



Interoffice Communication

To J. W. Leigh
From T. J. Mihalcik
Date May 18, 1981
Subject NPDES PERMIT APPLICATION

MAY 21 1981

Attached is a copy of the NPDES Permit application filled out by Anne Daubney. Would you please review the attached application and phone any comments to me by May 22, 1981.

Tom Mihalcik
Tom Mihalcik

jw
Encs
cc:
IFW AJN DTE
Brad Raffle, Houston
K. C. Hunt, Ponca City
C. R. Hampton, Denver

MCD 000002606

Please print or type in the unshaded areas only.

FORM 2C NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER

EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS

Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
001	30	14	18	93	16	40	Bayou Verdine
002	30	14	25	93	16	40	Bayou Verdine
003	30	14	23	93	15	26	Unnamed Ditch to Calcasieu River

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
001	Desalters	138,000 lb/hr		
	Coker Blowdown Pond	25,000 lb/hr	See Attachment C	
	Ballast and Crude Tank Draws	15,000 lb/hr		
	Misc. Users (See Attach. B)	48,000 lb/hr		
001	Cooling Twr Filter Backwash	18,500 lb/hr		
	Boiler Blowdown Water	102,100 lb/hr	See Attachment C	
	105°F Pit Overflow	169,800 lb/hr		
001	Cooling Twr Blowdown Water	181,500 lb/hr		
	Sanitary Sewer	10,000 lb/hr	See Attachment C	
002	Stormwater Runoff			
	From Process Area	42,800 lb/hr	Sedimentation	1-V
002	Stormwater Runoff			
	From Tank Farm Area	102,000 lb/hr	None	

OFFICIAL USE ONLY (effluent guidelines sub-categories)

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Total 001+002 = 18 MGD

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ YES (complete the following table)

☒ NO (go to Section III)

1. OUTFALL NUMBER (list)	2. OPERATION(s) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW					
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		b. TOTAL VOLUME (specify with units)		c. DUR- ATION (in days)	
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY		

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☒ YES (complete Item III-B)

☐ NO (to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?

☒ YES (complete Item III-C)

☐ NO (go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents an actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. MAXIMUM QUANTITY			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	
161.8	1,000 BBL	Refining Crude Oil <i>Transportation Dist.</i> <i>Process Dist.</i> <i>Refractory</i> <i>FCC</i> <i>Thermal</i> <i>Wing</i>	001, 002, 003

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of waste-water treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ YES (complete the following table)

☒ NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COM- PLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. RE- QUIRED	b. PRO- JECTED

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B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction. ☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

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CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding — Complete one set of tables for each outfall — Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
Cyclohexane Xylene Napthenic Acid	All three of these substances are present in the products from the reformer unit. It is therefore possible that at times, these may be found in the process wastewaters as a result of upsets.	<u>JK</u>	

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you do or expect that you will over the next 5 years use or manufacture as an intermediate or final product or byproduct?

☐ YES (list all such pollutants below)☒ NO (go to Item VI-B)

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharges of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐ YES (complete Item VI-C below)☒ NO (go to Section VII)

C. If you answered "Yes" to Item VI-B, explain below and describe in detail the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years, to the best of your ability at this time. Continue on additional sheets if you need more space.

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7. BIOLOGICAL TOXICITY TESTING DATA

☐ **YES** (identify the test(s) and describe their purposes below)

XNO (go to Section VIII)

Ver - 100
300
900

III. CONTRACT ANALYSIS INFORMATION

☐ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☒ **NO** (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
			MCD 000002610

X. CERTIFICATION

A. NAME & OFFICIAL TITLE (type or print)

B. PHONE NO. (area code & no.)

C. SIGNATURE

D. DATE SIGNED

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Form Approved OMB No. 158-R0173

OUTFALL NO.

001

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)			4. INTAKE (optional)	
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVERG. VALUE (if available)		d. NO. OF ANALYSES	e. CONCENTR- THATION	f. MASS	g. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	h. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					
a. Biochemical Oxygen Demand (BOD)	77	1,291	55	816	39	605	37 (1)	ppm	1bs/d		
b. Chemical Oxygen Demand (COD)	280	4,694	172	2,581	140	2,146	38 (1)	ppm	1bs/d		
c. Total Organic Carbon (TOC)	72	1,183	51	766	34	529	38 (1)	ppm	1bs/d		
d. Total Suspended Solids (TSS)	86	1,363	58	868	45	697	38 (1)	ppm	1bs/d		
e. Ammonia (as N)	56.1	818	24	390	19	290	38 (1)	ppm	1bs/d	VALUE	
f. Flow	20,667,000		16,549,000		15,370,000		N/A (2)	-	1bs/d	VALUE	
g. Temperature (winter)	29 (84) (3)		24 (75.2) (3)		21 (69) (3)		N/A (2)	°C (F)		VALUE	
h. Temperature (summer)	41 (105) (3)		29 (85) (3)		28 (82) (3)		N/A (2)	°C (F)		VALUE	
i. pH	6.0	8.8	6.1	7.9			N/A (2)	STANDARD UNITS			

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUT- ANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT				4. UNITS				5. INTAKE (optional)			
	a. PRESENT SPILL SHIFT	b. ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVERAGE VALUE (if available)		d. NO. OF ANAL- YSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANAL- YSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)	X		8						1	ppm				
b. Chlorine, Total Residual		X												
c. Color	X		40						1	Color Units				
d. Fecal Coliform	X													
e. Fluoride (16984-48-8)	X		.6						1	ppm				
f. Nitrate- Nitrite (as N)	X		ND(4)						1	ppm				

1. POLLUTANT AND CAS NO. (if available)		2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)	
		a. MAXIMUM DAILY VALUE		b. MAXIMUM DAILY VALUE		c. LONG TERM AVERAGE VALUE (if available)		d. LONG TERM AVERAGE VALUE	
		CONCENTRATION		CONCENTRATION		CONCENTRATION		CONCENTRATION	
		(1) CONCENTRATION		(2) MASS		(1) CONCENTRATION		(2) MASS	
g. Nitrogen, Total Organic (as N)		X	3				1	ppm	
h. Oil and Grease		X	26	232	8.5	130	37	ppm	lbs/d
i. Phosphorus (as P), Total (7723-14-0)		X	3.0		2.15		2	ppm	
j. Radioactivity									
(1) Alpha, Total		X							
(2) Beta, Total		X							
(3) Radium, Total		X							
(4) Radium 226, Total		X							
k. Sulfate (as SO ₄), (14808-79-8)		X	630				1	ppm	
l. Sulfide (as S)		X	.09	0.6	0.02	0.286	38	ppm	lbs/d
m. Sulfite (as SO ₃), (14265-45-3)		X	ND(4)				1		
n. Surfactants		X	1.9				1	ppm	
o. Aluminum, Total (7429-90-5)		X	1.7				1	ppm	
p. Barium, Total (7440-39-3)		X	.24				1	ppm	
q. Boron, Total (7440-42-8)		X	.42				1	ppm	
r. Cobalt, Total (7440-48-4)		X	.13				1	ppm	
s. Iron, Total (7439-89-6)		X	1.5				1	ppm	
t. Magnesium, Total (7439-95-4)		X	31				1	ppm	
u. Molybdenum, Total (7439-98-7)		X	ND(4)				1		
v. Manganese, Total (7439-96-5)		X	.51				1	ppm	
w. Tin, Total (7440-31-5)		X	ND(4)				1		
x. Titanium, Total (7440-32-6)		X	ND(4)				1		

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 EPA Form 3510-2C (6-80)

CONTINUED FROM PAGE 3 OF FORM 2-C

EPA I.D. NUMBER (copy from Item 1 of Form 1) OUTFALL NUMBER	001
LAD990683716	

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
	a. TEST EQUIP. INC. SENT	b. BEC. REQUIRED INC. SENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (2) MASS	c. LONG TERM AVG. VALUE (1) CONCENTRATION	d. NO. OF ANALYSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE (1) CONCENTRATION	h. NO. OF ANALYSES
METALS, CYANIDE, AND TOTAL PHENOLS										
1M. Antimony, Total (7440-36-0)	X		ND(4)			1				
2M. Arsenic, Total (7440-38-2)	X		0.004			1	ppm			
3M. Beryllium, Total (7440-41-7)	X		ND(4)			1				
4M. Cadmium, Total (7440-43-9)	X		ND(4)			1				
5M. Chromium, Total (7440-47-3)	X		0.57	8.6	0.173	38	ppm	lbs/d		
6M. Copper, Total (7550-50-8)	X		0.061			1	ppm			
7M. Lead, Total (7439-97-6)	X		ND(4)			1				
8M. Mercury, Total (7439-97-6)	X		ND(4)			1				
9M. Nickel, Total (7440-02-0)	X		0.1			1	ppm			
10M. Selenium, Total (7782-49-2)	X		0.003			1	ppm			
11M. Silver, Total (7440-22-4)	X		ND(4)			1				
12M. Thallium, Total (7440-28-0)	X		ND(4)			1				
13M. Zinc, Total (7440-66-6)	X		0.36			1	ppm			
14M. Cyanide, Total (57-12-5)	X		0.06	0.025	0.023	5	ppm			
15M. Phenols, Total	X		0.058	1.1	0.025	38	ppm	lbs/d		
DIOXIN										
2,3,7,8-Tetra chlorodibenzo-p-Dioxin (1764-01-6)		X								

DESCRIBE RESULTS

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1. POLLUTANT AND CAS NUMBER (if available)		2. MARK 'X'		3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
GC/MS FRACTION - VOLATILE COMPOUNDS	A. 15 MIN. DAILY VALUE (1) CONC. (ug/l)	B. 30 DAY VALUE (1) CONC. (ug/l)	C. LONG TERM AVERAGE VALUE (1) CONC. (ug/l)	D. NO. OF ANAL. YES	E. CONCENTRATION	F. MASS	G. LONG TERM AVERAGE VALUE (1) CONC. (ug/l)	H. NO. OF ANAL. YES			
									(2) MASS	(2) MASS	(2) MASS
1V. Acrolein (107-02-8)	X	ND(4)		1							
2V. Acrylonitrile (107-13-1)	X	ND(4)		1							
3V. Benzene (71-43-2)	X	ND(4)		1							
4V. Bis (Chloro-methyl) Ether (542-88-1)	X	ND(4)		1							
5V. Bromoform (75-25-2)	X	ND(4)		1							
6V. Carbon Tetrachloride (56-23-5)	X	ND(4)		1							
7V. Chlorobenzene (108-90-7)	X	ND(4)		1							
8V. Chlorodibromomethane (124-48-1)	X	ND(4)		1							
9V. Chloroethane (75-00-3)	X	ND(4)		1							
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	X	ND(4)		1							
11V. Chloroform (67-66-3)	X	ND(4)		1							
12V. Dichlorobromomethane (75-27-4)	X	ND(4)		1							
13V. Dichlorodifluoromethane (75-71-8)	X	ND(4)		1							
14V. 1,1-Dichloroethane (75-34-3)	X	ND(4)		1							
15V. 1,2-Dichloroethane (107-06-2)	X	ND(4)		1							
16V. 1,1-Dichloroethylene (75-35-4)	X	ND(4)		1							
17V. 1,2-Dichloropropane (78-87-5)	X	ND(4)		1							
18V. 1,2-Dichloropropylene (542-75-6)	X	ND(4)		1							
19V. Ethylbenzene (100-41-4)	X	ND(4)		1							
20V. Methyl Bromide (74-83-9)	X	ND(4)		1							
21V. Methyl Chloride (74-87-3)	X	ND(4)		1							

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
	DATE RECEIVED	DATE SENT	8. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	D. MAXIMUM 30 DAY VALUE (1) CONCENTRATION (2) MASS	C. LONG TERM AVERAGE VALUE (if available) (1) CONCENTRATION (2) MASS	D. NO. OF ANAL. YES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	b. NO. OF ANAL. YES
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)										
22V. Methylene Chloride (75-09-2)	X		ND(4)			1				
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	X		ND(4)			1				
24V. Tetrachloroethane (127-18-4)	X		ND(4)			1				
25V. Toluene (108-88-3)	X		ND(4)			1				
26V. 1,2-Trans-Dichloroethylene (156-60-5)	X		ND(4)			1				
27V. 1,1,1-Trichloroethane (71-55-6)	X		ND(4)			1				
28V. 1,1,2-Trichloroethane (79-00-5)	X		ND(4)			1				
29V. Trichloroethylene (79-01-6)	X		ND(4)			1				
30V. Trichlorofluoromethane (75-69-4)	X		ND(4)			1				
31V. Vinyl Chloride (75-01-4)	X		ND(4)			1				
GC/MS FRACTION - ACID COMPOUNDS										
1A. 2-Chlorophenol (95-57-8)	X		ND(4)			1				
2A. 2,4-Dichlorophenol (120-83-2)	X		ND(4)			1				
3A. 2,4-Dimethylphenol (105-67-9)	X		ND(4)			1				
4A. 4,6-Dinitro-Cresol (534-52-1)	X		ND(4)			1				
5A. 2,4-Dinitrophenol (51-28-5)	X		ND(4)			1				
6A. 2-Nitrophenol (88-75-5)	X		ND(4)			1				
7A. 4-Nitrophenol (100-02-7)	X		ND(4)			1				
8A. P-Chloro-M-Cresol (59-50-7)	X		ND(4)			1				
9A. Pentachlorophenol (87-86-5)	X		ND(4)			1				
10A. Phenol (108-95-2)	X		ND(4)			1				
11A. 2,4,6-Trichlorophenol (88-06-2)	X		ND(4)			1				

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT				4. UNITS				5. INTAKE (optional)		
	D. TEST METHOD USED	E. CONC. SENT	F. CONC. SENT	G. MAXIMUM DAILY VALUE	H. MAXIMUM 30 DAY VALUE (if available)		I. LONG TERM AVG. VALUE (if available)		J. CONC. TRATION	K. MASS	L. LONG TERM AVERAGE VALUE		M. NO. OF ANAL. YSES
					(1) CONC. TRATION	(2) MASS	(1) CONC. TRATION	(2) MASS			(1) CONC. TRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS													
1B. Acenaphthene (83-32-9)	X			ND(4)									
2B. Acenaphthylene (208-96-8)	X			ND(4)									
3B. Anthracene (120-12-7)	X			ND(4)									
4B. Benzidine (92-87-5)	X			ND(4)									
5B. Benzo (a) Anthracene (56-55-3)	X			ND(4)									
6B. Benzo (a) Pyrene (50-32-8)	X			ND(4)									
7B. 3,4-Benzofluoranthene (205-99-2)	X			ND(4)									
8B. Benzo (ghi) Perylene (191-24-2)	X			ND(4)									
9B. Benzo (k) Fluoranthene (207-08-9)	X			ND(4)									
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	X			ND(4)									
11B. Bis (2-Chloroethyl) Ether (111-44-4)	X			ND(4)									
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)	X			ND(4)									
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	X			ND(4)									
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	X			ND(4)									
15B. Butyl Benzyl Phthalate (85-68-7)	X			ND(4)									
16B. 2-Chloronaphthalene (91-58-7)	X			ND(4)									
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	X			ND(4)									
18B. Chrysene (218-01-9)	X			ND(4)									
19B. Dibenzo (a,h) Anthracene (53-70-3)	X			ND(4)									
20B. 1,2-Dichlorobenzene (95-50-1)	X			ND(4)									
21B. 1,3-Dichlorobenzene (541-73-1)	X			ND(4)									

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'	3. EFFLUENT				4. UNITS	5. INTAKE (optional)	6. NO. OF ANAL. YSES
		A. TEST INDICATED (if available)	B. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	C. MAXIMUM 30 DAY VALUE (1) CONCENTRATION (2) MASS	D. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS			
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)								
22B. 1,4-Dichloro-benzene (106-46-7)	X		ND(4)					1
23B. 3,3'-Dichloro-benzidine (91-94-1)	X		ND(4)					1
24B. Diethyl Phthalate (84-66-2)	X		ND(4)					1
25B. Dimethyl Phthalate (131-11-3)	X		ND(4)					1
26B. Di-N-Butyl Phthalate (84-74-2)	X		ND(4)					1
27B. 2,4-Dinitro-toluene (121-14-2)	X		ND(4)					1
28B. 2,6-Dinitro-toluene (606-20-2)	X		ND(4)					1
29B. Di-N-Octyl Phthalate (117-84-0)	X		ND(4)					1
30B. 1,2-Diphenyl-hydrazine (as Azobenzene) (122-66-7)	X		ND(4)					1
31B. Fluoranthene (206-44-0)	X		ND(4)					1
32B. Fluorene (86-73-7)	X		ND(4)					1
33B. Hexa-chlorobenzene (118-71-1)	X		ND(4)					1
34B. Hexa-chlorobutadiene (87-68-3)	X		ND(4)					1
35B. Hexachloro-cyclopentadiene (77-47-4)	X		ND(4)					1
36B. Hexachloro-ethane (67-72-1)	X		ND(4)					1
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	X		ND(4)					1
38B. Isophorone (78-59-1)	X		ND(4)					1
39B. Naphthalene (91-20-3)	X		ND(4)					1
40B. Nitrobenzene (98-95-3)	X		ND(4)					1
41B. N-Nitro-sodimethylamine (62-75-9)	X		ND(4)					1
42B. N-Nitrosodi-N-Propylamine (621-64-7)	X		ND(4)					1

MCD 000002617

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)	
	a. ANALYST	b. SEC. ANALYST	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (2) CONCENTRATION	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	b. NO. OF ANAL. YES
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)								
43B. N Nitro-sodiphenylamine (86-30-6)	X		ND(4)					1
44B. Phenanthrene (85-01-8)	X		ND(4)					1
45B. Pyrene (129-00-0)	X		ND(4)					1
46B. 1,2,4 - Tri-chlorobenzene (120-82-1)	X		ND(4)					1
GC/MS FRACTION - PESTICIDES								
1P. Aldrin (309-00-2)	X		ND(4)					1
2P. α -BHC (319-84-6)	X		ND(4)					1
3P. β -BHC (319-85-7)	X		ND(4)					1
4P. γ -BHC (58-89-9)	X		ND(4)					1
5P. δ -BHC (319-86-8)	X		ND(4)					1
6P. Chlordane (57-74-9)	X		ND(4)					1
7P. 4,4'-DDE (50-29-3)	X		ND(4)					1
8P. 4,4'-DDE (72-55-9)	X		ND(4)					1
9P. 4,4'-DDD (72-54-8)	X		ND(4)					1
10P. Dieldrin (60-57-1)	X		ND(4)					1
11P. α -Endosulfan (115-29-7)	X		ND(4)					1
12P. β -Endosulfan (115-29-7)	X		ND(4)					1
13P. Endosulfan Sulfate (1031-07-8)	X		ND(4)					1
14P. Endrin (72-20-8)	X		ND(4)					1
15P. Endrin Aldehyde (7421-93-4)	X		ND(4)					1
16P. Heptachlor (76-44-8)	X		ND(4)					1

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1. CAS NO. AND CAS NUMBER (if available)	2. NAME	3. CAS NO.	4. CAS NAME	5. MAXIMUM DAILY VALUE	
				6. (a)	7. (b)
9. CAS NO. AND CAS NAME					
1B. Acenaphthene (83-32-9)				X	
2G. Acenaphthylene (208-96-8)				X	
3B. Anthracene (120-12-7)				X	
4B. Benzidine (92-87-5)				X	
5B. Benzo (a) Anthracene (56-55-3)				X	
6B. Benzo (a) Pyrene (50-32-8)				X	
7B. 3,4-Benzofluoranthene (205-99-2)				X	
8B. Benzo (ghi) Perylene (191-24-2)				X	
9B. Benzo (k) Fluoranthene (207-08-9)				X	
10B. Bis (2-Chloroethoxy) Methane (111-91-1)				X	
11B. Bis (2-Chloroethyl) Ether (111-44-4)				X	
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)				X	
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)				X	
14B. 4-Bromophenyl Phenyl Ether (101-55-3)				X	
15B. Butyl Benzyl Phthalate (85-68-7)				X	
16B. 2-Chloronaphthalene (91-58-7)				X	
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)				X	
18B. Chrysene (218-01-9)				X	
19B. Dibenzo (a,h) Anthracene (53-70-3)				X	
20B. 1,2-Dichlorobenzene (95-50-1)				X	
21B. 1,3-Dichlorobenzene (541-73-1)				X	

MCD 000002625

1. POLLUTANT AND GAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT				4. UNITS				5. INTAKE (optional)	
	TOXIC SUBSTANCE ACT	ENVIRONMENTAL ACT	8. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	9. MAXIMUM 30 DAY VALUE (1) CONCENTRATION (2) MASS	6. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	7. NO OF ANAL YSES	3. CONCENTRATION	4. MASS	5. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	6. NO OF ANAL YSES		
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)												
22B. 1,4 Dichloro-benzene (108-46-7)		X										
23B. 3,3' Dichloro benzidine (91-94-1)		X										
24B. Diethyl Phthalate (84-66-2)		X										
25B. Dimethyl Phthalate (131-11-3)		X										
26B. Di-N Butyl Phthalate (84-74-2)		X										
27B. 2,4 Dinitro-toluene (121-14-2)		X										
28B. 2,6 Dinitro-toluene (606-20-2)		X										
29B. Di-N Octyl Phthalate (117-84-0)		X										
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)		X										
31B. Fluoranthene (206-44-0)		X										
32B. Fluorene (86-73-7)		X										
33B. Hexa-chlorobenzene (118-71-1)		X										
34B. Hexa-chlorobutadiene (87-68-3)		X										
35B. Hexachloro-cyclopentadiene (77-47-4)		X										
36B. Hexachloro-ethane (57-72-1)		X										
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)		X										
38B. Isophorone (78-59-1)		X										
39B. Naphthalene (91-20-3)		X										
40B. Nitrobenzene (98-95-3)		X										
41B. N-Nitro-sodium/amine (62-75-9)		X										
42B. N-Nitrosodi-N-Propylamine (621-64-7)		X										

MCD 000002626

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
	1P GAS	2P LIQ	3P SOL	4P SLUR	5P SLUR	6P SLUR	7P SOL	8P SOL	9P SOL	10P SOL
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)										
429. N Nitro-sodibenzenamine (86-30-6)										
448. Phenanthrene (85-01-8)										
458. Pyrene (129-00-0)										
468. 1,2,4-Tri-chlorobenzene (120-82-1)										
GC/MS FRACTION - PESTICIDES										
1P. Aldrin (309-00-2)										
2P. α -BHC (319-84-6)										
3P. β -BHC (319-85-7)										
4P. γ -BHC (58-89-9)										
5P. δ -BHC (319-86-8)										
6P. Chlordane (57-74-9)										
7P. 4,4'-DDT (50-29-3)										
8P. 4,4'-DDE (72-55-9)										
9P. 4,4'-DDD (72-54-8)										
10P. Dieldrin (50-57-1)										
11P. α -Endosulfan (115-29-7)										
12P. β -Endosulfan (115-29-7)										
13P. Endosulfan Sulfate (1031-07-8)										
14P. Endrin (72-20-8)										
15P. Endrin Aldehyde (7421-93-4)										
16P. Heptachlor (76-44-8)										

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CONTINUED FROM PAGE V-8

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EPA I.D. NUMBER (copy from Item 1 of Form 1) 002

OUTFALL NUMBER

Form Approved OMB No. 158-R0173

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)		6. NO OF ANALYSES	
	3. MAXIMUM DAILY VALUE (if available)	4. MAXIMUM 30 DAY VALUE (if available)	5. LONG TERM AVERAGE VALUE (if available)	6. CONCENTRATION	7. MASS	8. CONCENTRATION	9. MASS	10. LONG TERM AVERAGE VALUE (if available)		11. CONCENTRATION
GC/MS FRACTION - PESTICIDES (continued)										
17P. Heptachlor Epoxide (1024-57-3)										
18P. PCB-1242 (53469-21-9)										
19P. PCB-1254 (11097-60-1)										
20P. PCB-1221 (11104-28-2)										
21P. PCB-1232 (11141-16-5)										
22P. PCB-1248 (12672-29-6)										
23P. PCB-1260 (11096-82-5)										
24P. PCB-1016 (12674-11-2)										
25P. Toxaphene (8001-35-2)										

EPA Form 3510-2C (6-80)

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NOTES:

- (1) This parameter is measured continuously when there is flow.
- (2) None detected in concentration greater than the minimum detectable limit of the method.
- (3) Data for parameter was taken prior to 1977.

MCD 000002628

003

(1)				ESTIMATED DOLLARS
1. Admin. fee for each pollutant you know or have reason to believe is present in your area (2000 dollars per pollutant). If you know or have reason to believe that a pollutant is not present in your area, you must provide the results of at least one study, by the most reliable method available, to show that the pollutant is not present.				

CONTINUE ON REVERSE

1. POLLUT- ANT AND CAS NO. (If available)	2. MARK 'X' a. RECOVERED PERCENT	3. EFFLUENT				4. UNITS		5. INTAKE (optional)		b. NO. OF ANAL- YSES
		b. MAXIMUM DAILY VALUE (If available)		c. LONG TERM AVERAGE VALUE (If available)		b. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)	X	3				1	ppm			
h. Oil and Grease	X	7.1	4.2	3.4		41	ppm			
i. Phosphorus (as P), Total (7723-14-0)	X	1				1	ppm			
j. Radioactivity										
(1) Alpha, Total	X									
(2) Beta, Total	X									
(3) Radium, Total	X									
(4) Radium 226, Total	X									
k. Sulfate (as SO ₄), (14808-79-8)	X	95				1	ppm			
l. Sulfide (as S)		(1)								
m. Sulfite (as SO ₃), (14265-45-3)	X	ND(3)				1				
n. Surfactants	X	0.23				1	ppm			
o. Aluminum, Total (7429-90-5)	X	0.18				1	ppm			
p. Barium, Total (7440-39-3)	X	0.14				1	ppm			
q. Boron, Total (7440-42-8)	X	0.051				1	ppm			
r. Cobalt, Total (7440-48-4)	X	ND(3)				1				
s. Iron, Total (7439-89-6)	X	0.72				1	ppm			
t. Magnesium, Total (7439-95-4)	X	19				1	ppm			
u. Molybdenum, Total (7439-98-7)	X	ND(3)				1				
v. Manganese, Total (7439-96-5)	X	0.34				1	ppm			
w. Tin, Total (7440-31-5)	X	ND(3)				1				
x. Titanium, Total (7440-32-6)	X	ND(3)				1				

MCD 000002630

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003

CONTINUED FROM PAGE 3 OF FORM 2-C

Form Approved OMB No. 158-R0173

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
	a. TEST ING QUIP KIT	b. BE: C. BE: UNIVERSITY STATE SENT	b. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	b. MAXIMUM 30 DAY VALUE (if applicable) (1) CONCENTRATION (2) MASS	c. LONG TERM AVG. VALUE (if applicable) (1) CONCENTRATION (2) MASS	d. NO. OF ANAL. YES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	b. NO. OF ANAL. YES
METALS, CYANIDE, AND TOTAL PHENOLS										
1M. Antimony, Total (7440-36-0)		X	ND(3)							
2M. Arsenic, Total (7440-38-2)		X	ND(3)							
3M. Beryllium, Total (7440-41-7)		X	ND(3)							
4M. Cadmium, Total (7440-43-9)		X	ND(3)							
5M. Chromium, Total (7440-47-3)		X								
6M. Copper, Total (7550-50-8)		X	ND(3)							
7M. Lead, Total (7439-97-6)		X	ND(3)							
8M. Mercury, Total (7439-97-6)		X	ND(3)							
9M. Nickel, Total (7440-02-0)		X	ND(3)							
10M. Selenium, Total (7782-49-2)		X	ND(3)							
11M. Silver, Total (7440-22-4)		X	ND(3)							
12M. Thallium, Total (7440-28-0)		X	ND(3)							
13M. Zinc, Total (7440-66-6)		X	0.032							
14M. Cyanide, Total (57-12-5)		X							1 ppm	
15M. Phenols, Total		X								
DIOXIN										
2,3,7,8-Tetra- chlorodibenzo-P- Dioxin (1764-01-6)		X								

MCD 000002631

DESCRIBE RESULTS

	D. MA																																									
LUE	AS																																									

MCD 000002632

D. MA

C. N. F.

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ATTACHMENT B

Miscellaneous uses are:

Various water washes.

Caustic system.

Stormwater runoff that goes into the oily-water process sewer.

Miscellaneous units contributing process wastewater are:

Alkylation Unit

P-P Reformer Unit

P-F Debutanizer Unit

No. 2 Crude Tower

No. 3 Crude Tower

FCC Unit

Thermal Cracker Unit

PBC Fractionation Unit

Normal Paraffin Unit

MCD 000002638

ATTACHMENT C

The wastewater streams from the desalters, coker blowdown pond, ballast, crude tank draws, and the miscellaneous users are all receiving the following treatment steps:

<u>TREATMENT</u>	
<u>Description</u>	<u>Code</u>
1. API Separator	XX
2. CPI Separator	XX
3. Equalization Basin	3-B
4. Activated Sludge Unit	3-A
5. Process Lagoon	3-B
6. Dissolved Air Flotation	1-H

The cooling tower blowdown water and the sanitary sewer streams both combine with the CPI Separator effluent of Step 2 of above and continues on through the remainder of the treatment steps.

The cooling tower filter backwash, boiler blowdown water, and the 105°F pit overflow streams all go through a sedimentation pond (1-V) then combine with the Activated Sludge Unit effluent and continues on through the remainder of the treatment steps.

The size, flows, retention time, and ultimate disposal of any solids of each of the treatment units are shown in Table I.

MCD 000002639

ATTACHMENT C (CONTINUED)

TABLE ILAKE CHARLES REFINERYWASTEWATER TREATMENT UNITS

<u>Treatment Unit</u>	<u>Size, Gal</u>	<u>Flow Rate (Gpm)</u>	<u>Retention Time (Hours)</u>	<u>Ultimate Disposal of Solids</u>
API Separator	113,100	452	4	Slip oil emulsion from the separators is removed by a contractor.
CPI Separator	77,800	452	2.9	
Equalization Basin	860,200	835	17	
Activated Sludge Unit				Sludge is removed to a land farm owned by Conoco Inc.
Reaction Section	994,800	835	20	
Clarifier	161,600	835	3.2	
Process Lagoon	5,200,000	1,537.8	2.3	
Fire Water Pond	1,600,000	521	2.1	
Dissolved Air Flotation	79,100	1,537.8	0.8	Sludge is removed to a land farm owned by Conoco Inc.

MCD 000002640