

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 78-6

NPDES PERMIT NO. CA0006165
WASTE DISCHARGE REQUIREMENTS
FOR
STAUFFER CHEMICAL COMPANY, MARTINEZ PLANT

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

1. Stauffer Chemical Company, hereinafter discharger, has submitted a report of waste discharge dated August 23, 1977, as an application for reissuance of NPDES Permit No. CA0006165.
2. The discharger discharges or confines industrial waste as described below:
 - a. 0.26 mgd of wastewater from an 610 average ton-per-day sulfuric acid manufacturing plant into Peyton Slough, a navigable water of the United States, at a point near the foot of Mococco Road at Martinez, California. Peyton Slough is tributary to Carquinez Strait near Bulls Head. Seasonal storm runoff from the manufacturing area may increase the flow rate of this waste to about 0.38 mgd. Maximum discharge rate is 0.54 mgd (001).
 - b. Domestic waste is discharged into a subsurface leaching field about 2000 feet north of the plant office (002).
 - c. Domestic waste is discharged into a subsurface leaching field immediately east of the plant office (003).
 - d. Domestic waste is discharged into a subsurface leaching field about 500 feet north of the plant office (004).
3. The Board adopted Order No. 73-13, dated February 27, 1973, prescribing waste discharge requirements for the discharger.
4. Order No. 73-13 expires on February 27, 1978.
5. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin in April 1975.
6. The beneficial uses of Carquinez Strait and contiguous water bodies are:
 - a. Recreation
 - b. Aesthetic enjoyment
 - c. Preservation and enhancement of fish, wildlife, and other aquatic resources
 - d. Industrial water supply

7. Effluent limitations and toxic effluent standards which have been or may be established pursuant to Sections 301, 302, 304, and 307 of the Federal Water Pollution Control Act are applicable to discharge 001.
8. This project involves the continued operation of a privately-owned facility with negligible or no expansion of use beyond that previously existing. Consequently, this project will not have a significant effect on the environment based upon the exemption provided in Section 15101, Title 14, California Water Code.
9. These requirements have been approved by the Regional Administrator of the Environmental Protection Agency and will serve as a permit for the National Pollutant Discharge Elimination System pursuant to Section 402 of the Federal Water Pollution Control Act.
10. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge and has provided them an opportunity for a public meeting and an opportunity to submit their written views and recommendations.
11. The Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, Stauffer Chemical Company, in order to meet the provisions contained in 5, 6, and 7 above, shall comply with the following:

A. Effluent Limitations

1. Representative samples of Waste No. 001 shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Units</u>	<u>30-Day Mean</u>	<u>Daily Maximum^{a/}</u>
Settleable Matter	ml/l-hr	0.1	0.5
Chromium ^{b/}	mg/l	0.25	0.63
	lb/day	0.54	1.35
	kg/day	0.25	0.63
Lead	mg/l	0.05	0.13
	lb/day	0.11	0.28
	kg/day	0.049	0.13
Zinc ^{b/}	mg/l	0.5	1.25
	lb/day	1.08	2.70
	kg/day	0.49	1.23
Total Suspended Matter ^{b/}	mg/l	20	50
	lb/day	43.4	109
	kg/day	19.7	49.3

^{a/}In the event the effluent is retained without discharge for 24 hours or longer, the maximum pounds-per-day discharge rates may be increased by a factor equal to the number of days without discharge until the effluent so accumulated has been released.

^{b/}Values in addition to quantities and concentrations in the plant water supply.

2. Waste No. 001 shall not have a pH less than 6.5 or greater than 8.5.
3. The survival of test fishes in 96-hour bioassays of the effluent shall be a median of 90 percent survival and a 90th percentile value of not less than 70% survival.

B. Receiving Water Limitations

1. The discharge of Waste 001 shall not cause:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam in waters of the State at any place;
 - b. Bottom deposits or aquatic growths at any place;
 - c. Alteration of temperature, turbidity or apparent color beyond present natural background levels in waters of the State at any place;
 - d. Visible, floating, suspended or deposited oil or other products of petroleum origin in waters of the State at any place;
 - e. Tidal waters of the State to exceed the following limits of quality at any place more than 100 feet from the point of discharge:

Dissolved Oxygen	Minimum - 5.0 mg/l Annual median - 80% saturation
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When natural factors cause lesser concentrations, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.

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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pH	A variation from the natural ambient pH by more than 0.2 pH units.
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Un-ionized Ammonia (as N)	Maximum 0.4 mg/l Annual median 0.025 mg/l
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2. The discharge of Waste No. 001 shall not cause a violation of any other applicable existing water quality standard for the receiving water adopted pursuant to the Federal Water Pollution Control Act and implementing regulations. If a more stringent applicable water quality standard is promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act and implementing regulations, the Regional Board shall revise or modify this Order in accordance with those standards.

C. Confinement Specifications -- Wastes 002, 003, and 004

Wastes Nos. 002, 003, and 004 shall be kept entirely beneath the ground surface at all times.

D. Provisions

1. The discharger shall submit to the Board, by January 30 of each year, an annual summary of the quantities of all chemicals, listed by both trade and chemical names, which are used for cooling and/or boiling water treatment and which are discharged.
2. This order includes the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977 except for item 3 of Section B.
3. The discharger shall notify the Board not later than 180 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge and appropriate filing fee.
4. The requirements for wastes "F", "G", and "H" in Order No. 72-83 shall remain in effect and shall be in addition to the requirements prescribed in this Order.
5. This Order expires February 27, 1983, and Stauffer Chemical Company must file a report of waste discharge no later than 180 days in advance of such date for issuance of new waste discharge requirements.
6. This Order becomes effective upon expiration of Order No. 73-13. Order No. 72-83 is hereby rescinded except as noted in D.4., above.

I, Fred H. Dierker, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 21, 1978.

FRED H. DIERKER
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

STAUFFER CHEMICAL COMPANY

MARTINEZ PLANT

NPDES NO. CA 0006165

ORDER NO. 78-6

CONSISTS OF

PART A, dated 1/78

AND

PART B

PART B

DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSES, & OBSERVATIONS

Analyses, observations, and examinations shall be performed according to the specifications shown in Table I.

A. WATER INTAKE

<u>Station</u>	<u>Description</u>
I	At a point in the intake water source located prior to the cooling tower.

B. EFFLUENT

<u>Station</u>	<u>Description</u>
001	At any point in the 001 wastestream from the treatment facilities between the point of discharge and the point at which all waste tributary to that outfall is present.

C. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C-1	At a point in Peyton Slough, located within 20 feet downcurrent from the point of discharge.
C-2	At a point in Peyton Slough, located at the boat landing pier, about 250 feet bayward from the Mosquito Abatement District Dam.
C-3	At a point in Peyton Slough, located midway between Outfall A and the mouth of Peyton Slough.
C-4	At the mouth of Peyton Slough.
C-5 through C-9	At points in Suisun Bay, located at equidistant intervals along an arc with a radius of 100 feet from the confluence of Peyton Slough with waters of Suisun Bay, Stations C-5 and C-9 to be located near shore, westerly and easterly (respectively) from said confluence, at points with water depths of 2.0 feet.
C-10 through C-16	At points in Suisun Bay, located at equidistant intervals along an arc with a radius of 300 feet from the confluence of Peyton Slough with waters of Suisun Bay, Stations C-10 and C-16 to be located near shore, westerly and easterly (respectively) from said confluence, at points with water depth of 2.0 feet.
C-17, C-18, and C-19	At points located in Suisun Bay at intervals of 500 feet beginning from Station "C-4" westerly along the shoreline of Suisun Bay at points with water depth of 2.0 feet.

<u>Station</u>	<u>Description</u>
C-R	At a point in Suisun Bay, located 2000 feet upcurrent from Station C-4.

D. SEDIMENTS

<u>Station</u>	<u>Description</u>
B-1 B-R	At points in Peyton Slough and Suisun Bay at locations coincident with the loci of Stations C-4, and C-R respectively.

E. LAND OBSERVATIONS

<u>Station</u>	<u>Description</u>
P-1 through P-'n'	Located along the periphery of the waste treatment or disposal facilities, at equidistant intervals, not to exceed 200 feet. (A sketch showing the location of these stations will accompany each report.)
L-002-1 thru L-002-'n' L-003-1 thru L-003-'n' L-004-1 thru L-004-'n' L-005-1 thru L-005-'n' L-006-1 thru L-006-'n' L-007-1 thru L-007-'n'	Located along the periphery of the respective waste detention and/or land disposal areas. The locations at which leaching liquid or odor is detected shall be identified and shown on a sketch to accompany the report.

F. GROUNDWATER

<u>Station</u>	<u>Description</u>
G-1	At a point located along the southerly property line at/or near the plant access road.
G-2	At a point located along the southerly property line or prolongation thereof at the westerly levee of Peyton Slough.
G-3	At a point at the toe of the slope easterly of the plant access road at the northwesterly corner of Land Disposal Site "L-3".

<u>Station</u>	<u>Description</u>
G-4	At a point at the northeasterly corner of Land Disposal Site "L-3".
G-5	At a point approximately 100 yards southerly of the westerly end of the earthen dam across Peyton Slough.
G-6	At a point 500 feet southerly of the earthen dam across Peyton Slough and within 50 feet of the top of the fill area.
G-7	At a point at the toe of the slope of the filled area at the westerly property line at Suisun Bay.
G-8	At a point at the toe of the slope of the filled area, located approximately 750 feet northerly of the westerly end of the earthen dam across Peyton Slough.
G-9	At a point at the toe of the slope of the perimeter levee surrounding Land Disposal Site "L-5".

NOTE: sketch showing the locations of all sampling and observation stations shall accompany each report submitted to the Regional Board.

G. MISCELLANEOUS REPORTING

1. The discharger shall submit with each self-monitoring report the production rate and percentage of total production capacity of the facility for each day during the report period.

H. MODIFICATIONS OF PART "A", DATED 1/78

1. Exclusions: Paragraphs C.3 and C.5.c.
2. Modifications: Paragraph D.1.a.: Replace "on varying days selected at random." with "... as specified in Table I."

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing self-monitoring program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in the Regional Board Order No. 78-6.
2. Becomes effective on the "Date Ordered", below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer on request from the discharger. Revisions will be ordered by the Executive Officer.

FRED H. DIERKER
Executive Officer

Attachments to Part B:
Table I

Date Ordered February 21, 1978

TABLE I
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS
(1)

Sampling Station	E-001			C-1 thru C-4 & C-B	C-5, 7& C-9	C-10 thru C-15	C-17 thru C-19	ALL Sta. B	ALL Sta. P	ALL Sta. L	ALL Sta. G	I	
TYPE OF SAMPLE	C-24	G	Cont		G	G	G	G	BS	O	O	G	C-24
Flow Rate (mgd)	D	D											D
BOD, 5-day, 20° C, or COD (mg/l & kg/day)	M												
Chlorine Residual & Dosage (mg/l & kg/day)													
Settleable Matter (ml/1-hr. & cu. ft./day)		D											
Total Suspended Matter (mg/l & kg/day)	2/W												2/W
Oil & Grease (mg/l & kg/day)	Q												
Coliform (Total or Fecal) (MPN/100 ml) per req't													
Fish Toxicity, 96-hr. TL ₅₀ % Survival in undiluted waste	M												
Ammonia Nitrogen (mg/l & kg/day)													
Nitrate Nitrogen (mg/l & kg/day)													
Nitrite Nitrogen (mg/l & kg/day)													
Total Organic Nitrogen (mg/l & kg/day)													
Total Phosphate (mg/l & kg/day)													
Turbidity (Jackson Turbidity Units)	M				M								
pH (units)			Cont		M	M	E	M					M
Dissolved Oxygen (mg/l and % Saturation)		5/W			M	M	E	M					
Temperature (°C)			Cont		M	M	E	M					
Apparent Color (color units)	M				M	M	E	M					M
Secchi Disc (inches)					M	M	E	M					
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)		D			M	M	E	M					
Arsenic (mg/l & kg/day)													
Cadmium (mg/l & kg/day)	Q							Q					
Chromium, Total (mg/l & kg/day)	2/W												2/W
Copper (mg/l & kg/day)	Q							M					M
Cyanide (mg/l & kg/day)													
Silver (mg/l & kg/day)													
Lead (mg/l & kg/day)	2/W												

TABLE I (continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS
(1)

Sampling Station	E-001			C-1 thru C-4 & C-R	C-5, C-7, C-9	C-10 thru C-15	C-17 thru C-19	All B Sta.	All P Sta.	All L Sta.	All G Sta.	I	
	C-24	G	Cont		G	G	G	G	BS	O	O	G	C-24
Mercury (mg/l & kg/day)													
Nickel (mg/l & kg/day)													
Zinc (mg/l & kg/day)	2/W						M					M	2/W
PHENOLIC COMPOUNDS (mg/l & kg/day)													
All Applicable Standard Observations	2/W	D			M	M				2/W	(2) 2/W		
Bottom Sediment Analyses and Observations													
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)													
Iron	Q							M				M	
Un-ionized Ammonia (as N) (mg/l)					M	(3)							

(1) Sampling at stations C-10 through C-15 will be required only when requirement violation is found at Station C-4.

(2) Any leaching of surfacing material to Suisun Bay shall be reported per Section E.1. of this program.

(3) Except C-2.

LEGEND FOR TABLE

TYPES OF SAMPLES

- G = grab sample
- C-24 = composite sample - 24-hour
- C-X = composite sample - X hours
(used when discharge does not continue for 24-hour period)
- Cont = continuous sampling
- DI = depth-integrated sample
- BS = bottom sediment sample
- O = observation

TYPES OF STATIONS

- I = intake and/or water supply stations
- A = treatment facility influent stations
- E = waste effluent stations
- C = receiving water stations
- P = treatment facilities perimeter stations
- L = basin and/or pond levee stations
- B = bottom sediment stations
- G = groundwater stations

FREQUENCY OF SAMPLING

- E = each occurrence
- H = once each hour
- D = once each day
- W = once each week
- M = once each month
- Y = once each year
- 2/H = twice per hour
- 2/W = 2 days per week
- 5/W = 5 days per week
- 2/M = 2 days per month
- 2/Y = once in March and once in September
- Q = quarterly, once in March, June, Sept. and December
- 2H = every 2 hours
- 2D = every 2 days
- 2W = every 2 weeks
- 3M = every 3 months
- Cont = continuous