

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 72-80

WASTE DISCHARGE REQUIREMENTS
FOR
SEQUOIA REFINING CORPORATION

The California Regional Water Quality Control Board, San Francisco Bay Region finds:

1. Sequoia Refining Corporation discharges 0.1 mgd of process wastewater from their 30,000 barrel per day petroleum refinery into San Pablo Bay at a depth of 10 feet about 2000 feet offshore and generally west of Lone Tree Point. In addition, storm waters are discharged during periods of heavy rainfall into a drainage course near the south boundary of the refinery.
2. The Board adopted an Interim Water Quality Control Plan for the San Francisco Bay Basin in June 1971.
3. The beneficial uses of San Pablo Bay as set forth in the Interim Basin Plan includes:
 - a. Industrial water supply
 - b. Recreation
 - c. Esthetic enjoyment
 - d. Preservation and enhancement of fish and wildlife
 - e. Navigation
4. The requirements hereinafter prescribed are necessary to implement the Basin Plan for San Francisco Bay, protect the beneficial uses of San Pablo Bay, and prevent nuisance.
5. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for Sequoia Refining Corporation.
6. The Board in a public meeting heard and considered comments pertaining to the discharge and the requirements prescribed herein.

IT IS HEREBY ORDERED, Sequoia Refining Corporation shall comply with the following:

A. Discharge Specifications - Process Wastewaters

1. Neither the treatment nor the discharge shall create a nuisance as defined in Section 13050(m) of the California Water Code.

2. Representative samples of the discharge shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Mean</u>	<u>Maximum</u>
Settleable matter	ml/l/hr	0.1	0.5
5 day 20° C BOD	lbs/day	240	480
Ammonia(N)	lbs/day	120	240
Phenol	lbs/day	0.6	1.2
Total Sulfide	lbs/day	0.6	1.2
Zinc	lbs/day	0.6	1.2
Toxicity Emission Rate <u>1/</u>	(Toxicity Units)(mgd)	0.1	0.25
Oil and Grease	lbs/day	18	36
Total Chromium	lbs/day	0.2	0.4

3. The process wastewater shall receive an initial dilution such that the concentration of the waste in the receiving waters is less than 1/20 of the 96 hr. median tolerance limit (TLM) of the waste. If the TLM exceeds 100 percent this requirement does not apply.
4. The discharge shall not have a pH of less than 7.0 nor greater than 8.5; or 6.5 to 8.5 when the natural ambient value is as low as 6.5.
5. At a point in the waste treatment process where all sanitary wastes are present the median most probable number of coliform organisms in any 30-day period shall not exceed 230 MPN/100 ml, nor shall any value exceed 10,000 MPN/100 ml.

1/ The limits on toxicity emission rates will not apply if the mean toxicity concentration is less than 0.59 toxicity units and the maximum toxicity concentration is less than 0.87 toxicity units.

- f. Tidal waters of the State to exceed the following limits of quality:

Toxic or Other Deleterious Substances	None shall be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl 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.
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D. Provisions

1. Mean values shall be based on the running average of samples representative of the discharge over any 30-day period.
2. Sequoia Refining Corporation shall immediately take all possible measures to achieve compliance with the discharge specifications in this order and shall submit to the California Regional Water Quality Control Board, San Francisco Bay Region, by December 15, 1972, a report delineating the immediate measures that have been or will be taken.
3. Sequoia Refining Corporation shall comply with the following time schedule to assure compliance with the requirements of this order:

<u>Task</u>	<u>Completion Date</u>	<u>Report of Compliance Due</u>
Develop a work plan to meet discharge requirements	December 1, 1972	December 15, 1972
Develop a conceptual plan and detailed time schedule for completion of final plans, award of contracts, completion of construction and compliance with requirements.	June 1, 1973	June 15, 1973

4. The requirements prescribed by this order amend the requirements prescribed by Resolution 776 adopted by the Board on August 18, 1966, which shall remain in full force and effect until the date Sequoia Refining Corporation is to be in full compliance with these requirements pursuant to a complete time schedule to be adopted by this Board.
5. This order includes items 1, 6, 7 and 8 of the attached "Reporting Requirements" dated September 11, 1972.
6. This order includes items numbered 1 through 6 of the attached "Notifications" dated January 6, 1970.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an order adopted by the Regional Board on September 26, 1972.

Executive Officer

DEFINITION OF TOXICITY TERMINOLOGY

a. Toxicity Concentration (Tc)

Expressed in Toxicity Units (tu)

$$Tc (tu) = \frac{100}{96\text{-hr. TLM\%}}$$

b. Median Tolerance Limit (TLM%)

The TLM shall be determined by static or continuous flow bioassay techniques using standard test species.

When it is not possible to measure the 96-hr. TLM due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$Tc (tu) = \frac{\log (100 - S)}{1.7}$$

S = percentage survival in
100% waste

c. Toxicity Emission Rate (TER)

Is the product of the effluent Toxicity Concentration (Tc) and the waste flow rate expressed as mgd.

$$TER (tu \times mgd) = Tc (tu) \times \text{Waste Flow Rate (mgd)}$$