.85		8.9			N					No detected value of B, Step 7	
39	Toluene	ug/L								200000		200000			N					No detected value of B, Step 7	
40	1,2-Trans-Dichloroethylene	ug/L								140000		140000			N					No detected value of B, Step 7	
41	1,1,1-Trichloroethane	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
42	1,1,2-Trichloroethane	ug/L								42		42.0			N					No detected value of B, Step 7	
43	Trichloroethylene	ug/L								81		81.0			N					No detected value of B, Step 7	
44	Vinyl Chloride	ug/L								525		525			N					No detected value of B, Step 7	
45	2-Chlorophenol	ug/L								400		400			N					No detected value of B, Step 7	
46	2,4-Dichlorophenol	ug/L								790		790			N					No detected value of B, Step 7	
47	2,4-Dimethylphenol	ug/L								2300		2300			N					No detected value of B, Step 7	
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L								765		765.0			N					No detected value of B, Step 7	
49	2,4-Dinitrophenol	ug/L								14000		14000			N					No detected value of B, Step 7	
50	2-Nitrophenol	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
51	4-Nitrophenol	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
53	Pentachlorophenol	ug/L					13.00	7.90		8.2		7.90			N					No detected value of B, Step 7	
54	Phenol	ug/L								4600000		4600000			N					No detected value of B, Step 7	
55	2,4,6-Trichlorophenol	ug/L								6.5		6.5			N					No detected value of B, Step 7	
56	Acenaphthene	ug/L								2700		2700			N					No detected value of B, Step 7	
57	Acenaphthylene	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
58	Anthracene	ug/L								110000		110000			N					No detected value of B, Step 7	
59	Benzidine	ug/L								0.00054		0.00054			N					No detected value of B, Step 7	
60	Benzo(a)Anthracene	ug/L								0.049		0.0490			N					No detected value of B, Step 7	

Fact Sheet Attachment J-1
Calculation of Effluent Limitations Based on TMDL (Per Sections 1.3 and 1.4 of SIP)
Copper, Lead, Zinc, 4,4'-DDT, and Total PCBs
For All Discharge Points

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)						TMDL (WLA)	Lowest C	REASONABLE POTENTIAL ANALYSIS (RPA)								
					Freshwater		Saltwater		Human Health for consumption of:				MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?
					C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only											
61	Benzo(a)Pyrene	ug/L								0.049		0.0490			N					No detected value of B, Step 7	
62	Benzo(b)Fluoranthene	ug/L								0.049		0.0490			N					No detected value of B, Step 7	
63	Benzo(ghi)Perylene	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
64	Benzo(k)Fluoranthene	ug/L								0.049		0.0490			N					No detected value of B, Step 7	
65	Bis(2-Chloroethoxy)Meth	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
66	Bis(2-Chloroethyl)Ether	ug/L								1.4		1.400			N					No detected value of B, Step 7	
67	Bis(2-Chloroisopropyl)Eth	ug/L								170000		170000			N					No detected value of B, Step 7	
68	Bis(2-Ethylhexyl)Phthalat	ug/L								5.9		5.9			N					No detected value of B, Step 7	
69	4-Bromophenyl Phenyl E	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
70	Butylbenzyl Phthalate	ug/L								5200		5200			N					No detected value of B, Step 7	
71	2-Chloronaphthalene	ug/L								4300		4300			N					No detected value of B, Step 7	
72	4-Chlorophenyl Phenyl E	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
73	Chrysene	ug/L								0.049		0.0490			N					No detected value of B, Step 7	
74	Dibenzo(a,h)Anthracene	ug/L								0.049		0.0490			N					No detected value of B, Step 7	
75	1,2-Dichlorobenzene	ug/L								17000		17000			N					No detected value of B, Step 7	
76	1,3-Dichlorobenzene	ug/L								2600		2600			N					No detected value of B, Step 7	
77	1,4-Dichlorobenzene	ug/L								2600		2600			N					No detected value of B, Step 7	
78	3,3 Dichlorobenzidine	ug/L								0.077		0.08			N					No detected value of B, Step 7	
79	Diethyl Phthalate	ug/L								120000		120000			N					No detected value of B, Step 7	
80	Dimethyl Phthalate	ug/L								2900000		2900000			N					No detected value of B, Step 7	
81	Di-n-Butyl Phthalate	ug/L								12000		12000			N					No detected value of B, Step 7	
82	2,4-Dinitrotoluene	ug/L								9.10		9.10			N					No detected value of B, Step 7	
83	2,6-Dinitrotoluene	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
84	Di-n-Octyl Phthalate	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
85	1,2-Diphenylhydrazine	ug/L								0.54		0.540			N					No detected value of B, Step 7	
86	Fluoranthene	ug/L								370		370			N					No detected value of B, Step 7	
87	Fluorene	ug/L								14000		14000			N					No detected value of B, Step 7	
88	Hexachlorobenzene	ug/L								0.00077		0.00077			N					No detected value of B, Step 7	
89	Hexachlorobutadiene	ug/L								50		50.00			N					No detected value of B, Step 7	
90	Hexachlorocyclopentadie	ug/L								17000		17000			N					No detected value of B, Step 7	
91	Hexachloroethane	ug/L								8.9		8.9			N					No detected value of B, Step 7	
92	Indeno(1,2,3-cd)Pyrene	ug/L								0.049		0.0490			N					No detected value of B, Step 7	
93	Isophorone	ug/L								600		600.0			N					No detected value of B, Step 7	
94	Naphthalene	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
95	Nitrobenzene	ug/L								1900		1900			N					No detected value of B, Step 7	
96	N-Nitrosodimethylamine	ug/L								8.10		8.10000			N					No detected value of B, Step 7	
97	N-Nitrosodi-n-Propylamir	ug/L								1.40		1.400			N					No detected value of B, Step 7	
98	N-Nitrosodiphenylamine	ug/L								16		16.0			N					No detected value of B, Step 7	
99	Phenanthrene	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
100	Pyrene	ug/L								11000		11000			N					No detected value of B, Step 7	
101	1,2,4-Trichlorobenzene	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
102	Aldrin	ug/L					1.30			0.00014		0.00014			N					No detected value of B, Step 7	
103	alpha-BHC	ug/L								0.013		0.0130			N					No detected value of B, Step 7	
104	beta-BHC	ug/L								0.046		0.046			N					No detected value of B, Step 7	
105	gamma-BHC	ug/L					0.16			0.063		0.063			N					No detected value of B, Step 7	
106	delta-BHC	ug/L		No Criteria								No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria
107	Chlordane	ug/L					0.09	0.004		0.00059		0.00059			N					No detected value of B, Step 7	
108	4,4'-DDT	ug/L	0.6				0.13	0.001		0.00059	0.00059	0.00059			N					No detected value of B, Step 7	TMDL
109	4,4'-DDE (linked to DDT)	ug/L								0.00059		0.00059			N					No detected value of B, Step 7	
110	4,4'-DDD	ug/L								0.00084		0.00084			N					No detected value of B, Step 7	
111	Dieldrin	ug/L					0.71	0.0019		0.00014		0.00014			N					No detected value of B, Step 7	
112	alpha-Endosulfan	ug/L					0.034	0.0087		240		0.0087			N					No detected value of B, Step 7	
113	beta-Endolsulfan	ug/L					0.034	0.0087		240		0.0087			N					No detected value of B, Step 7	
114	Endosulfan Sulfate	ug/L								240		240			N					No detected value of B, Step 7	
115	Endrin	ug/L					0.037	0.0023		0.81		0.0023			N					No detected value of B, Step 7	
116	Endrin Aldehyde	ug/L								0.81		0.81			N					No detected value of B, Step 7	
117	Heptachlor	ug/L					0.053	0.0036		0.00021		0.00021			N					No detected value of B, Step 7	
118	Heptachlor Epoxide	ug/L					0.053	0.0036		0.00011		0.00011			N					No detected value of B, Step 7	
19-125	PCBs sum (2)	ug/L	0.6					0.03		0.00017	0.00017	0.00017			N					No detected value of B, Step 7	TMDL
126	Toxaphene	ug/L					0.21	0.0002		0.00075		0.0002			N					No detected value of B, Step 7	

Notes:
Ud = Undetermined due to lack of data
Uc = Undetermined due to lack of CTR Water Quality Criteria
C = Water Quality Criteria
B = Background receiving water data

Fact Sheet Attachment J-1
Calculation of Effluent Limitations Based on TMDL (Per Sections 1.3 and 1.4 of SIP)
Copper, Lead, Zinc, 4,4'-DDT, and Total PCBs
For All Discharge Points

CTR#	Parameters	RPA Result - Need Limit?	Reason	HUMAN HEALTH CALCULATIONS – Organisms only: AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	AQUATIC LIFE CALCULATIONS – Saltwater / Freshwater / Basin Plan: ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	LIMITS: Lowest AMEL	Lowest MDEL	Recommendation	Comment
1	Antimony	Ud	No effluent data & no B															No Limit	
2	Arsenic	Ud	No effluent data & no B															No Limit	
3	Beryllium	Uc	No Criteria															No Limit	
4	Cadmium	Ud	No effluent data & no B															No Limit	
5a	Chromium (III)	Uc	No Criteria															No Limit	
5b	Chromium (VI)	Ud	No effluent data & no B															No Limit	
6	Copper	TMDL	TMDL		2.01		0.32		0.53	1.97	1.97	1.55	3.06	3.11	6.13527	3.06	6.14	Permit Limit	
7	Lead	TMDL	TMDL		2.01		0.32		0.53	4.49	4.49	1.55	6.97	3.11	13.9912	6.97	13.99	Permit Limit	
8	Mercury	Ud	No effluent data & no B															No Limit	
9	Nickel	Ud	No effluent data & no B															No Limit	
10	Selenium	Ud	No effluent data & no B															No Limit	
11	Silver	Uc	No Criteria															No Limit	
12	Thallium	Ud	No effluent data & no B															No Limit	
13	Zinc	TMDL	TMDL		2.01		0.32		0.53	45.16	45.16	1.55	70.11	3.11	140.651	70.11	140.65	Permit Limit	
14	Cyanide	Ud	No effluent data & no B															No Limit	
15	Asbestos	Uc	No Criteria															No Limit	
16	2,3,7,8 TCDD	Ud	No effluent data & no B															No Limit	
	TCDD Equivalents	Ud	No effluent data & no B															No Limit	
17	Acrolein	Ud	No effluent data & no B															No Limit	
18	Acrylonitrile	Ud	No effluent data & no B															No Limit	
19	Benzene	Ud	No effluent data & no B															No Limit	
20	Bromoform	Ud	No effluent data & no B															No Limit	
21	Carbon Tetrachloride	Ud	No effluent data & no B															No Limit	
22	Chlorobenzene	Ud	No effluent data & no B															No Limit	
23	Chlorodibromomethane	Ud	No effluent data & no B															No Limit	
24	Chloroethane	Uc	No Criteria															No Limit	
25	2-Chloroethylvinyl ether	Uc	No Criteria															No Limit	
26	Chloroform	Uc	No Criteria															No Limit	
27	Dichlorobromomethane	Ud	No effluent data & no B															No Limit	
28	1,1-Dichloroethane	Uc	No Criteria															No Limit	
29	1,2-Dichloroethane	Ud	No effluent data & no B															No Limit	
30	1,1-Dichloroethylene	Ud	No effluent data & no B															No Limit	
31	1,2-Dichloropropane	Ud	No effluent data & no B															No Limit	
32	1,3-Dichloropropylene	Ud	No effluent data & no B															No Limit	
33	Ethylbenzene	Ud	No effluent data & no B															No Limit	
34	Methyl Bromide	Ud	No effluent data & no B															No Limit	
35	Methyl Chloride	Uc	No Criteria															No Limit	
36	Methylene Chloride	Ud	No effluent data & no B															No Limit	
37	1,1,2,2-Tetrachloroethane	Ud	No effluent data & no B															No Limit	
38	Tetrachloroethylene	Ud	No effluent data & no B															No Limit	
39	Toluene	Ud	No effluent data & no B															No Limit	
40	1,2-Trans-Dichloroethylen	Ud	No effluent data & no B															No Limit	
41	1,1,1-Trichloroethane	Uc	No Criteria															No Limit	
42	1,1,2-Trichloroethane	Ud	No effluent data & no B															No Limit	
43	Trichloroethylene	Ud	No effluent data & no B															No Limit	
44	Vinyl Chloride	Ud	No effluent data & no B															No Limit	
45	2-Chlorophenol	Ud	No effluent data & no B															No Limit	
46	2,4-Dichlorophenol	Ud	No effluent data & no B															No Limit	
47	2,4-Dimethylphenol	Ud	No effluent data & no B															No Limit	
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	Ud	No effluent data & no B															No Limit	
49	2,4-Dinitrophenol	Ud	No effluent data & no B															No Limit	
50	2-Nitrophenol	Uc	No Criteria															No Limit	
51	4-Nitrophenol	Uc	No Criteria															No Limit	
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	Uc	No Criteria															No Limit	
53	Pentachlorophenol	Ud	No effluent data & no B															No Limit	
54	Phenol	Ud	No effluent data & no B															No Limit	
55	2,4,6-Trichlorophenol	Ud	No effluent data & no B															No Limit	
56	Acenaphthene	Ud	No effluent data & no B															No Limit	
57	Acenaphthylene	Uc	No Criteria															No Limit	
58	Anthracene	Ud	No effluent data & no B															No Limit	
59	Benzidine	Ud	No effluent data & no B															No Limit	
60	Benzo(a)Anthracene	Ud	No effluent data & no B															No Limit	

Fact Sheet Attachment J-1
Calculation of Effluent Limitations Based on TMDL (Per Sections 1.3 and 1.4 of SIP)
Copper, Lead, Zinc, 4,4'-DDT, and Total PCBs'
For All Discharge Points

CTR#	Parameters	RPA Result - Need Limit?	Reason	HUMAN HEALTH CALCULATIONS Organisms only: AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	AQUATIC LIFE CALCULATIONS Saltwater / Freshwater / Basin Plan: ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	LIMITS: Lowest AMEL	Lowest MDEL	Recommendation	Comment
61	Benzo(a)Pyrene	Ud	No effluent data & no B															No Limit	
62	Benzo(b)Fluoranthene	Ud	No effluent data & no B															No Limit	
63	Benzo(ghi)Perylene	Uc	No Criteria															No Limit	
64	Benzo(k)Fluoranthene	Ud	No effluent data & no B															No Limit	
65	Bis(2-Chloroethoxy)Meth	Uc	No Criteria															No Limit	
66	Bis(2-Chloroethyl)Ether	Ud	No effluent data & no B															No Limit	
67	Bis(2-Chloroisopropyl)Eth	Ud	No effluent data & no B															No Limit	
68	Bis(2-Ethylhexyl)Phthalat	Ud	No effluent data & no B															No Limit	
69	4-Bromophenyl Phenyl E	Uc	No Criteria															No Limit	
70	Butylbenzyl Phthalate	Ud	No effluent data & no B															No Limit	
71	2-Chloronaphthalene	Ud	No effluent data & no B															No Limit	
72	4-Chlorophenyl Phenyl E	Uc	No Criteria															No Limit	
73	Chrysene	Ud	No effluent data & no B															No Limit	
74	Dibenzo(a,h)Anthracene	Ud	No effluent data & no B															No Limit	
75	1,2-Dichlorobenzene	Ud	No effluent data & no B															No Limit	
76	1,3-Dichlorobenzene	Ud	No effluent data & no B															No Limit	
77	1,4-Dichlorobenzene	Ud	No effluent data & no B															No Limit	
78	3,3 Dichlorobenzidine	Ud	No effluent data & no B															No Limit	
79	Diethyl Phthalate	Ud	No effluent data & no B															No Limit	
80	Dimethyl Phthalate	Ud	No effluent data & no B															No Limit	
81	Di-n-Butyl Phthalate	Ud	No effluent data & no B															No Limit	
82	2,4-Dinitrotoluene	Ud	No effluent data & no B															No Limit	
83	2,6-Dinitrotoluene	Uc	No Criteria															No Limit	
84	Di-n-Octyl Phthalate	Uc	No Criteria															No Limit	
85	1,2-Diphenylhydrazine	Ud	No effluent data & no B															No Limit	
86	Fluoranthene	Ud	No effluent data & no B															No Limit	
87	Fluorene	Ud	No effluent data & no B															No Limit	
88	Hexachlorobenzene	Ud	No effluent data & no B															No Limit	
89	Hexachlorobutadiene	Ud	No effluent data & no B															No Limit	
90	Hexachlorocyclopentadie	Ud	No effluent data & no B															No Limit	
91	Hexachloroethane	Ud	No effluent data & no B															No Limit	
92	Indeno(1,2,3-cd)Pyrene	Ud	No effluent data & no B															No Limit	
93	Isophorone	Ud	No effluent data & no B															No Limit	
94	Naphthalene	Uc	No Criteria															No Limit	
95	Nitrobenzene	Ud	No effluent data & no B															No Limit	
96	N-Nitrosodimethylamine	Ud	No effluent data & no B															No Limit	
97	N-Nitrosodi-n-Propylamin	Ud	No effluent data & no B															No Limit	
98	N-Nitrosodiphenylamine	Ud	No effluent data & no B															No Limit	
99	Phenanthrene	Uc	No Criteria															No Limit	
100	Pyrene	Ud	No effluent data & no B															No Limit	
101	1,2,4-Trichlorobenzene	Uc	No Criteria															No Limit	
102	Aldrin	Ud	No effluent data & no B															No Limit	
103	alpha-BHC	Ud	No effluent data & no B															No Limit	
104	beta-BHC	Ud	No effluent data & no B															No Limit	
105	gamma-BHC	Ud	No effluent data & no B															No Limit	
106	delta-BHC	Uc	No Criteria															No Limit	
107	Chlordane	Ud	No effluent data & no B										1.55		3.11		0.00059	0.0012	Permit Limit	
108	4,4'-DDT	TMDL	TMDL	0.00059	2.01	0.00118													No Limit	
109	4,4'-DDE (linked to DDT)	Ud	No effluent data & no B																No Limit	
110	4,4'-DDD	Ud	No effluent data & no B																No Limit	
111	Dieldrin	Ud	No effluent data & no B																No Limit	
112	alpha-Endosulfan	Ud	No effluent data & no B																No Limit	
113	beta-Endolsulfan	Ud	No effluent data & no B																No Limit	
114	Endosulfan Sulfate	Ud	No effluent data & no B																No Limit	
115	Endrin	Ud	No effluent data & no B																No Limit	
116	Endrin Aldehyde	Ud	No effluent data & no B																No Limit	
117	Heptachlor	Ud	No effluent data & no B																No Limit	
118	Heptachlor Epoxide	Ud	No effluent data & no B										1.55		3.11		0.00017	0.00034	Permit Limit	
119-125	PCBs sum (2)	TMDL	TMDL	0.00017	2.01	0.00034													No Limit	
126	Toxaphene	Ud	No effluent data & no B																	

Notes:
Ud = Undetermined due to lack c
Uc = Undetermined due to lack o
C = Water Quality Criteria
B = Background receiving water

Tesoro Refining & Marketing Company LLC

In the Matter of Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit (Order No. R4-2013-0157, NPDES No. CA0059153) and Time Schedule Order (Order No. R4-2013-0158) Adopted by the Los Angeles Regional Water Quality Control Board

Exhibit 6

TSO Order

ORDER NO. R4-2013-0158
TIME SCHEDULE ORDER (TSO)

FOR

TESORO REFINING & MARKETING COMPANY LLC
TESORO WILMINGTON CALCINER
NPDES NO. CA0059153

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

TIME SCHEDULE ORDER NO. R4-2013-0158

REQUIRING TESORO REFINING & MARKETING COMPANY LLC (TESORO WILMINGTON CALCINER) TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER NO. R4-2013-0157 (NPDES PERMIT NO. CA0059153)

The California Regional Water Quality Control Board, Los Angeles Region, (hereinafter, Regional Water Board) finds:

1. The Tesoro Refining & Marketing Company LLC, former BP West Coast Products LLC (hereinafter, Discharger or Tesoro) is the owner and operator of the Tesoro (former BP) Wilmington Calciner Facility (hereinafter, Facility), located at 1175 Carrack Avenue, Wilmington, California. The Facility is a petroleum coke calcining facility.

2. The Facility discharges wastes under waste discharge requirements (WDRs) contained in Order No. R4-2013-0157 adopted by the Regional Board on September 12, 2013. Order No. R4-2013-0157 serves as a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0059153) and it expires on November 1, 2018.

3. The Facility is permitted to discharge up to 1.1 million gallons per day (mgd) of treated storm water and wastewater associated with industrial activities (wastewater) from the Facility into the Cerritos Channel, within the Los Angeles-Long Beach Inner Harbor, a water of the United States via Discharge Point No. 001 (Latitude 33° 46' 29" N, Longitude 118° 13' 39" W). Tesoro believes that based on the March 21, 2013, "Hydrological Study" submitted to the Regional Water Board, the Facility can retain approximately 2.2 million gallons of storm water, which equates to approximately 5.45 inches of rainfall from a 50-year, 24-hour storm.

4. The Facility was permitted to discharge storm water and wastewater pursuant to WDRs contained in Order No. R4-2007-0031, adopted by the Board on June 7, 2007, which also served as NPDES Permit No. CA0059153 and it expired on May 10, 2012. The terms and conditions of the current Order have been administratively extended and remain in effect until new Waste Discharge Requirements and an NPDES permit are adopted pursuant to this Order. Order No. R4-2007-0031 did not prescribe effluent limitations for lead, 4,4'-DDT, and Total PCBs.

5. On May 5, 2011, the Regional Water Board adopted Resolution No. R11-008, that amended the Basin Plan to incorporate the *TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters* (Harbor Toxics

TMDL). The Harbor Toxic TMDL was approved by the State Water Resources Control Board (State Water Board) on February 7, 2012, the Office of Administrative Law (OAL) on March 21, 2012, and the U.S. Environmental Protection Agency (USEPA) on March 23, 2012. The Harbor Toxics TMDL contains requirements applicable to discharges from the Facility to the Cerritos Channel which is located within the Long Beach Inner Harbor. The Harbor Toxics TMDL included water column final concentration-based waste load allocations (WLAs) for lead, 4,4'-DDT, and total PCBs.

As required by Title 40 Code of Federal Regulations section 122.44(d)(4)(vii)(B), Order No. R4-2013-0157 implements and is consistent with the assumptions and requirements of all WLAs established in the Harbor Toxics TMDLs. The final water quality-based effluent limitations (WQBELs) are statistically-calculated based on salt water column final concentration-based WLAs for lead, 4,4'-DDT, and total PCBs, converted from saltwater California Toxics Rule (CTR) criteria using CTR saltwater default translators, and relevant implementation provisions in section 1.4 of the State Implementation Policy.

6. Order No. R4-2013-0157 prescribed effluent limitations for lead, 4,4'-DDT, and PCBs for Discharge Point 001. The final effluent limitations are as follows:

Table 1. Final Effluent Limitations

Constituents	Units	Effluent Limitations		Rationale
		Average Monthly	Maximum Daily	
Lead, Total Recoverable	µg/L	7	14	TMDL[2]
	lbs/day[1]	0.1	0.1	
4,4'-DDT	µg/L	0.0006	0.001	TMDL[2]
	lbs/day[1]	5.4E-06	1.1E-05	
Total PCBs	µg/L	0.0002	0.0003	TMDL[2]
	lbs/day[1]	1.6E-06	3.1E-06	

[1] The mass limitations in lbs/day were calculated using the concentration limits and the maximum flow rate of 1.1 mgd and calculated as follows:

Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

[2] TMDL = Total maximum daily load – Harbor Toxics TMDL (Resolution No.R11-008).

7. Monitoring data (water samples collected in the retention pond) submitted to the Regional Water Board indicates that the Discharger may not be able to comply with the prescribed new effluent limitations for 4,4'-DDT, and total PCBs based on the Harbor Toxics TMDLs by Order No. R4-2013-0157. Monitoring data for 4,4'-DDT and total PCBs collected from the retention pond in 2007, 2008, 2009, 2010, and 2011 indicate that these pollutants were not detected (ND) but the MDLs (4,4'-DDT = 0.038 µg/L, and total PCBs = 0.56 µg/L, in one case for one of the PCBs, Aroclor 1016) were greater than the State Water Resources Control Board Minimum Levels (SMLs) (4,4'-DDT= 0.01 µg/L, and total PCBs = 0.5 µg/L) and the new effluent limitations listed in Table 1

for 4,4'-DDT and total PCBs. The Discharger may not be able to comply with the new effluent limitations for 4,4'-DDT and total PCBs. Accordingly, pursuant to Water Code section 13300, a discharge of waste is taking place and/or threatens to take place that violates or will violate the new effluent limitations for 4,4'-DDT, and total PCBs prescribed by the Regional Water Board.

On March 28, 2013, the Discharger submitted a letter requesting a time schedule order (TSO) to conduct a study to determine if discharges to receiving waters exceed the limits for lead, 4,4'.DDT, and total PCBs. The letter summarized the Discharger's actions to achieve full compliance with the new effluent limitations for lead, 4,4'-DDT, and total PCBs in Order No. R4-2013-0157. The actions include collection and evaluation of data, selection and design of water management practices and/or control measures, and implementation of the measures selected that are intended to achieve full compliance with the final effluent limitations for 4,4'-DDT, and total PCBs in the discharge. Accordingly, the Regional Water Board finds that Tesoro is making diligent effort to bring its waste discharge into compliance with the new effluent limitations for lead, 4,4'-DDT, and total PCBs and that a time schedule is warranted.

The Discharger is able to meet the new effluent limitations for lead in Order No. R4-2013-0157. The monitoring data collected from the retention pond in 2007, 2008, 2009, 2010, and 2011 indicate that lead was detected at concentrations (ranges from ND to 2.9 µg/L) greater than the SMLs (0.5 µg/L) and laboratory's method detection limit (MDL = 0.2 µg/L) but below the new effluent limitations listed in Table 1 for lead. Thus, lead is not included in this TSO.

8. Section 13300 of the California Water Code states, in part, that:

"Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."

9. Water Code section 13385, subdivisions (h) and (i), require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. Section 13385(j)(3) exempts violations of an effluent limitation from mandatory minimum penalties "where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, *if all of the [specified] requirements are met.*" (emphasis added).

10. The final effluent limitations for 4,4'-DDT, and total PCBs prescribed in Order No. R4-2013-0157, are new regulatory requirements. The prior WDRs for the waste discharge, Order No. R4-2007-0031 did not prescribe effluent limitations for 4,4'-DDT, and total PCBs.

11. As described in Finding 8, new or modified control measures may be necessary in order for the Discharger to comply with the new effluent limitations for 4,4'-DDT, and total PCBs prescribed in Order No. R4-2013-0157. These new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

12. This TSO establishes interim effluent limitations for 4,4'-DDT and total PCBs, and requires the Discharger to undertake specific actions if necessary in order to prevent or correct the discharge of waste that exceeds or threatens to exceed the final effluent limitations for 4,4'-DDT and total PCBs prescribed in Order No. R4-2013-0157. The TSO establishes a time schedule for bringing the waste discharge into compliance with the final effluent limitations for 4,4'-DDT and total PCBs in as short amount of time as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary for compliance.

13. The time schedule for completion of the action necessary to bring the waste discharge into compliance exceeds one year from the effective date of this TSO. Accordingly, this TSO includes interim requirements and the dates for their achievement. The interim requirements include interim effluent limitations for 4,4'-DDT and total PCBs, and actions and milestones leading to compliance with the final effluent limitations set by Order No. R4-2013-0157.

14. Full compliance with the requirements of this TSO exempts the Discharger from mandatory minimum penalties only for violations of the final effluent limitation for 4,4'-DDT and total PCBs in Order No. R4-2013-0157, pursuant to Water Code section 13385(j)(3). This TSO does not apply to the final effluent limitations for lead set by Order No. R4-2013-0157.

15. Water Code section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to Water Code section 13263.3. The Discharger must prepare and implement a pollution prevention plan for 4,4'-DDT and total PCBs pursuant to Water Code section 13263.3.

16. This TSO allows the Discharger necessary time to evaluate and, if needed undertake actions to reduce the amount of 4,4'-DDT and total PCBs in its waste discharge and

comply with applicable effluent limitations for 4,4'-DDT and total PCBs. This Order does not modify the final effluent limitations for 4,4'-DDT and total PCBs set by Order No. R4-2013-0157. The interim effluent limitations for 4,4'-DDT and total PCBs included in this TSO will advance completion of necessary upgrades to control measures if necessary to reduce 4,4'-DDT and total PCBs in the waste discharge in a timely manner, and are therefore in the public interest.

17. The Regional Water Board has notified the Discharger, interested agencies, and persons of its intent to issue this TSO concerning compliance with waste discharge requirements. The Regional Water Board accepted written comments, and heard and considered all comments pertinent to this matter in a public hearing.

18. Issuance of this TSO is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with section 15321(a), Title 14 of the California Code of Regulations (exemption from CEQA for enforcement actions) and section 15301, Title 14 of the California Code of Regulations (exemption from CEQA for existing facilities).

19. Any person aggrieved by this action of the Regional Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

IT IS HEREBY ORDERED that, pursuant to California Water Code section 13300, Tesoro Refining & Marketing Company LLC, as the owner and operator of the Tesoro Wilmington Calciner Facility, shall comply with the requirements listed below to ensure compliance with the final effluent limitations for 4,4'-DDT and total PCBs contained in Order No. R4-2013-0157:

1. Comply immediately with the following interim effluent limitations:

Table 2. Interim Effluent Limitations

Constituents	Units	Interim Effluent Limitations	
		Average Monthly[1]	Maximum Daily[1]
4,4'-DDT	µg/L	0.041	0.049
	lbs/day[2]	0.0004	0.00045
Total PCBs	µg/L	0.61	0.80
	lbs/day[2]	0.006	0.007

[1] The interim effluent limitations were derived from the Facility's monitoring data collected from the retention pond obtained in 2007 through 2011 using the 95th (average monthly) and 99th (maximum daily) of the laboratory's method detection limits.

[2] The mass limitations in lbs/day were calculated using the concentration limits and the maximum flow rate of 1.1 million gallons per day (mgd);

Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

The foregoing interim effluent limitations for 4,4'-DDT and Total PCBs are in effect from November 22, 2013, through November 22, 2018. During this time, the Discharger shall investigate and implement any required upgrades to control measures to ensure compliance with the final effluent limitations for 4,4'-DDT and Total PCBs contained in Order No. R4-2013-0157.

2. Achieve full compliance with the final effluent limitations for 4,4'-DDT and Total PCBs in Order No. R4-2013-0157, no later than November 23, 2018, to the extent the pollutants are discharged to receiving waters from the Facility.

3. Submit for approval to the Executive Officer as soon as possible, but no later than March 1, 2014, a workplan to evaluate water quality and select actions/measures, if needed including a feasibility study of the selected actions/measures, and implement the selected actions/measures to prevent or correct any violation of applicable effluent limits for 4,4'-DDT and Total PCBs in the discharge from the Facility to receiving waters. The workplan shall contain the following components:

   a. A time schedule that identifies a means to achieves compliance with the final effluent limitations for 4,4'-DDT and Total PCBs as soon as possible, but no later than November 23, 2018;

   b. A determination of whether or not actions/measures are needed, and a description of the actions/measures to be utilized;

   c. A schedule for the evaluation, design, installation or construction, and implementation of the selected actions/measures to bring Tesoro Wilmington Calciner's discharge into full compliance with the final effluent limitations for 4,4'-DDT and Total PCBs; and

d. A feasibility study on the selected actions/measures, including assessment of the impacts to land, surface waters, and groundwater.

4. Submit for approval to the Executive Officer as soon as possible, but no later than March 1, 2014, a Pollution Prevention Plan (PPP) workplan, with the time schedule for implementation, pursuant to California Water Code section 13263.3.

5. Submit semiannual progress reports of efforts towards compliance with the final effluent limitations for 4,4'-DDT and Total PCBs. The reports shall summarize the progress to date, activities conducted during the reporting period, and the activities planned for the upcoming reporting period. Each report shall be submitted to this Regional Water Board by February 15th and August 15th for the second half of the previous reporting year and the first half of the reporting year, respectively, and include milestones completed and any new pertinent updates. The first semiannual progress report is due on February 15, 2014.

6. Submit a final report on the results of the evaluation of the selected actions/measures by February 1, 2019. The report shall include: a) results of the study proposed by Discharger; b) a description of the actions/measures selected; c) the monitoring data collected; and d) an evaluation of the effectiveness of the selected actions/ measures.

7. All technical reports required under this TSO are required pursuant to California Water Code sections 13267 and 13383. The Regional Water Board needs the required information in order to determine compliance with this TSO. The Regional Water Board believes that the burdens, including costs, of these reports bear a reasonable relationship to the needs for the reports and the benefits to be obtained from the reports.

8. Any person signing a document submitted under this TSO shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

9. If the Discharger fails to comply with any provision of this TSO, the Regional Water Board may take any further action authorized by law. The Executive Officer, or his/her delegee, is authorized to take appropriate administrative enforcement action pursuant, but not limited to, Water Code sections 13301, 13350 and/or 13385. The Regional Board may also refer any violations to the Attorney General for judicial enforcement, including injunction and civil monetary remedies.

10. All other provisions of Order No. R4-2013-0157, that do not conflict with this TSO, are in full force and effect.

11. This Time Schedule Order expires on November 22, 2018.

I, Samuel Unger, 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, Los Angeles Region, on October 3, 2013.

Samuel Unger

Samuel Unger, P.E.
Executive Officer