

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

**COMPLAINT NO. R2-2016-1017
ADMINISTRATIVE CIVIL LIABILITY
IN THE MATTER OF**

**VALERO REFINING COMPANY-CALIFORNIA
IMPROPER OPERATION OF TREATMENT SYSTEM
RESULTING IN EFFLUENT LIMIT VIOLATIONS
BENICIA REFINERY, BENICIA, CONTRA COSTA COUNTY**

This Administrative Civil Liability Complaint (Complaint) alleges that Valero Refining Company-California (Discharger) discharged to state and federal waters from the Valero Benicia Refinery located at 3400 East Second Street, Benicia, CA 94510 (Refinery) in violation of NPDES Permit No.CA0005550, Order R2-2015-0037 (Order) effluent limitations. The California Regional Water Quality Control Board, San Francisco Bay Region (Water Board) is authorized to assess administrative civil liability under California Water Code sections 13323 and 13385 for the alleged violations. The proposed liability for the alleged violations is **\$197,500**.

The Assistant Executive Officer of the Water Board hereby gives notice that:

1. This Complaint presents the factual basis for the alleged violations, legal and statutory authorities (including citations to applicable Water Code sections), and case-specific factors used to propose a \$197,500 liability for the alleged violations.
2. Unless waived, the Water Board will hold a hearing on this matter on **January 11, 2017**, at Elihu M. Harris Building, First Floor Auditorium, 1515 Clay Street, Oakland, 94612. At the hearing, the Water Board will consider whether to affirm, reject, or modify the proposed administrative civil liability, or whether to refer the matter to the Attorney General for judicial civil liability. The Discharger or its representative will have an opportunity to be heard and to contest the allegations in this Complaint and the imposition of civil liability by the Water Board. The Discharger will be mailed an agenda approximately ten days before the hearing date. A meeting agenda will also be available at: http://www.waterboards.ca.gov/sanfranciscobay/board_info/agenda.shtml. The Discharger must submit all comments and written evidence concerning this Complaint to the Water Board not later than 5 p.m. on **November 14, 2016**, so that such comments may be considered. Any written evidence submitted to the Water Board after this date and time may not be accepted or responded to in writing.
3. The Discharger may waive its right to a hearing to contest the allegations contained in this Complaint by signing and submitting the enclosed waiver and paying the civil liability in full or by taking other actions as described in the waiver form. If this matter proceeds to hearing, the Water Board's Prosecution Team reserves the right to seek an increase in the civil liability amount to recover the costs of enforcement incurred subsequent to the issuance of this Complaint through the hearing.

FACTUAL BASIS FOR THE ALLEGED VIOLATIONS

4. The Discharger owns and operates the Valero Benicia Refinery located at 3400 East Second Street, Benicia CA 94510 (Refinery).
5. The Refinery discharges wastewater and stormwater to Suisun Bay and Carquinez Strait, waters of the State and United States within the Suisun Basin watershed.
6. The Discharger is regulated pursuant to National Pollutant Discharge Elimination System NPDES Permit No, CA0005550, Order R2-2015-0037.
7. Pursuant to California Water Code section 13260, the Discharger filed a Report of Waste Discharge and submitted an application for reissuance of its Waste Discharge Requirements (WDRs) and NPDES permit on June 26, 2014. The WDRs contain, among other items, prohibitions, effluent limitations, and monitoring and reporting requirements with which the Discharger must comply.
8. The Refinery can process 165,000 barrels per day of crude oil, producing hydrocarbon products, byproducts, and intermediates.
9. Refinery wastewaters include asphalt plant wastewater, sour water (i.e., process wastewater containing significant hydrogen sulfide), crude water from onsite and offsite storage facilities, cooling tower and steam boiler blowdown, raw water treatment backwash, process area stormwater runoff, and miscellaneous wastewaters.
10. The combined wastewater is treated first by an activated sludge treatment system consisting of aeration cells with corresponding clarifiers, then an induced air flotation system which float residual solids, and finally by a reactor clarifier which co-precipitates selenium as selenite using ferric chloride, pH adjustment, and polymer addition to enhance flocculation. The resulting iron sludge can then be reused or disposed of.
11. Water that passes through all the above treatment steps is then discharged to Suisun Bay through a submerged diffuser approximately 1,100 feet offshore.
12. NPDES Permit No. CA0005550, Order R2-2015-0037, Provision IV.A Table 4 (page 7) contains, in part, the following effluent limitations with which the Discharger is required to maintain compliance at Discharge Point No. 001:

Parameter	Units	Effluent Limitations	
		Maximum Daily	Average Monthly
Biochemical Oxygen Demand, 5-day @ 20°C (BOD ₅)	lbs/day	3,400	1,900
Chemical Oxygen Demand (COD)	lbs/day	24,000	13,000
Oil and Grease	lbs/day	1,000	550
Phenolic Compounds (4AAP)	lbs/day	25	12
Sulfide	lbs/day	21	10

Parameter	Units	Effluent Limitations	
		Maximum Daily	Average Monthly
Total Suspended Solids (TSS)	lbs/day	2,400	1,500
Total Ammonia, as N	lbs/day	2,000	1,000
	mg/L	20	5.7
Total Chromium	lbs/day	46	16
Chromium (VI)	lbs/day	2.9	1.3
	µg/L	72	36
Bis(2-Ethylhexyl)Phthalate	µg/L	110	53
Chronic Toxicity	TUc	10	---
Copper, Total Recoverable	µg/L	120	58
Cyanide, Total	µg/L	42	19
Dioxin-TEQ	µg/L	2.8×10^{-8}	1.4×10^{-8}
Selenium, Total Recoverable	µg/L	50	42
pH	SU	6.0 – 9.0	

13. On January 26, 2016, the Discharger reported that operator error on January 18, 2016, resulted in the failure of the iron co-precipitation unit to maintain a stable sludge bed inside the reactor clarifier.
14. Specifically, at about 10:00 a.m. on January 18, 2016, the Refinery operator failed to open the polymer feed, which resulted in an unstable sludge bed and incomplete flocculation. About seven hours later, at around 5:00 p.m. that same day, the next shift operator reestablished the polymer feed. At about 7:00 p.m. and two hours after the polymer feed was reestablished, the operator visually confirmed the unit's return to normal operation when a stable sludge bed was observed. A total of 1.13 million gallons of partially treated wastewater was discharged during that time.
15. On January 18, 2016, the daily loading limit for TSS and the daily concentration limit for Selenium were exceeded. Due to the Selenium excess on January 18, 2016, the monthly average concentration limit was also exceeded:

Date	Parameter	Effluent Limitation	Reported Value ¹
1/18/2016	Total Suspended Solids	2,400 lbs/day	5,266 lbs/day
1/18/2016	Selenium	50 µg/L (Max Daily)	110 µg/L
1/18/2016	Selenium	42 µg/L (Avg Monthly)	42.8 µg/L

¹ Monthly Self-Monitoring Report for January 2016 submitted to Water Board on 02/29/2016.

ALLEGED VIOLATIONS

16. On January 18, 2016, the Discharger discharged partially treated wastewater into waters of the State and United States, violating NPDES Permit No. CA0005550, Order R2-2015-0037.

17. The January 18, 2016, discharge violated the effluent limitations prescribed in Table 4 of Provision IV.A of the Order for total suspended solids and selenium.
18. The Discharger's self-monitoring report for December 2014 showed that the wastewater discharged from the Refinery exceeded the effluent limitations for cyanide set forth in the Order on six occasions, of which five violations are subject to mandatory minimum penalties ("MMPs") under Water Code section 13385, as identified in **Exhibit B**.

LEGAL AUTHORITY

19. The Water Board may impose administrative civil liabilities for violations of a discharger's WDR permit and/or applicable Board orders pursuant to the procedures described in Water Code section 13323.
20. The Discharger's conduct on January 18, 2016, constitutes a violation of NPDES Permit No. CA0005550, Order R2-2015-0037 and this complaint seeks administrative civil liabilities under Water Code section 13385(a)(2) for that violation.
21. Water Code section 13385, subdivision (h)(1) requires the Regional Water Board to assess a MMP of three thousand dollars (\$3,000) for each serious violation.
22. Water Code section 13385, subdivision (h)(2) defines a "serious violation" as "any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 20 percent or more or for a Group I pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 40 percent or more."
23. This enforcement action is exempt from the provisions of the California Environmental Quality Act, Public Resources Code section 21000 et seq., in accordance with California Code of Regulations, title 14, section 15321.

STATUTORY LIABILITY

24. Water Code section 13385, subdivision (a)(2) states that a person who violates a waste discharge requirement shall be liable civilly in accordance with this section.
25. The Discharger is subject to an administrative civil liability for the violations of the Order that occurred on January 18, 2016, pursuant to Water Code section 13385(a)(2)..
26. The Discharger is subject under Water Code section 13385 subdivision (h)(1) to mandatory minimum penalties for serious violations of the effluent limitation for cyanide set forth in NPDES Permit No. CA0005550, Order R2-2015-0037 on five occasions in December 2014, as identified in Exhibit B.

PROPOSED CIVIL LIABILITY

27. **Maximum Liability:** The maximum administrative civil liability is \$28.7 million. This is based on the maximum allowed by Water Code section 13385: (1) \$10,000 for each day in which each violation occurred; and (2) \$10 for each gallon exceeding 1,000 gallons that is discharged and not recovered.
28. **Minimum Liability:** Pursuant to Water Code section 13385(e), at a minimum, liability shall be assessed at a level that recovers the economic benefit or savings, if any, derived from the unauthorized discharge violation. The State Water Resources Control Board Water Quality Enforcement Policy (Enforcement Policy) requires that the minimum liability amount imposed not to be below the economic benefit plus ten percent. The Discharger realized cost savings of approximately \$343. Applying the methodology as set forth in **Exhibit A**, the minimum liability for the discharge on January 18, 2016 in this matter is \$377. As noted in **Exhibit B**, The minimum penalty for the discharge in December of 2014 in violation of effluent limitations for cyanide is set pursuant to Water Code 13385(h)(1) at \$15,000.
29. **Proposed Liability:** The Assistant Executive Officer proposes that administrative civil liability be imposed in the amount of \$182,500. The Exhibit A attachment (incorporated herein by this reference) presents a discussion of the factors considered and the values assessed to calculate the proposed liability in accordance with the Enforcement Policy and Water Code section 13385. The Assistant Executive Officer further proposes that the Discharger be assessed an MMP of \$15,000 for exceeding the effluent limitation for cyanide specifically identified in Exhibit B. The total proposed liability is **\$197,500**. The proposed liability is more than the minimum liability and less than the maximum liability allowed for the alleged violation.

Thomas E. Mumley
Assistant Executive Officer

October 13, 2016

Date

Attachments: Exhibit A: Factors Considered in Determining Administrative Civil Liability
Exhibit B: Mandatory Minimum Penalties Assessed for Violation of Effluent Limitations