

California Regional Water Quality Control Board San Francisco Bay Region

STAFF-INITIATED CHANGES

in the Revised Tentative Order for

C&H Sugar Company, Inc., and Crockett Community Services District
C&H Sugar Company Refinery, Joint Use C&H Sugar Company-Crockett Community
Services District Philip F. Meads Water Treatment Plant, and Crockett Community
Services District sanitary sewer system
Crockett, Contra Costa County

The Revised Tentative Order reflects the following staff-initiated changes. Revisions are shown with underlined text for additions and ~~striketrough~~ text for deletions.

Change 1

We revised language in Provision 5.3.3.3 to clarify when the Discharger must develop and conduct a Pollutant Minimization Program, as follows:

- 5.3.3.3. The Discharger shall develop and conduct a Pollutant Minimization Program as described below when there is an effluent limitation exceedance of a priority pollutant or when there is evidence that suggest a priority pollutant is present in the effluent above an effluent limitation (e.g., sample results reported as detected but not quantified [DNQ] when the effluent limitation is less than the method detection limit [MDL], sample results from analytical methods more sensitive than those methods required by this Order, presence of aquatic toxicity, health advisories for fish consumption, or results of benthic or aquatic organism tissue sampling) and either:

Change 2

We corrected the report submittal deadlines for the Entrainment and Impingement Study and Tasks in Table 7, Tasks 3 and 4; Best Technology Available Compliance Schedule in Table 8, Task 2; Thermal Plume Monitoring Study and Tasks in Table 9, Task 3; and the Outfall Inspection and Maintenance Provision in section 5.3.5.8 of the Revised Tentative Order to be consistent with the Report of Waste Discharge deadline, as follows:

Table 1. Entrainment and Impingement Study and Tasks

Task Number	Task	Deadline
:	:	:
2	Commence Entrainment and Impingement Study. Commence the study in accordance with the study plan and schedule, incorporating any changes the Executive Officer may provide to the Discharger. Provide an annual update on study progress in the	Annually on March 1, with annual self-monitoring reports

Task Number	Task	Deadline
	annual Self-Monitoring Report following commencement of the study.	
3	Report Findings, Conclusions, and Recommendations. Complete the entrainment and impingement study and submit a final report containing its findings, conclusions, and recommendations, including the following information: - Identification of species that are in the vicinity of the cooling water intake structure(s). - Identification of species susceptible to entrainment and impingement, including any fragile², threatened, endangered, or protected species; and - Identification and evaluation of the primary periods of reproduction, larval recruitment, and peak abundance for these species. If the entrainment and impingement study concludes that the rate of impingement is <i>de minimis</i> and no additional controls are justified, the Discharger shall demonstrate these findings in the final report.	January 2, 2030 <u>December 31, 2030</u>
4	Report Status of Cooling Water Intake Structure. Submit a report providing updated information on the cooling water intake structure, including the following information: - Narrative description of the configuration of the cooling water intake structure and where it is located in the water body and the water column. - Latitude and longitude, in degrees, minutes, and seconds, of the cooling water intake structure. - Narrative description of the operation of the cooling water intake structure, including design intake flows, daily hours of operation, number of days of the year in operation, and seasonal changes, if applicable. - Flow distribution and water balance diagram that includes all sources of water to the facility, recirculating flows, and discharges. - Engineering drawings of the cooling water intake structure. This report may be combined with the final report submitted in Task 3, above.	January 2, 2030 <u>December 31, 2030</u>

Table 8. BTA Compliance Schedule

Task Number	Task	Deadline
⋮	⋮	⋮
2	Evaluate and Propose a BTA. Evaluate each BTA standard listed in paragraphs (c)(1) through (c)(7) of 40 C.F.R. section 125.94 and submit a proposal for the Discharger's chosen BTA standard for compliance with 40 C.F.R section 125.94. The proposal may be combined with the final report submitted in Task 3 of Provision 5.3.5.5.3, above. The proposal shall include the following: Documentation that it consulted with the National Marine	January 2, 2030 <u>December 31, 2030</u>

² Defined at 40 C.F.R. section 125.92(m).

Task Number	Task	Deadline
	Fisheries Service and U.S. Fish and Wildlife Service in selecting the alternative BTA standard; b. Demonstration of compliance with all applicable provisions of CEQA (California Public Resources Code Division 13, Chapter 3, Section 21100 et seq.); and c. Earliest commencement date of implementing the BTA standard. If the Discharger chooses to comply with 40 C.F.R. section 125.94(c)(5) or (6), it shall provide a schedule for completing an Impingement Technology Performance Optimization Study that includes and complies with the elements in 40 C.F.R. sections 122.21(r)(6)(i) and (ii). If the entrainment and impingement study in Provision 5.3.5.5.3, above, concludes that the cooling water system meets a <i>de minimis</i> rate of impingement, the Discharger may submit a request that no additional controls are warranted. The request shall still include the Discharger's chosen BTA standard for compliance with 40 C.F.R section 125.94. If the Executive Officer approves the Discharger's request for no additional controls, the Discharger does not need to proceed with Task 3, below.	
3	BTA Implementation. Upon approval from the Executive Officer of the proposed BTA standard identified in Task 2, above, the Discharger shall update its Operation and Maintenance Manual (see Attachment G section 1.4.1) and Contingency Plan (see Attachment G section 1.3.1) to include the BTA standard, implement the BTA standard, and provide certification by a licensed professional that the BTA standard has been constructed as designed, has been tested, and is ready for use.	60 days after Executive Officer's approval

Table 9. Thermal Plume Monitoring Study and Tasks

Task Number	Task	Deadline
:	:	:
2	Commence Thermal Plume Study. Commence the thermal plume study in accordance with the study plan and schedule, incorporating any changes the Executive Officer may provide to the Discharger. Provide an annual update on the study progress following the commencement of the study.	Annually on March 1, with annual self-monitoring reports
3	Report Findings, Conclusions, and Recommendations. Complete the thermal plume study and submit a final report containing its findings, conclusions, and recommendations, including the following information: a. Potential impacts to delta smelt (<i>Hypomesus transpacificus</i>) and longfin smelt (<i>Spirinchus thaleichthys</i>), b. Delineation of minimum and maximum plume size, temperature, and duration, c. Any measures necessary to ensure the protection of beneficial uses identified in this Order (see Attachment F, Table F-8) and a schedule to implement those measures.	January 2, 2030 <u>December 31, 2030</u>

Task Number	Task	Deadline
4	Implement Protective Measures. Implement measures identified in Task 3.c above, incorporating any changes the Executive Officer or Services may provide to the Discharger.	In accordance with the schedule set forth in the final report.
⋮	⋮	⋮

- 5.3.5.8. **Outfall Inspection and Maintenance.** By December 1, 2026, the Discharger shall prepare a plan, which includes an implementation schedule, to inspect the condition of its outfalls, Discharge Points 001 and 002, by September 3, 2029....The Discharger shall submit an Outfall Inspection Report by ~~January 2, 2030~~ December 31, 2030, that includes the results of its inspection and any maintenance that must be implemented, along with a time schedule, to ensure that the diffuser is operating as designed and complies with Discharge Prohibition 3.3.

We also corrected the respective report submittal deadlines in the MRP. Additionally, for clarity, we moved the report requirements from MRP section 7.2 (Self-Monitoring Reports) to a new section, MRP section 7.4 (Other Reports), and added a missing report requirement (MRP section 7.4.3) to reflect all the reports required in the Revised Tentative Order, as follows:

7.2. Self-Monitoring Reports (SMRs)

- 7.2.1. **SMR Format.** The Discharger shall electronically submit SMRs using the State Water Board’s California Integrated Water Quality System (CIWQS) Program website (waterboards.ca.gov/water_issues/programs/ciwqs). The CIWQS website will provide additional information for SMR submittal in the event of a planned service interruption for electronic submittal.

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- 7.2.2.2. **Annual SMR** — Annual SMRs shall be due March 1 each year, covering the previous calendar year. The annual SMR shall contain the applicable items described in Provisions 5.3.2.2 (Effluent Characterization Study and Report), 5.3.5.5.2 (Once-Through Cooling Water Intake Structure), and 5.3.5.5.3 (Entrainment and Impingement Study), 5.3.5.5.5 (Thermal Plume Monitoring Study – Discharge Points 001) of the Order and Attachment G, section 5.3.1.6 (Annual Self-Monitoring Reports).

- ~~7.2.3. **Pollutant Minimization Program Annual Report** — The Discharger shall implement its Pollutant Minimization Program and submit an annual report due February 28 each year,~~

~~covering the previous calendar year. The annual report shall contain the applicable items described in Provision 5.3.3.2 of the Order.~~

~~7.2.4. **Entrainment and Impingement Study** – The Discharger shall implement a entrainment and impingement study in accordance with Provision 5.3.5.5.3 of the Order and submit a final report due with the Report of Waste Discharge on January 2, 2030.~~

~~7.2.5. **Thermal Plume Monitoring Study** – The Discharger shall implement a thermal plume monitoring study in accordance with Provision 5.3.5.5.5 of the Order and submit a final report due with the Report of Waste Discharge on January 2, 2030.~~

~~7.2.6. **Annual Stormwater Report** – The Discharger shall submit annual stormwater reports by July 30 each year, covering the July 1 through June 30 of the preceding reporting year. The annual stormwater report shall contain the items listed in Attachment S, Section 3.1.~~

~~7.2.7. **Outfall Inspection and Maintenance** – The Discharger shall inspect the condition of its outfalls at Discharge Points 001 and 002 in accordance with Provision 5.3.5.8 of the Order and submit an Outfall Inspection Report with the Report of Waste Discharge on January 2 2030.~~

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7.4. Other Reports

7.4.1. **Pollutant Minimization Program Annual Report** – The Discharger shall implement its Pollutant Minimization Program and submit an annual report due February 28 each year, covering the previous calendar year. The annual report shall contain the applicable items described in Provision 5.3.3.2 of the Order.

7.4.2. **Entrainment and Impingement Study** – The Discharger shall implement an entrainment and impingement study in accordance with Provision 5.3.5.5.3 of the Order and submit a final report due with the Report of Waste Discharge on December 31, 2030.

7.4.3. **Compliance with Best Technology Available (BTA) Standards for Impingement Mortality** –The Discharger shall evaluate each BTA standard listed in paragraphs (c)(1) through (c)(7) of 40 C.F.R. section 125.94 in accordance with Provision

5.3.5.5.4 of the order and submit a BTA proposal due with the Report of Waste Discharge on December 31, 2030.

7.4.4. **Thermal Plume Monitoring Study** – The Discharger shall implement a thermal plume monitoring study in accordance with Provision 5.3.5.5.5 of the Order and submit a final report due with the Report of Waste Discharge on December 31, 2030.

7.4.5. **Annual Stormwater Report** — The Discharger shall submit annual stormwater reports by July 30 each year, covering the July 1 through June 30 of the preceding reporting year. The annual stormwater report shall contain the items listed in Attachment S, Section 3.1.

7.4.6. **Outfall Inspection and Maintenance** – The Discharger shall inspect the condition of its outfalls at Discharge Points 001 and 002 in accordance with Provision 5.3.5.8 of the Order and submit an Outfall Inspection Report with the Report of Waste Discharge on December 31, 2030.

Change 3

Because the Discharger may add isopropanol to its refining process, which could affect the concentration of priority pollutants in the discharge, we added a footnote to Table E-5 of the MRP to ensure at least one priority pollutant monitoring event at EFF-001 coincides with the monitoring of acetone, a byproduct of isopropanol, as follows:

Table E-5. Effluent Monitoring Location EFF-001

Parameter	Unit	Sample Type	Minimum Sampling Frequency
Flow ^[1]	MG/MGD	Continuous	Continuous/D
:	:	:	:
Acetone	mg/L	Grab	1/Month ^[3,4]
Other Priority Pollutants ^[5]	µg/L	Grab or C-24 ^[6]	1/Year ^[7]

Footnotes:

^[1] Flow shall be calculated based on influent flow monitoring. The following flow information shall be reported in monthly self-monitoring reports:

- Daily average flow rate (MGD)
- Total monthly flow volume (MG)

^[2] If pH and/or temperature is monitored continuously, the minimum and maximum for each day shall be reported in monthly self-monitoring reports.

^[3] The Discharger shall monitor for acetone for when it adds isopropanol to the Refinery's vacuum pans.

^[4] If at any time the Discharger does not meet compliance with the acetone action level, the minimum monitoring frequency shall be accelerated to weekly in accordance with Provision 5.3.5.1.2.

^[5] The Discharger shall monitor for the pollutants listed in Attachment G, Table B.

^[6] The Discharger shall collect C-24 samples for metals.

^[7] If the Discharger adds isopropanol to the Refinery's vacuum pans, the priority pollutant monitoring shall coincide with acetone monitoring at least once during the Order term.

Change 4

We corrected the parameters listed in Fact Sheet section 5.2.5.10 requiring the development of an influent action level to be consistent with the parameters listed in Table 12, Task 2 (Joint Treatment Plant Evaluation) of the Revised Tentative Order, as follows:

- 5.3.5.10. **Joint Treatment Plant Evaluation.** This provision is necessary to ensure that wastewater discharges from the Refinery to the Joint Treatment Plant do not adversely impact operations of the Joint Treatment Plant. Due to the nature of the Refinery's operations, the Refinery's discharge can be concentrated in organic material that can inhibit or disrupt the operation of the Joint Treatment Plant, leading to the discharge of untreated or inadequately-treated wastewater into waters of the United States. Implementing influent action levels on ~~BOD~~ TSS, COD, pH, and temperature can ensure that the Refinery's discharge to the Joint Treatment Plant are protective of the Joint Treatment Plant's operations.

Change 5

We corrected the chronic toxicity monitoring language in Fact Sheet section 6.1.3 to reflect the actual flow conditions at Discharge Point 002, where the chronic toxicity monitoring requirements would apply, and to be consistent with the monitoring requirements in the Monitoring and Reporting Program, as follows:

- 6.1.3. **Toxicity Testing.** Toxicity tests are necessary to ensure the discharge does not cause or contribute to toxicity in the receiving waters, to evaluate whether the Toxicity Provisions' chronic toxicity water quality objectives are met, and to conduct future reasonable potential analyses. ...

Toxicity Provisions section III.C.4.b.i(A) also requires a routine chronic toxicity monitoring frequency of ~~monthly~~ quarterly for non-stormwater NPDES dischargers authorized to discharge at a rate ~~equal to or greater than 5.0 MGD~~ greater than 1.0 MGD and less than 5.0 MGD unless the Regional Water Board approves a reduced monitoring frequency under Toxicity Provisions section III.C.4.b.i(B). Toxicity Provisions section III.C.4.b.i(B) allows for a reduced routine toxicity monitoring frequency if all of the following conditions have been met:

- The Discharger complied with the previous order's toxicity requirements.
- The Discharger conducted a minimum of at least ten chronic aquatic toxicity tests during the last five years at an effluent concentration at or above the IWC.
- The Discharger analyzed or reanalyzed all test data for the last five years using the TST.

- The Discharger found no test resulting in a “fail” at the IWC. All results were “pass.”

The Discharger’s previously monitored for chronic toxicity once a year and does not meet the requirement to have conducted a minimum of ten chronic toxicity tests during the last five years. Instead, Regional Water Board considered all of the Discharger’s previous chronic toxicity tests since 2013, all of which did not detect chronic toxicity when monitoring annually using giant kelp (*Macrocystis pyrifera*). This Order approves a reduced routine chronic toxicity monitoring frequency of ~~once per quarter~~ twice per year.

Change 6

We corrected non-substantive typographical errors and, for clarity, made minor and non-substantive formatting adjustments throughout the Revised Tentative Order.