California Regional Water Quality Control Board
San Francisco Bay Region

RESPONSE TO WRITTEN COMMENTS

On the Tentative Order for
Phillip 66, Rodeo Renewable Energy Complex

The Regional Water Board received written comments from San Francisco Baykeeper (Baykeeper) on a tentative order distributed for public comment. The comments are summarized below in *italics* (paraphrased for brevity) and followed by staff responses. For the full content and context of the comments, refer to the comment letter. To request copies of the comment letter, see the contact information provided in Fact Sheet section 8.7 of the Revised Tentative Order.

Revisions are shown with ~~strikethrough~~ for deletions and <u>underline</u> for additions.

Comment 1

Baykeeper indicates that, despite new scientific information published after the adoption of the North San Francisco Bay Selenium TMDL (May 2016), the Regional Board has not revisited the TMDL and has refused to implement more stringent limits for refinery NPDES permits than those issued in the TMDL. Baykeeper asserts that the TMDL and the Board's implementation of it fail to protect fish, people, and beneficial uses of San Francisco Bay.

Response

We did not make changes in response to this comment. The Revised Tentative Order implements the North San Francisco Bay Selenium TMDL, which establishes the basis for the selenium effluent limits in the permit and was based on the best available science at the time.

The North San Francisco Bay Selenium TMDL states that selenium water quality-based effluent limits are to be calculated as the 95th percentile of daily loads based on representative data reported during 2000 through 2012 and are to be expressed in units of kilograms per day (kg/day). While the Revised Tentative Order implements selenium limits based on performance established in the TMDL from 2000 through 2012, we expect the Discharger's selenium loads to be substantially reduced with its shift from using petroleum feedstocks that are high in selenium to renewable feedstocks that are low in selenium. We plan to update the Discharger's selenium limits with the next permit reissuance when sufficient data have been collected that are representative of its new operations.

Comment 2

Baykeeper asserts that Provision 6.3.4.7 of the Tentative Order, which sets conditions for shutting down the Facility's Selenium Removal Plant, equates to a determination that there is no need for selenium removal from the Facility's wastewater. Further, Baykeeper asserts that the Clean Water Act requires implementation of Best Available Technology (BAT) to prevent future impairments to an impaired water body. Thus,

Baykeeper explains that the Tentative Order must demand identification and implementation of control technologies to remove pollutants from wastewater discharges unless or until the Facility effluent contains none. Furthermore, instead of requiring BAT, Baykeeper asserts that the Tentative Order assumes selenium discharges will continue and eliminates legally required BAT that would reduce or eliminate selenium.

Response
We made changes in response to this comment. As mentioned in response to comment 1, we plan to establish more restrictive effluent limits for selenium, consistent with the North San Francisco Bay Selenium TMDL, after sufficient data have been collected to characterize the Discharger's new operations. These updated limits would still be water quality-based because they would be consistent with a TMDL, not technology-based as Baykeeper suggests by proposing that the Discharger implement BAT. Contrary to Baykeeper's suggestion, neither technology-based nor water quality-based approaches would require the elimination of selenium discharges.

To better document the constraints and function of the Selenium Removal Plant under the new process conditions (e.g. processing fuel from renewable feedstocks instead of petroleum feedstocks), we revised Provision 6.3.4.7, as follows:

> **Conditions for Selenium Removal Plant Shutdown.** ~~At least 30 days prior to shutting down the Selenium Removal Plant, the Discharger shall submit a technical report demonstrating that selenium in the Facility's wastewater no longer requires treatment by the Selenium Removal Plant to comply with permit requirements.~~ For a period of at least six months, the Discharger shall collect influent samples to, and effluent samples from, the Selenium Removal Plant, and final effluent samples at Discharge Point 002, as shown in Table 8.
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> **Table 8. Selenium Monitoring Requirements**
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Parameter	Unit	Sample Type	Minimum Sample Frequency
Total Selenium	µg/L	24-hour composite or Grab	2/week
Dissolved Selenium	µg/L	24-hour composite or Grab	2/week
Selenite	µg/L	Grab	2/month
Selenate	µg/L	Grab	2/month
Selenocyanate	µg/L	Grab	2/month
>
> Before routing wastewater around the Selenium Removal Plant, the Discharger shall submit a technical report that analyzes this selenium data and demonstrates that the Selenium Removal Plant is not expected to significantly reduce selenium loads to the Bay because (1) influent selenium levels have been substantially reduced, and (2) the Selenium Removal Plant is not designed to remove the form of selenium associated with the renewable feedstock. Prior to

routing wastewater around the Selenium Removal Plant, the Discharger shall receive written concurrence from the Executive Officer.

When the Discharger routes wastewater around the Selenium Removal Plant, it shall monitor final effluent for at least six months at Discharge Point 002 as shown in Table 8. Within 60 days of completing this monitoring, the Discharger shall submit a technical report that analyzes the selenium data and demonstrates that no statistically significant change in selenium loads occurred. Then the Discharger may decommission the Selenium Removal Plant. Prior to decommissioning the Selenium Removal Plant, the Discharger shall receive written concurrence from the Executive Officer.

Comment 3

Baykeeper indicates that "renewable feedstocks" is not defined and the Tentative Order does not explain what "much less selenium" means in the context of determining whether wastewater should still receive treatment at the Selenium Removal Plant. Baykeeper says requirements are not comprehensive enough to justify allowing the decommissioning of the Selenium Removal Plant.

Response

We revised the Tentative Order to include specific requirements that the Discharger must comply with prior to decommissioning the Selenium Removal Plant (see response to Comment 2). As for renewable feedstocks, Fact Sheet section 2.1 defines them as crop-based oils, rendered fats, and other biological oils.

Comment 4

Baykeeper notifies the Board that it recently petitioned the California Department of Fish and Wildlife to recommend that White Sturgeon be listed as a protected species under the Endangered Species Act. Baykeeper asserts that the Bay's fish, fisheries, and related beneficial uses are not being reasonably protected because the North San Francisco Bay Selenium TMDL is outdated. Finally, Baykeeper reminds the Board that waiting for delayed U.S. EPA action is not consistent with the Board's obligation to protect water quality.

Response

We did not make changes in response to this comment. To ensure that we are able to base future decisions on the best available science, on July 12, 2023, we required Martinez Refining Company to investigate the impacts of selenium from refinery discharges on aquatic life. A final report from this investigation is due in February 2026. We imposed this requirement on Martinez Refining Company because it discharges significantly more selenium to San Francisco Bay than the other four refineries.

As for Baykeeper's assertion that the North San Francsico Bay Selenium TMDL is outdated, we regularly consider whether updates to the Basin Plan are needed to address new or changing water quality issues, and we involve stakeholders in this deliberation. This evaluation, called the Triennial Review, is required by, and follows the guidelines of, the federal Clean Water Act and the California Water Code. We suggest

that Baykeeper voice its concerns regarding the North San Francisco Bay Selenium TMDL when we conduct the next Triennial Review, which is expected to occur in late 2024.