CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESPONSE TO WRITTEN COMMENTS
ON THE REISSUANCE OF WASTE DISCHARGE REQUIREMENTS FOR:

Tesoro Refining and Marketing Company
Golden Eagle Refinery
Contra Costa County
NPDES Permit No. CA0004961

I. San Francisco Baykeeper – May 10, 2010
II. Tesoro Refining and Marketing Company – May 10, 2010
III. Editorial Corrections Initiated by Regional Water Board Staff

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Note: The format of this staff response begins with a brief introduction of the party's comments, followed with staff's response. Interested persons should refer to the original letters to ascertain the full substance and context of each comment.

I. San Francisco Baykeeper (Baykeeper) – May 10, 2010

Baykeeper Comment 1
Baykeeper indicates that relaxation of limits for BOD, COD, TSS, Oil & Grease, Phenolic Compounds, sulfide, total chromium, and hexavalent chromium appear to violate the Clean Water Act's prohibition on backsliding.

Baykeeper indicates that the Draft Permit violates the Clean Water Act's (CWA) anti-backsliding policy by reducing limitations for several constituents compared to the existing permit for Tesoro's Golden Eagle refinery. Parameters for which limitations have been reduced include BOD, COD, TSS, oil & grease, phenolic compounds, sulfide, total chromium and hexavalent chromium within effluent, as measured at Outfall 001.

The CWA's anti-backsliding policy was adopted in order to implement the Act's "national goal that the discharge of pollutants into navigable waters be eliminated by 1985." It states that a permit may not be renewed or reissued with less stringent effluent limitations than those contained in the previous permit.

Baykeeper indicates that no justification has been provided within the Draft Permit for increasing the production-based mass emission limits and technology-based concentration limits listed in Table 6 compared with those of the existing permit. Baykeeper requests that the effluent limitations at least match those of the existing permit or, at an absolute minimum, provide justification for increasing effluent limitations imposed on the permit holder.

Response 1

The Fact Sheet (pages F-32-33) details why anti-backsliding requirements do not apply to technology-based effluent limits described by the Baykeeper. In sum, the derivation of technology-based limits depends on the process configuration of the refinery, which, in turn, depends on the feedstock rate of each process. Based on information provided by the Discharger in its application for permit renewal, during the term of the previous permit, feedstock rates for certain refinery processes increased, resulting in different "process configuration values" used in the derivation of effluent limitations and higher effluent limitations. Such a change in effluent limitations is consistent with CWA section 402(o)(2)(A), which allows a reissued permit to include less stringent limitations when a material and substantial alteration to the permitted facility has occurred after the previous limitations became effective. In these circumstances, technology-based effluent limitations are still consistent with applicable requirements of 40 CFR 419; however, material changes in refinery processes have resulted in different factors to be considered in the derivation of technology-based limits.

That said, the Baykeeper's comments did cause us to look in more depth at the factors originally used in calculating production-based mass limits, and to revise those factors resulting in slightly lower mass limits than are in the tentative order. Tesoro had reported in its application the maximum process rates for each process category (e.g., hydrocracking, hydrotreating, vacuum distillation) from the last five years. These were the values we used originally in the tentative order. But, the correct methodology for calculating technology-based limits is to use the process category information from the year with the highest crude throughput. Therefore, we recalculated Tesoro's technology-based effluent limits using this methodology. The revisions to Effluent Limitations and Discharge Specifications, IV.A.1.a, are shown below:

Parameter	**Units**	**Effluent Limitations**	
		Average Monthly	**Maximum Daily**
BOD_5	lbs/day	2,300	4,200
COD	lbs/day	16,000	31~~2~~,000
TSS	lbs/day	1,8~~9~~00	2,900
Oil & Grease	lbs/day	67~~8~~0	1,300
	mg/L	8	15
Phenolic Compounds	lbs/day	13	31~~2~~
Ammonia (N)	lbs/day	1,300	2,800
Sulfide	lbs/day	12	27~~8~~
Total Chromium	lbs/day	15	42~~4~~
Hexavalent Chromium	lbs/day	1.2~~3~~	2.7~~8~~
pH	s.u.	6.0 - 9.0 at all times	

We also revised the methodology in Attachment F-1 to the Fact Sheet to include the correct process factors for calculating the above limits. Finally, we revised the Fact Sheet to correctly state parameters for which the Revised Tentative Order establishes increased technology-based mass loading limits as follows:

"This Order establishes increased technology-based mass loading limits for BOD, ~~COD, TSS, oil & grease~~, phenolic compounds, ~~sulfide,~~ total chromium, and hexavalent chromium consistent with the ELGs."

Baykeeper Comment 2
Effluent limitations have been removed for toxic substances including nickel, thallium, and total PCBs in violation of the Clean Water Act's prohibition on backsliding.

Baykeeper points out that based on its comparison with the existing permit, the Draft Permit removes effluent limitations for several toxic substances. Limitations have been omitted for nickel, thallium, and total PCBs without any justification. Baykeeper indicates that this appears to violate the CWA's anti-backsliding requirements. Baykeeper indicates that no reasonable justification appears likely for these omissions and requests that the existing limitations for these constituents be included in the Draft Permit.

Response 2
We have not made changes in response to this comment. The Fact Sheet (page F-32) explains that the Water Board's analysis showed no reasonable potential for nickel, thallium, and total PCBs in the discharge that would cause or contribute to a violation of water quality standards. This analysis is called a Reasonable Potential Analysis. Therefore, the limitations in the previous permit were not retained in the tentative order. This is consistent with State Water Board Order WQ 2001-16, which found, "Anti-backsliding does not necessarily dictate that a pollutant that was limited in a prior permit must have a limit in a later permit, even though the pollutant has never been detected and its discharge does not have the Reasonable Potential to cause or contribute to a water quality standards violation." The logic of State Water Board Order WQ 2001-16 also applies to situations where a pollutant is detected, but no longer triggers reasonable potential. The removal of limits for these pollutants is therefore consistent with State Water Board Order WQ 2001-16 and anti-backsliding requirements.

Baykeeper Comment 3
Baykeeper indicates that the storm water runoff allocations provided in Table 7 of the Draft Permit are intended to identify pollutants attributable to storm water runoff. However, this list does not represent an appropriate range of pollutants commonly found in storm water runoff from industrial sites. Baykeeper indicates that this list should be expanded to include pollutants that are likely to be discharges to surfaces due to refinery operations via atmospheric deposition, maintenance and on-going operations.

Since it does not appear that this site has been subject to a full suite of storm water quality testing it cannot be accurately determined which constituents should be monitored on a routine basis. To enable the Regional Water Board to make a reasonable determination of which constituents should be subject to on-going monitoring Baykeeper recommends quarterly sampling and testing for a full suite of chemical constituents over the course of one year. After this point, the Regional Water Board should determine appropriate storm water runoff allocations for those pollutants with the potential to adversely affect receiving waters. Revised allocations should be included as a permit

amendment, subject to public comment. In addition, if preliminary monitoring results indicate the necessity of additional storm water mitigation measures these should be required in this permit amendment.

Response 3

We have not made changes in response to this comment. The commenter appears to misunderstand the purpose of Table 7. The technology-based limits for this discharge are derived in accordance with federal regulations. Because Tesoro processes storm water through its treatment plant during wet weather, federal regulations allow it an additional allocation for certain pollutants. In other words, during wet weather, Tesoro's technology-based limits are the sum of the loadings permitted by Table 6 and Table 7 (the allocations in Table 7 are shown as a concentration, so they would need to be multiplied by the flow due to storm water runoff to get a loading allocation). The allocations included in Table 7 are consistent with the previous permit and 40 CFR Part 419.22. In other words, if we expanded the pollutant list in Table 7, it would not be consistent with 40 CFR Part 419.22, and it would also permit Tesoro to discharge more pollutants during wet weather.

Baykeeper Comment 4

Baykeeper indicates that the Draft Permit does not require statistically significant monitoring intervals to demonstrate permit compliance.

Baykeeper points out that minimum sampling frequencies for some constituents in treated process wastewater, as described in Attachment E of the Draft Permit are insufficient to determine compliance with the Draft Permit. Effluent limitations for toxic substances are provided on an average monthly and maximum daily basis in Table 10 of the Draft Permit. This includes stringent dioxin-TEQ standards for which the Regional Water Board and Baykeeper have worked to strengthen over the last decade. However, the Monitoring and Reporting Program (MRP) includes lengthy monitoring intervals for several highly toxic constituents, which makes policy compliance difficult, and potentially impossible to determine. For example, the minimum sampling frequency for dioxin-TEQ is once per quarter. Monitoring frequencies of this duration makes determination of compliance with average monthly and maximum daily effluent limitations statistically impossible.

For the Regional Water Board to determine compliance with average monthly and maximum daily limitations monitoring frequencies should be designed to establish a data set that permits calculation of statistically significant effluent concentrations. The Regional Water Board should provide evidence that the monitoring program has been designed appropriately and that data collected through the MRP can be used to calculate statistically relevant effluent concentrations for the purposes of permit compliance.

Response 4

In response to this comment, we revised the monitoring frequency for ammonia from monthly to weekly. The principal purposes of a self-monitoring program are: (1) to document compliance with waste discharge requirements and prohibitions, and (2) to facilitate self-policing by the waste discharger in the prevention and abatement of

pollution arising from waste discharge. In this context, the monitoring frequencies proposed are based on the risk level relative to the limit, historical performance, and cost.

For pollutants that have been consistently measured or measured near or above the proposed limits, the previous permit also specified limits for these same pollutants. Because of this, there are sufficient historical data to evaluate effluent variability and future compliance likelihood. Based on this evaluation, the tentative order proposes weekly or monthly monitoring frequencies. As indicated in the Fact Sheet (page F-9), Tesoro complied with all of its effluent limits with the exception of ammonia in January 2006. In the case of ammonia, we revised the monitoring frequency from monthly to weekly. This is, in part, because Tesoro exceeded its ammonia limit, but also because ammonia concentrations have proved to be more variable than other pollutants. For the remaining pollutants with effluent limits, the tentative order continues these pollutants' monitoring frequencies, which was at least monthly, from the previous permit. As Tesoro complied with its effluent limits for these pollutants, these data are sufficient to show that the risk of exceeding their respective effluent limits does not merit more frequent monitoring.

For pollutants such as those which are indicative of the adequacy of treatment, higher frequencies are appropriate and are thus proposed in the tentative order. These include weekly monitoring for total suspended solids and four days out of each 7-day week for acute toxicity. Total suspended solids is a very relevant parameter of both treatment and as a surrogate for other toxic pollutants, since most toxic pollutants have a high affinity to solids. Acute toxicity is also another good indicator of adequate treatment in that it is able to capture the potential effects of a combination of pollutants.

Finally, for pollutants where the cost of analysis is extremely high (i.e., greater than $1,000 per test for chronic toxicity and dioxin-TEQ), the tentative order proposes quarterly monitoring as a reasonable compromise between the cost of, and the need for, the information.

Baykeeper Comment 5

Baykeeper indicates that the storm water sampling points are not clearly defined. Specifically, on pages E-2 to E-3, Baykeeper indicates that the description is too vague to prevent sampling within the receiving water or the mixing zone. Baykeeper believes that the language should be revised as follows: "At any point prior to entering the receiving waters where storm water representative of that discharged at Discharge Point (X), including all storm water flow tributary to that outfall, is present."

Response 5

We have not made changes in response to this comment because the suggested revisions are not necessary. In describing storm water sample stations, the tentative order states: "At any point where storm water representative of that discharged at Discharge Point (X), including all storm water flow tributary to that outfall, is present." Samples taken in the receiving water or mixing zone would not be representative of the storm water

discharged, and would result in a violation of the permit as currently proposed. Therefore, the revision suggested is unnecessary.

Baykeeper Comment 6
Baykeeper points outs that there are provisions in the Draft Permit that allow the Executive Officer to modify deadlines for the discharger's Selenium Characterization Study for up to three years if there are "delays in data collection, sample collection, analytical turnaround, or receipt of third party reports." Baykeeper indicates that the permit should not equate "good cause" for a deadline modification with any "delays." At a minimum, to constitute good cause, the delays should be outside of the control of the discharger, and exclude any delays which reasonably should have been anticipated or avoided. Finally, the permit must require public notice and comment whenever the Executive Officer considers extending these deadlines.

In addition, Task 4(c) of the permit's Selenium Characterization Study, as listed in Table 13, should be changed to grant the Regional Water Board, not the discharger, the ability to determine whether there is reasonable potential for selenium dischargers to violate the Basin Plan. In addition, it is unclear how the discharger would determine whether selenium levels "adversely affect food web or wildlife." Tasks 4(c) and 4(f) should, at a minimum, cite appropriate assessment methodologies and grant the Regional Water Board and the California Department of Fish and Game appropriate oversight responsibility.

Response 6
We have not made significant changes in response to this request because the suggested revisions are not necessary. Also significant revisions to this requirement would introduce inconsistency in identical requirements that the Board imposed on all the San Francisco Bay region's refineries, including Tesoro, in the past six months (Order Nos. R2-2010-0057 and R2-2009-0079). Inconsistencies in requirements could complicate the required selenium study, which is to be completed collaboratively by the refineries.

In our view that the revisions are unnecessary, we note that all of the submittals under this provision are subject to the approval of the Executive Officer. While Task 4(c) requires that Tesoro determine whether or not selenium has reasonable potential to violate the Basin Plan's narrative bioaccumulation objective, the Water Board may agree or disagree with Tesoro's determination. Similarly, the Water Board has the discretion to approve or disapprove any of the determinations Tesoro makes under Task 4(f).

On the issue of time extensions for completion of the tasks, we agree that the "good cause" condition would exclude delays caused by the refineries, or that could have been reasonably avoided. To make this clearer in the requirements, we have made the following changes:

> "The Discharger shall implement effluent and receiving water selenium characterization studies as set forth in Table 13. The Discharger may complete, or cause to be completed, all or some of the required tasks collaboratively. All submittals shall be acceptable to the Executive Officer. Upon request by the

> Discharger, the Executive Officer may modify the deadlines for the following tasks by no more than three years if good cause exists, such as delays in data collection, sample collection, analytical turnaround, or receipt of third party reports; laboratory QA/QC problems; other factors outside the Discharger's control; or new information that warrants schedule modification. Good cause does not include delays caused by the Discharger, or that could have been reasonably avoided. Any requests for schedule modification shall be in writing with necessary justification. Any approval shall also be in writing."

As for the suggestion to require public notice and comment whenever the Executive Officer considers extending a deadline, this would likely cause even further delays in completion of the study. To accommodate the time it would take for Water Board staff to process a notice, wait for comments, and then respond to comments, refineries would more likely seek extensions as soon as there is even a remote possibility of a delay. However, all of Tesoro's submittals, including requests to extend a deadline, are public documents open to the Baykeeper's or other parties' review at any time. We also expect to regularly report on the refineries' progress on completing these studies in the monthly Executive Officer's Report, which is available to the public on the Water Board's website.

Baykeeper Comment 7

Baykeeper indicates that the limitations for acute toxicity do not appear to be based on scientific reasoning and appropriate assay procedures have not been specified to the discharger. The Regional Water Board should provide evidence that 90% survival has been determined to be a statistically significant toxicity level, either by resource agencies or within scientific literature.

Also, the Draft Permit should cite the currently approved bioassay protocols that should be followed in IV.A.4(c) of the Draft Permit in order to avoid confusion. In addition, this subsection should cite standards the Executive Officer must consider and review prior to granting exceptions to bioassay testing. Finally, the permit should not create an unjustified exception for ammonia toxicity that fails toxicity testing. Any ammonia concentrations sufficient to results in the killing of a statistically significant portion of the test species should not be permitted.

Response 7

We have not made changes in response to this request. The requirements for acute toxicity in the tentative order are from the Water Board's *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan). The Basin Plan requires at least a 90^{th} percentile survival as an 11-sample median. The bases for the acute toxicity limits were developed in the Basin Plan, not during tentative order preparation. The Basin Plan also includes an exception for toxicity caused by ammonia. This is because ammonia rapidly degrades in the environment, and, provided the Discharger is meeting effluent limitations for ammonia, such discharges should not pose a threat to aquatic life.

The tentative order does cite the currently approved bioassay protocols. They are included in U.S. EPA's *Methods for Measuring the Acute Toxicity of Effluents and*

Receiving Water to Freshwater and Marine Organisms, currently 5th Edition (EPA-821-R-02-012). In some cases, it is necessary for the Executive Officer and the Environmental Laboratory Accreditation Program to grant exceptions to U.S. EPA protocols, but it is difficult to predict the issues beforehand.

Baykeeper Comment 8
Baykeeper indicates that the receiving water limitations do not place a sufficient burden of proof on the discharger to demonstrate that discharges not cause deleterious effects on wildlife. Specifically, Baykeeper indicates that Paragraph V-A.4 of the Draft Permit be rewritten to prohibit toxic substances that "may," rather than "will" cause deleterious effects on humans or wildlife. The burden of proof to show that such discharges "will", with certainty, have a deleterious impact to humans or wildlife is too high. Baykeeper indicates that receiving water limitations should be based on a precautionary principle in order to avoid deleterious effects on humans or wildlife. Thus, the permit should prohibit such discharges that "may," not "will" cause such deleterious effects.

Response 8
We have made changes in response to this comment. To be consistent with the language used in Chapter 3 of the Basin Plan, we have restated this limitation as follows:

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

The Basin Plan prohibits substances from causing toxicity, not substances that "will" or "may" cause toxicity.

Baykeeper Comment 9
Baykeeper points out that the Draft Permit allows the Discharger to request a permit modification, based on several criteria (VI-C.1, p. 17). In Baykeeper's view the range of criteria listed are sufficient to warrant public review and believe the section should expressly state that any such permit modification must first undergo public review and comment before approval.

Response 9
We have made changes in response to this comment. The changes indicated in the reopener provision would require approval by our Board, and therefore, an opportunity for the public to comment. To address Baykeeper's concern, we have made the following changes:

> "The Regional Water Board may modify or reopen this Order (in accordance with federal regulations) prior to its expiration date in any of the following circumstances as allowed by law:"

Baykeeper Comment 10

Baykeeper indicates that the Draft Permit's Best Management Practices and Pollutant Minimization section is too vague. For example, requirements include that a PMP report must "periodically" determine which pollutants are "a problem," and which may become "a problem." These vague requirements are unenforceable and do not place regulatory oversight within the hands of the Regional Water Board. The permit should define the period of this assessment, and should define, or provide meaningful guidance, as to what pollutants may cause degradation of receiving waters.

Further, the permit states that, when a priority pollutant exceeds effluent limitations, the PMP shall include a control strategy "designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutants in the effluent at or below the effluent limitation." This must be strengthened to require the PMP to attain, and maintain, as quickly as possible, compliance with the effluent limitation. A control strategy that is "designed to proceed toward the goal" of attainment will not necessarily reach attainment. In addition, the PMP must require implementation of the best available technology economically achievable, not merely "appropriate cost-effective control measures," as the permit currently requires.

Response 10

We have not made changes in response to this comment. We do not agree that the requirement for Tesoro to periodically evaluate pollutants that may become a problem is too vague or undermines our regulatory oversight. The tentative order requires that Tesoro submit a Pollution Minimization Program (PMP) report annually that covers the period from January through December of the preceding year. So Tesoro must evaluate, at least annually, if pollutants have the potential to become a problem, and the Water Board, based on our review of the report and self-monitoring data, has the oversight to approve or disapprove of Tesoro's program accordingly.

The requirement that the PMP shall include a control strategy "designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutants in the effluent at or below the effluent limitation" is taken verbatim from Section 2.4.5.1 of the *Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California* (SIP) and is necessary to implement the SIP. Again, the requirement that Tesoro implement "appropriate cost-effective control measures" is also taken verbatim from the SIP and is necessary to implement the SIP (the tentative order must implement the SIP; see Finding J).

Baykeeper Comment 11

Baykeeper indicates that according to Standard Provisions contained in Attachment D (I-G-2) "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 provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below (40 CFR 122.41(m)(2).)" This vague provision suggests that any bypass event, which typically represent a significant volume of discharge, is permissible and no reporting and requirements are necessary in the event

of bypass discharges to receiving waters. This section should be changed to include explicit sampling and reporting requirements for all bypass events.

Response 11
We have made changes in response to this comment. To clarify the monitoring and reporting requirements that apply to Tesoro if it bypasses any of its treatment units for essential maintenance, we revised the Self-Monitoring Program to include the following:

> "If the Discharger bypasses any of its treatment units under the conditions stated in I.G.2 of Attachment D, it shall monitor flows and collect samples on a daily basis for all constituents at affected discharge points that have effluent limits (except chronic toxicity) for the duration of the bypass (including acute toxicity using static renewals). As such discharges may result in noncompliance that may endanger health or the environment, the Discharger shall follow the reporting requirements under V.E.1 of Attachment D."

II. Tesoro Refining and Marketing Company (Tesoro) – May 10, 2010

Tesoro Comment 1
Tesoro requests that the Regional Water Board delete the proposed water quality based effluent limits for ammonia nitrogen in the Tentative Order and that it develop a more comprehensive approach to regulating ammonia in wastewater discharges. To support its position, Tesoro indicates that the fate and effects of ammonia and other nitrogen compounds in the San Francisco Bay Delta system have been the subject of numerous scientific studies conducted over several decades by governmental agencies and academic institutions. Tesoro indicates that it is not aware of any studies that suggest the possibility of toxic levels being caused by discharges of ammonia nitrogen found in treated wastewater from its refinery or similar facilities. Further, Tesoro believes that the Regional Water Board should carefully consider the scientific data available regarding ammonia nitrogen from known natural and anthropogenic sources and not broadly apply a requirement from State Water Resources Control Board Order WQ 2007-0004 (Remand Order for East Bay Municipal Utility District that directed the Regional Water Board to include appropriate effluent limitations and monitoring requirements for ammonia) to all NPDES permit holders in its jurisdiction.

Response 1
We have not made changes in response to this comment. Because there is a numeric objective in the Basin Plan for ammonia, and the ammonia in Tesoro's effluent exceeds that objective, there is reasonable potential for the discharge to cause or contribute to a violation of that objective in Bay waters. Thus, it is appropriate for the permit to specify limits to ensure that Tesoro's discharge does not violate that objective or cause toxicity in Bay waters. The proposed methodology used in developing the limits is consistent with the Basin Plan and with our approach for other toxic pollutants. It would be irresponsible

to wait until there is an undisputed and demonstrated widespread problem in the Bay before imposing requirements on ammonia or any toxic pollutant.

Tesoro Comment 2
Tesoro indicates that earlier this year, it provided data summaries to the Water Board with a review of over forty Tesoro GER E-001 dioxin and furan analyses from 2000 to 2010. These data indicate that all resulting dioxin-TEQ calculations have been 30 to 140 times less than the $1.4*10^{-8}$ µg/L average monthly limit specified in the Tentative Order.

Tesoro points out that Monitoring and Reporting Programs in NPDES Permits, including those issued to local competitor's facilities, specify a sampling and analysis frequency for dioxins as twice per year. Tesoro's Tentative Order specifies a quarterly frequency. Therefore, Tesoro requests that it the Water Board change the frequency to that assigned to other permits.

Response 2
We have not made changes in response to this comment. One of the challenges with dioxin-TEQ analysis is that the detection limit for congeners often exceeds the water quality objective. Monitoring data from the Tesoro refinery does show that many congeners are, at times, detected but not quantified. This suggests that dioxin-TEQ in Tesoro's effluent is at levels close to the water quality objective (not 30 to 140 times lower). Additionally, Tesoro routes treated wastewater through a canal that is known to contain elevated levels of dioxins and furans in its sediment. Therefore, there is a greater potential for the levels of dioxins and furans to vary in Tesoro's effluent relative to other dischargers in our Region. As such, a more frequent monitoring interval is appropriate for this pollutant.

Tesoro Comment 3
Tesoro indicates that a 20-year review of residual chlorine analysis at E-001 indicates that it has never found a detectable concentration. Tesoro points out that sanitary wastewater streams join other flows just downstream on sample points E-001-D1 and E-001-D2 and receive extensive active and passive biological treatment in the surge ponds, oxidation pond, coke pond and clean canal, as well as being filtered through granular activated carbon columns.

Tesoro points out that these treatment systems and the associated total residence times of generally greater than 25 days suggest that it would be technically impossible for a residual chlorine concentration ever to be detectable at sampling E-001. Additionally, Tesoro has concerns about the toxicity related to chemical used in conducting the chlorine residual analysis. Accordingly, Tesoro requests that the Water Board delete the E-001 sampling requirement for chlorine residual.

Response 3
We revised the tentative order to incorporate this request. Additionally, we removed references to the chlorine limitation from Section IV. Effluent Limitations and Discharge Specifications A.2, and from the Fact Sheet.

III. Editorial Corrections

Correction 1

The tentative order indicates that the Executive Officer can specify the appropriate test species for acute toxicity in both the Effluent Limitations and Discharge Specifications Section and the Monitoring and Reporting Program (MRP). To eliminate duplication, we have made the following changes under Section IV. Effluent Limitations and Discharge Specifications 5.c Acute Toxicity:

> "c. Bioassays shall be performed using the most up-to-date USEPA protocol and the most sensitive species as specified in the MRP. ~~writing by the Executive Officer based on the most recent screening test results~~."