1980
SUN COMPANY
ENVIRONMENTAL
COMPLIANCE
SURVEY

PLAINTIFF'S EXHIBIT

KRC-634

S (B) 00895

Questionnaire # 432

SUN COMPANY

1980

ENVIRONMENTAL

COMPLIANCE

SURVEY

S (B) 00896

OCTOBER, 1980

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APPROVED LIST OF SUBSIDIARY KEY CONTACTS

• Oil and Gas Group	
— Sunmark Exploration	G. E. Moores
— Sun Production	A.R. Ballou
— Sun Gas	C. C. Jones
— Sun Texas	R. B. Freels
• Marketing Group	
— SPPC	M. A. Buercklin
— Sunmark Industries	A. B. Chieffo
— Sun International	R. W. Brown
• Energy Minerals Group	
— Sunedco	J. F. Williams
— Elk River	R. W. Ince/E. Bagley
• Logistics Group	
— Sun Pipeline	R. E. McCloskey
— Sun Terminals	A. J. Clubb
— Sun Transport	Capt. J. Bates
— Sun Carriers	R. L. Veith
• Commercial Group	
— TOTE	R. Griffith
— Sperry-Sun	K. McVey
— SIS	P. J. Coffey
— Sun Distributors	L. W. Cissone
• SUN SHIP	R. Bible

BACKGROUND AND OBJECTIVES

Environmental laws and regulations are continually becoming more complex and comprehensive. Virtually every segment of Sun Company operations must comply with a number of evolving environmental regulatory programs.

Sun Company is concerned that compliance is also becoming more complex and costly. At the same time, both the government and the public want to know more about the compliance status of corporate operations. In fact, the EPA has a research program under development to license outside auditors to perform corporate environmental compliance audits.

Sun Company is undertaking this 1980 compliance program in order to develop a baseline for the environmental compliance of *all* company operations. The information developed by this program can be used for a number of benefits:

- Focus subsidiary and corporate management awareness.
- Validate Sun certifications to groups such as the Securities and Exchange Commission.
- Influence external government audit proposals.
- Recommend plans for future Sun compliance reviews.
- Leave in place a permanent data collection system for local and subsidiary use.

We encourage you to make a thorough and complete response to this questionnaire. The Environmental Survey Task Force will be reviewing your responses and contacting you to clarify any ambiguities. In addition, following standard auditing techniques, a sample of questionnaires will be verified with the respondent, to validate the accuracy of the basic information.

Please call your subsidiary key contact if you have any questions. The Key contact list appears on page i.

GENERAL INSTRUCTIONS

- Please review the entire questionnaire before completing.
- If this questionnaire is addressed to a *group* of facilities, the word "Facility" used throughout the questionnaire applies to the group.
- If a particular section does not apply to your facility or group of facilities, please mark the section *NA* (for not applicable) and proceed to the next section.
- In the final section, you will be asked to report the number of man hours required to complete this questionnaire so please keep a record of time spent.

GENERAL INSTRUCTIONS (cont.)

All items which require your reponse are on the *right hand* pages of this booklet with any instructions pertaining to those items on the facing, *left hand* page.

The questionnaire require three types of responses:

1. For responses which require words, please print legibly.

2. For responses which require a blank to be checked, please use an "X".

3. Where items call for a number as a response, give an approximate number unless the actual number is known to you or can be readily calculated. *If you use estimated, rather than recorded/established figures, indicate this with an "E" following the number.*

If any item does not provide sufficient space for a complete response, write "See Note" in the response space and present a complete response to key to the number of the questionnaire item.

Any pages used for response to this questionnaire that are not bound as part of the booklet should be identified with the Questionnaire Number and listed on the last page under "NOTES".

INSTRUCTIONS FOR
Section 1.0 — GENERAL INFORMATION

1.1 Give the name of the Sun Company subsidiary to which your facility or group of facilities belong.

1.2 If this questionnaire is addressed to a single facility, give the proper, corporately recognized name for your particular facility — not local, colloquial designations or nickname.

If it is addressed to a *group* of facilites, give the name of the *group* of facilities to which it applies.

1.4 If it is a single facility, give the actual borough or township (if any), county or parish, and state in which your facility is located. If it spans more than one such political unit, give the name of the one which is most commonly associated with the facility.

(For multiple locations, just list the state.)

1.5 Give street number, if any; P.O. Box number, if any, municipality, state and Zip code.

(Not applicable for multiple facilities.)

1.6 Write in the blank the number of the function which best represents the principal function of your facility.

1.7 Name the person who has the chief management authority at your facility (or group of facilities).

1.8 Name the person, *serving under the facility manager,* with the direct, overall responsiblity for environmental matters or pollution control. If this person is the facility manager, write "same".

QUESTIONNAIRE

SUN COMPANY: 1980 ENVIRONMENTAL COMPLIANCE SURVEY

1.0 GENERAL INFORMATION

1.1 Subsidiary Name Sun Petroleum Products Co.

1.2 Facility Name Corpus Christi Ref or Group _____

1.3 If this is a multiple facility, to how many discrete facilities does this questionnaire apply? _____

1.4 Facility Location Nueces, Tx.
Municipality, County, State

1.5 Mailing Address P.O. Box 2608
Corpus Christi, Tx. 78403

1.6 Principal Function of Facility 7

1. Petroleum Exploration
2. Petroleum Production
3. Petroleum Transport (Domestic Pipeline)
4. Petroleum Transport (Marine Fleet)
5. Truck or Rail Terminal
6. Marine Terminal
7. Refinery
8. Marketing Terminal
9. Bulk Plant
10. Service Station
11. Food Service
12. Mining
13. Instruments and Tool Manufacture
14. Electronic Information Service
15. Ship Building
16. Common Carrier Trucking
17. Industrial Products & Supplies Distr.
18. Ocean Transport
19. Other (Specify) _____

1.7 Facility Manager J. L. Laird

1.8 Person at Facility Responsible for Environmental Matters J. R. Kampfhenkel

1.9 Facility Telephone No. (512) 241-4811

INSTRUCTIONS

Section 1.10 Respond by supplying the number of full-time and part-time employees in eachpersonnel classification listed. For

For persons serving in more than one capacity, consider only their primary function.

Give the estimated man-months per year which each classification spends on environmental matters (as an average estimated over the past three years). Please include the time commitments of personnel not located at this facility.

S (B) 00904

QUESTIONNAIRE

1.10 Environmental Manpower

(1) Personnel Classification	(2) Number of Persons Assigned to Environmental Matters at this facility		(4) Estimated Total Man-Months/Year Assigned to Environmental Matters
	Full Time	**Part Time**	
(1) Engineers	2	3	24.75
(2) Attorneys			
(3) Chemists		1	2.4
(4) Biologists			
(5) Other professionals		1	0.6
(6) Technicians	2		24.0
(7) Operators	1	4	13.8
(8) Clerks, secretaries		2	3.6
(9) Outside consultants		4	1.0
Totals	5	15	70.15

INSTRUCTIONS FOR
Section 2.0 — ENVIRONMENTAL REGULATORY AGENCY AFFAIRS

2.1 Indicate all permits issued by local, state, regional, or Federal agencies currently held by your facility in *air pollution, solid/hazardous waste, water/wastewater,* and other *general environmental* matters by listing each by permit type and title. In the columns to the right: give the name of the agency issuing each permit; the permit number; and the date (month/day/year) on which it will expire. Do not include Spill Prevention Control Countermeasure Plans (SPCC).

EXAMPLE

Permit Type	Permit Title	Issuing Agency	Permit Number	Permit Expiration Date (mo/day/yr)
Wastewater	NPDES	U.S. EPA	PA-0007920	11/30/80

2.2 Indicate all *air pollution, solid/hazardous waste, water/wastewater,* and other *general environmental* permits for which your facility has applied, but has not yet received, by listing each by permit type and title. In the columns to the right: give the name of the agency which is to issue each permit and the date (month/day/year) of your application for each permit.

Indicate whether the application was for new construction and/or modification.

QUESTIONNAIRE

2.0 ENVIRONMENTAL REGULATORY AGENCY AFFAIRS

2.1 List all *Existing* Environmentally Related *Permits* Issued by Local, State, Regional, and Federal Agencies

(1) Permit Type	(2) Permit Title	(3) Issuing Agency	(4) Permit Number	(5) Permit Expiration Date mo./day/yr.	
Wastewater	TDWR	TDWR	00531	7-1-82	(1)
Air Pollution	Operating	TACB	R-43		(2)
" "	"	"	R-44		(3)
" "	"	"	R-37		(4)
" "	"	"	R-797		(5)
" "	"	"	R-1420		(6)
" "	"	"	R-4678		(7)
" "	Construction	"	C-3623		(8)
" "	"	"	C-5966		(9)
" "	Operating	U.S. EPA	PSD-TX-56		

2.2 List all Environmentally Related *Permits Pending* from Local, State, Regional, and Federal Agencies

(1) Permit Type	(2) Permit Title	(3) Issuing Agency	(4) Application Date (mo./day/yr.)	(5) Is Application for new Construction and/or Modification? Yes	No	
Wastewater	NPDES	U.S. EPA	9-26-80		X	(1)
						(2)
						(3)
						(4)
						(5)
				# S (B) 00907		(6)
						(7)

INSTRUCTIONS

Section 2.3 Indicate *inspections by and/or visitations from* local, state, regional, or Federal environmental regulatory agencies, listing the purpose, date, agency responsible for each visit, and follow-up actions, if any. Note that for scheduled, periodic visits, you should give the frequency of such visits, e.g., monthly, quarterly, yearly, etc., rather than the date (month/year).

EXAMPLE:

Purpose	Visiting Regulatory Agency	Frequency or Date (mo/yr) of Visits	Follow-up Action by Agency
Review of Watewater Treatment Operations	PA DER	Quarterly	None
Stack Inspection	EPA-Region III	8/79	Request complete emission inventory

S (B) 00908

2.3 List all Facility *Inspections* and *Visitations* by Local, State, Regional, and Federal Environmental Regulatory Agencies Personnel— since July, 1977.

	(1) Purpose	(2) Visiting Regulatory Agency	(3) Frequency or Date (mo./yr.) of Visits	(4) Follow-up Action by Agency
(1)	Air Pollution Inspection	U.S. EPA	1/9-10/80	None
(2)	" "	TACB	10/30/80	"
(3)	Wastewater and Solid Waste	TDWR	12/3-4/80	"
(4)	" "	TDWR	12/4-5/79	"
(5)	Air Pollution Inspection	TACB	10/16/79	"
(6)	Waste water and Solid Waste	TDWR	9/25-26/79	"
(7)	" "	"	5/22/79	"
(8)	" "	"	1/17/79	"
(9)	" "	"	6/26/78	"
(10)	" "	"	3/9/78	"
(11)	" "	"	2/28/78	"
(12)	" "	U.S. EPA	8/24/78	"
(13)	Air Pollution Inspection	TACB	10/27/78	"
(14)	Waste water and Solid Waste	TDWR	10/18-19/77	"
	" "	"	7/21/77	"
	Air Pollution Inspection	TACB	10/24/77	"

INSTRUCTIONS FOR
Section 3.0 — AIR EMISSIONS

Section 3.1 applies to *SINGLE* facilities *ONLY such as Refineries, Marketing Terminals, and Natural Gas Plants.*

3.1 Indicate those emissions which are relevant to your facility and the classification into which they fall.

The emission types are:

TSP — Total Suspended Particulates

SO_x — Sulphur Oxides

NO_x — Nitrogen Oxides

O_x — Photchemical Oxidants (ozone)

CO_x — Carbon Monoxide

S (B) 00910

QUESTIONNAIRE

3.0 AIR EMISSIONS

3.1 Air Quality Status

	Classification	Emission Types				
		TSP	SO_x	NO_x	O_x	CO
(1)	Does Not Meet Primary Standards				X	
(2)	Does Not Meet Secondary Standards					
(3)	Cannot be Classified					
(4)	Better Than National Standards	X	X			
(5)	Cannot Be Classified Or Better Than National Standards					
		(1)	(2)	(3)	(4)	(5)

3.2 Have you completed a facility emission survey or inventory?

[X] Yes [ ] No

If so, give the date. 0 7 [mo] 7 6 [yr]

3.2.1 Do you operate any continous stack monitoring devices at this facility?

[X] Yes [ ] No

3.2.1 If you do operate stack monitors, is all of this equipment included in a statistically based quality control maintanence program?

[X] Yes [ ] No

INSTRUCTIONS

Section 3.3 Indicate any of the units, processes, or operations which are present at your facility. If you have checked any of these items, complete relevant items in Section 3.4. *IF NOT,* Proceed to Section 4.0.

3.3.8 Fugitive Hydrocarbon Emissions refer to volatile organic compounds which are emitted from pumping and piping systems (see Item 3.4.8).

Note the third digit in the Section Number for Sections 3.3 and 3.4 correspond: e.g., Items *3.3.1* and *3.4.1* both refer to Boilers and Heaters.

S (B) 00912

QUESTIONNAIRE

3.3 Index of Air Emissions Sources

3.3.1 Boilers and heaters ..... [X]

3.3.2 Process units and Incinerators with stacks..... [X]

3.3.3 Stationary internal combustion/turbine engines..... [X]

3.3.4 Emergency Flares..... [X]

3.3.5 Above ground petroleum storage tank ..... [X]

3.3.6 Bulk loading/unloading of volatile organic compounds (VOC) ..... [X]

3.3.7 Oil/Water Gravity Separator ..... [X]

3.3.8 Fugitive Hydrocarbon Emissions ..... [X]

3.3.9 Underground petroleum product storage tanks ..... [ ]

3.3.10 Degreasing operation using solvent spraying or dipping ... [ ]

INSTRUCTIONS

Section 3.4.1 Complete this section only if you have previously checked item #3.3.1 on page 6-Q.

TSP — Total Suspended Particulates

SO_x — Sulphur Oxides

CO — Carbon Monoxide

NO_x — Nitrogen Oxides

QUESTIONNAIRE

3.4 Description of Sources

3.4.1 Boilers and Heaters (with stacks)

1. How many boilers and heaters are at this facility? 49

2. Is anyone at your facility familiar with the State Implementation Plan (SIP) requirements pertaining to this source category of air emissions? [X] Yes [ ] No

3. Check the emissions regulated by the SIP requirements.

TSP	[X]	SO_x	[ ]	CO	[ ]
Opacity	[X]	NO_x	[ ]	None	[ ]

4. Have there been any significant excursions, exceedences, or discrepancies from SIP regulations or permit parameters in this particular catgeory? [ ] Yes [X] No

5. How many heaters and boilers have been tested since July, 1977? Emission Test TSP - SO_x 1

6. How many fuel burning sources are greater than 100 million BTUs/hr.? 1

7. Is the aggregate of all fuel burning sources greater than 250 million BTUs/hr.? [X] Yes [ ] No

INSTRUCTIONS

Section 3.4.2 and 3.4.3 Complete these sections only if you have previously checked items # 3.3.2 or 3.3.3 on page 6-Q.

TSP — Total Suspended Particulates

SO_X — Sulphur Oxides

NO_X — Nitrogen Oxides

HC — Hydrocarbons

S (B) 00916

QUESTIONNAIRE

3.4.2 Process Units and Incinerators With Stacks

1. How many such units are at this facility? 22
2. Are you familiar with the State Implementation Plan (SIP) requirements pertaining to this source category of air emissions? [X] Yes [ ] No
3. Check the emissions regulated by the SIP requirements.

TSP	[ ]	SO_x	[ ]	CO	[ ]
Opacity	[ ]	NO_x	[ ]	None	[X]

4. Have there been any significant excursions, exceedences, or discrepancies from SIP regulations or permit parameters in this particular category? [ ] Yes [X] No
5. How many units have been tested since July 1977? 7

3.4.3 Stationary Internal Combustion/Turbine Engines

1. How many such units are at this facility? 7
2. Are you familiar with the State Implementation Plan (SIP) requirements pertaining to this source category of air emissions? [X] Yes [ ] No
3. Check the emissions regulated by the SIP requirements.

TSP	[ ]	SO_x	[ ]	Opacity	[ ]
HC	[ ]	NO_x	[ ]	None	[X]

4. Have there been any significant excursions, exceedances, or discrepancies from SIP regulations or permit parameters in this particular category? [ ] Yes [X] No
5. How many units have been tested since July 1977? 0
6. How many engines are there in each of the following horsepower ranges?

0 - 400 HP	7
401 - 1000 HP	
1001 - 2000 HP	
greater than 2000 HP	

INSTRUCTIONS

Complete these sections only if you have previously checked the air emission source in Section 3.3.4 or 3.3.5

Section 3.4.4 SO_x — Sulphur Oxides

HC — Hydrocarbons

VOC is generally defined as having a vapor prerssure greater than 1.5 psia. Check this for consistency with standards in your state, and use whatever pressure your state uses.

QUESTIONNAIRE

3.4.4 Emergency Flares

1. How many emergency flares are at this facility? 4

2. Are you familiar with the State Implementation Plan (SIP) requirements pertaining to this source category of air emissions? [X] Yes [ ] No

3. What emissions are regulated by the SIP requirements?

   SO_x [ ] Opacity [X]

   HC [ ] None [ ]

4. Have there been any significant excursions, exceedences, or discrepancies from SIP regulations or permit parameters in this particular category? [ ] Yes [X] No

3.4.5 Above Ground Petroleum Product Storage Tanks

1. How many tanks, other than crude tanks, storing volatile organic compounds (VOC) have a capacity of more than 40,000 gallons? 51

2. Are you familiar with the State Implementation Plan (SIP) for such tanks? [X] Yes [ ] No

3. How many crude tanks have a capacity:
   1,000 to 10,000 barrels 0
   greater than 10,000 barrels 2

4. Are you familiar with the State Implementation Plan (SIP) for such crude tanks? [X] Yes [ ] No

5. Does you SIP, as of 1 July 1980, require the installation of secondary seals, or equivalent vapor recovery devices? [X] Yes [ ] No

6. Have there been any significant excursions exceedences, or discrepancies from SIP regulations or permit parameters in this particular category? [ ] Yes [X] No

S (B) 00919

INSTRUCTIONS

Complete these sections only if you have previously checked the air emission source in Section ~~3.6.6~~ 3.3.6 or ~~3.6.7.~~ 3.3.7

Section 3.4.6 This item refers to VOC as defined in your state (s).

3.4.7 This refers to oil/water gravity separators which are *open to the atmosphere* prior to control, such as API separators.

S (B) 00920

QUESTIONNAIRE

3.4.6 Bulk Loading/Unloading of Volatile Organic Compounds (VOC)

1. Type of Loading/ Unloading Operation		Materials Handled	
[X]	Truck	Ref. 43-Q	(1)
[X]	RR tank car	-	(2)
[X]	Barge	-	(3)
[X]	Ship	-	(4)

2. Are you familiar with SIP requirements for this type of operation? [X] Yes [ ] No

3. Does the SIP, as of 1 July 1980, require vapor controls for such operations (other than controls of fugitive emissions from pumping/piping of petroleum)? [X] Yes [ ] No

4. Have there been any significant excursions exceedences, or discrepancies from SIP regulations or permit parameters in this particular category? [ ] Yes [X] No

3.4.7 Oil/Water Gravity Separators

1. How many such separators do you have at your facility? 3

2. How many receive more than 200 gallons per day of hydrocarbons? 3

3. Are you familiar with the SIP requirements for these separators? [X] Yes [ ] No

4. Does the SIP, as of 1 July 1980, require covering of these separators or equivalent measure? [X] Yes [ ] No

5. Have there been any significant excursions, exceedences, or discrepancies from SIP regulations or permit parameters in this particular category? [ ] Yes [X] No

S (B) 00921

INSTRUCTIONS

Section 3.4.8 **Complete this section only if you have previously checked the air emission source in Section 3.3.8.**

S (B) 00922

QUESTIONNAIRE

3.4.8 Fugitive Hydrocarbon Emissions

1. Estimate the approximate number of units at your facility in each of the following categories.

Category of Unit	Approximate # of Units	
Valves	84,000	(1)
Compressor seals	80	(2)
Pump seals	905	(3)
Flanges	168,000	(4)
Drains	1015	(5)
Relief valves	200	(6)
Sight glasses	250	(7)
Hatches	162	(8)

2. Are you familiar with SIP requirements for controlling fugutive hydrocarbon emissions from valves, compressors, pumps, flanges, etc? [X] Yes [ ] No

3. Does the SIP, as of 1 July 1980, require specific control measures for such fugitive hydrocarbon emissions? [X] Yes [ ] No

INSTRUCTIONS

Complete these sections only if you have previously checked the air emission source in Section 3.3.9 or 3.3.10.

Section 3.4.10 — *Do not* include maintenance operations.

S (B) 00924

QUESTIONNAIRE

3.4.9 Underground Petroleum Storage Tanks

1. How many underground tanks does your facility have with capacities greater than 2000 gallons? None

2. Are you familiar with the SIP Stage I requirements for controlling emmissions from underground storage tanks? [ ] Yes [ ] No

3. Does the SIP, as of July 1980, require vapor recovery measures for this type of facility? [ ] Yes [ ] No

4. Have there been any significant excursions, exceedences, or discrepancies from SIP regulations or permit parameters in this particular category? [ ] Yes [ ] No

3.4.10 Degreasing Operation

1. Are you familiar with SIP requirements for controlling emissions from this type of operation? [ ] Yes [ ] No

2. Does the SIP, as of July 1980, require specific control measures for this type of operation? [ ] Yes [ ] No

3. Have there been any significant excursions, exceedences, or discrepancies from SIP regulations or permit parameters in this particular category? [ ] Yes [ ] No

INSTRUCTIONS

Section 3.5.1 *Indicate whether your facility has been subject to any official actions, such as those listed , for violations of air quality regulations. If this questionnaire applies to a multiple facility, indicate which specific facility(ies) was (were) involved.*

If an official action was taken other than one of those listed, specify under "Other". Indicate date (month/year) of official action.

Indicate if any of the penalties listed were imposed. If a fine was imposed, list the amount. If other penalties were imposed, specify under "Other".

Indicate the current status of the violation source.

If additional space is required, Xerox a blank copy of the table, complete it, and attach it to the back cover of the questionnaire.

S (B) 00926

QUESTIONNAIRE

3.5 Environmental Regulatory Agency Actions

3.5.1 Air Quality Violations

		(1)	(2)	(3)	(4)	(5)	
Status of Violation	Other*						(17)
	Uncorrected						(16)
	Corrected						(15)
Penalty Imposed	Other*						(14)
	Facility Closed						(13)
	Operation Halted						(12)
	Fine (list amount)						(11)
	None						(10)
Agency							(9)
Date	yr.						(8)
	mo.						
Official Action	Other*						(7)
	Criminal Action						(6)
	Civil Action						(5)
	Administrative Order						(4)
	Notice of Violation						(3)
Type of Violation		None					(2)
Name of Facility (for multiple facilities only)							(1)

*"Other"

S (B) 00927

INSTRUCTIONS FOR
Section 4.0 - SOLID/HAZARDOUS WASTE

4.1 Waste Generation and Characteristics

Indicate any solid/hazardous waste types generated at your facility including those disposed of both on-site and off-site.

If you generate a waste not listed, enter it by name under "Other" in the waste type column.

If you discard any commercial chemicals, check for their inclusion on the EPA list (on the following pages) of acute hazardous and toxic wastes. List substances by their EPA Hazardous Waste Number.

For each waste generated, in the column headed "Generation Rate", indicate under "Amount" the number of tons, barrels, gallons, generated *per year.* Under the "Units/Year", use "T" to indicate *tons*, "B" for *barrels*, "G" for *gallons*, and "D" for *drums.*

Be sure to include periodically generated wastes, such as tank bottoms, and estimate a yearly amount as an average over two or more years.

Under the heading "Characteristics" indicate whether a waste is a liquid, semi-solid, or a solid.

For all waste types, except drilling mud, garbage/refuse, and the discarded commercial chemicals, evaluate their hazardousness or non-hazardousness in regard to *ignitability, corrosivity,* reactivity and *EP toxicity* by entering the correct number listed below.

1. Determined hazardous based on testing.
2. Determined non-hazardous based on testing.
3. Assumed hazardous based on judgment.
4. Assumed non-hazardous based on judgment.
5. Unknown

4.0 SOLID/HAZARDOUS WASTE

4.1 Waste Generation

I.D. Number	Waste Types	Generation Rate: Amount	Generation Rate: Units/Year	Characteristics: Physical Form: Liquid	Semi-Solid	Solid	Ignitability	Corrosivity	Reactivity	EP Toxicity	
1	Spent Catalysts	940,000	lbs.			X	2	2	2	2	
2	Spent Clays	200,000	lbs.			X	2	2	2	2	
3	Leaded Tank Bottoms	75000	lbs.		X		3	3	3	3	*
4	Unleaded Tank Bottoms	140,000	lbs.		X						
5	Dissolved Air Flotation Float	6,820,000	lbs.		X		2	2	2	1	*
6	Heat Exchanger Bundle Cleaning Sludge	9,000,000	lbs	X		X	2	2	2	2	*
7	API Separator Sludge	7,800,000	lbs.		X		2	2	2	2	*
8	Slop Oil Emulsion Solids	140,000	lbs.		X						*
9	Wastewater Treatment Plant Sludge	29,000	lbs.		X		2	2	2	2	
10	Septic Tank Solids										
11	Water Treatment Plant Sludge										
12	Garbage/Refuse	456,000	lbs.			X					
13	Crank Case Oil										
14	Spent Solvents										
15	Dredge Spoil										
16	Drillig Mud										
17	Tailings										
18	Assorted Lab Wastes										
19	Industrial Painting Residues										
	Discarded Commercial Chemicals (specify from EPA list)										
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
	Other (specify)										
31											
32											
33											
34											
35											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	

S (B) 00929

Hazardous waste No.	Substance
	1080 see P058
	1081 see P057
	(Acetato)phenylmercury see P092
	Acetone cyanohydrin see P069
P01	3 (alpha Acetonylbenzyl)-4-hydroxycoumarin and salts
P02	1 Acetyl-2 thiourea
P03	Acrolein
	Agann see P007
	Agrosan GN 5 see P092
	Aldicarb see P069
	Aldrin see P046
P04	Aldrin
	Algimycin see P092
P05	Allyl alcohol
P006	Aluminum phosphide (R)
	ALVIT see P037
	Aminoethylene see P054
P007	5 (Aminomethyl) 3-isoxazolol
P008	4-Aminopyridine
	Ammonium metavanadate see P119
P009	Ammonium picrate (R)
	ANTIMUCIN WDR see P092
	ANTURAT see P073
	AQUATHOL see P088
	ARETIT see P020
P010	Arsenic acid
P011	Arsenic pentoxide
P012	Arsenic trioxide
	Athrombin see P001
	AVITROL see P008
	Azidene see P054
	AZOFOS see P061
	Azophos see P061
	BANTU see P072
P013	Barium cyanide
	BASENITE see P020
	BCME see P016
P014	Benzenethiol
	Benzoepin see P050
P015	Beryllium dust
P016	Bis(chloromethyl) ether
	BLADAN-M see P071
P017	Bromoacetone
P018	Brucine
P019	2-Butanone peroxide
	BUFEN see P092
	Butaphene see P020
P020	2-sec Butyl-4,6-dinitrophenol
P021	Calcium cyanide
	CALOON see P020
P022	Carbon disulfide
	CERESAN see P092
	CERESAN UNIVERSAL see P092
	CHEMOX GENERAL see P020
	CHEMOX P E see P020
	CHEM-TOL see P090
P023	Chloroacetaldehyde
P024	p-Chloroaniline
P025	1-(p-Chlorobenzoyl)-5-methoxy-2 methyindole-3-acetic acid
P026	1-(o-Chlorophenyl)thiourea
P027	3-Chloropropionitrile
P028	alpha-Chlorotoluene
P029	Copper cyanide
	CRETOX see P108
	Coumadin see P001
	Coumafen see P001
P030	Cyanides
P031	Cyanogen
P032	Cyanogen bromide
P033	Cyanogen chloride
	Cyclodan see P050
P034	2-Cyclohexyl-4,6-dinitrophenol
	D-CON see P001
	DETHMOR see P001
	DETHNEL see P001
	DFP see P043
P035	2,4-Dichlorophenoxyacetic acid (2,4-D)
P036	Dichlorophenylarsine
	Dicyanogen see P031
P037	Dieldrin
	DIELDREX see P037
P038	Diethylarsine
P039	0,0-Diethyl-S-(2-(ethylthio)ethyl)ester of phosphorothioic acid
P040	0,0-Diethyl-0-(2-pyrazinyl)phosphorothioate
P041	0,0-Diethyl phosphoric acid, 0-p-nitrophenyl ester
P042	3,4-Dihydroxy-alpha-(methylamino)-methyl benzyl alcohol
P043	Diisopropylfluorophosphate
	DIMETATE see P044
	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro endo, endo see P060
P044	Dimethoate
P045	3,3-Dimethyl-1-(methylthio)-2-butanone-O-((methylamino)carbonyl) oxime
P046	alpha,alpha-Dimethylphenethylamine
	Dinitrocyclohexylphenol see P034
P047	4,6-Dinitro-o-cresol and salts
P048	2,4-Dinitrophenol
	DINOSEB see P020
	DINOSEBE see P020
	Disulfoton see P039
	DOW GENERAL see P020.
	DOW GENERAL WEED KILLER see P020
	DOW SELECTIVE WEED KILLER see P020
	DOWICIDE G see P060
	DYANACIDE see P092
	EASTERN STATES DUOCIDE see P001
	ELGETOL see P020
P050	Endosulfan
P051	Endrin
	Epinephrine see P042
P052	Ethylcyanide
P053	Ethylenediamine
P054	Ethyleneimine
	FASCO FASCRAT POWDER see P001
	FEMMA see P091
P055	Ferric cyanide
P056	Fluorine
P057	2-Fluoroacetamide
P058	Fluoroacetic acid, sodium salt
	FOLOOOL-80 see P071
	FOLOOOL M see P071
	FOSFERNO M 50 see P071
	FRATOL see P058
	Fulminate of mercury see P065
	FUNGITOX OR see P092
	FUSSOF see P057
	GALLOTOX see P092
	GEARPHOS see P071
	GERUTOX see P020
P059	Heptachlor
P060	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo, endo-dimethanonaphthalene
	1,4,5,6,7,7-Hexachloro-cyclic-5-norbornene-2,3-dimethanol sulfite see P050
P061	Hexachloropropene
P062	Hexaethyl tetraphosphate
	HOSTAQUICK see P092
	HOSTAQUIK see P092
	Hydrazomethane see P068
P063	Hydrocyanic acid
	ILLOXOL see P037
	INDOCI see P025
	Indomethacin see P025
	INSECTOPHENE see P050
	Isodrin see P060
P064	Isocyanic acid, methyl ester
	KILOSEB see P020
	KOP-THIODAN see P050
	KWIK-KIL see P108
	KWIKSAN see P092
	KUMADER see P001
	KYPFARIN see P001
	LEYTOSAN see P092
	LIQUIPHENE see P092
	MALIK see P050
	MAREVAN see P001
	MAR-FRIN see P001
	MARTIN'D MAR-FRIN see P001
	MAVERAN see P001
	MEGATOX see P005
P065	Mercury fulminate
	MERSOLITE see P092
	METACID 50 see P071
	METAFOS see P071
	METAPHOR see P071
	METAPHOS see P071
	METASOL 30 see P092
P066	Methomyl
P067	2-Methylaziridine
	METHYL-E 605 see P071
P068	Methyl hydrazine
	Methyl isocyanate see P064
P069	2-Methyllactonitrile
P070	2-Methyl-2-(methylthio)propionaldehyde-o-(methylcarbonyl) oxime
	METHYL NIRON see P042
P071	Methyl parathion
	METRON see P071
	MOLE DEATH see P108
	MOUSE-NOTS see P108
	MOUSE-RIO see P108
	MOUSE-TOX see P108
	MUSCIMOL see P007
P072	1-Naphthyl-2-thiourea
P073	Nickel carbonyl
P074	Nickel cyanide
P075	Nicotine and salts
P076	Nitric oxide
P077	p-Nitroaniline
P078	Nitrogen dioxide
P079	Nitrogen peroxide
P080	Nitrogen tetroxide
P081	Nitroglycerine (R)
P082	N-Nitrosodimethylamine
P083	N-Nitrosodiphenylamine
P084	N-Nitrosomethylvinylamine
	NYLMERATE see P092
	OCTALOX see P037
P085	Octamethylpyrophosphoramide
	OCTAN see P092
P086	Oleyl alcohol condensed with 2 moles ethylene oxide
	OMPA see P085
	ORTHOCIDE see P065
P088	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
	PANIVARFIN see P001
	PANORAM D-31 see P037
	PANTHERINE see P007
	PANWARFIN see P001
P089	Parathion
	PCP see P090
	PENNCAP-M see P071
	PENOXYL CARBON N see P048
P090	Pentachlorophenol
	Pentachlorophenate see P090
	PENTA-KILL see P090
	PENTASOL see P090
	PENWAR see P090
	PERMICIDE see P090
	PERMAGUARD see P090
	PERMATOX see P090
	PERMITE see P090
	PERTOX see P090
	PESTOX III see P085
	PHENMED see P092
	PHENOTAN see P020
P091	Phenyl dichloroarsine
	Phenyl mercaptan see P014
P092	Phenylmercury acetate
P093	N-Phenylthiourea
	PHILIPS 1861 see P008
	PHIX see P092
P094	Phorate
P095	Phosgene
P096	Phosphine
P097	Phosphorothioic acid, 0,0-dimethyl ester, 0-ester with N,N-dimethyl benzene sulfonamide
	Phosphorothioic acid 0,0-dimethyl-0-(p-nitrophenyl) ester see P071
	PIED PIPER MOUSE SEED see P108
P098	Potassium cyanide
P099	Potassium silver cyanide
	PREMERGE see P020
P100	1,2-Propanediol
	Propargyl alcohol see P102
P101	Propionitrile
P102	2-Propyn-1-ol
	PROTHROMADIN See P001
	QUICKSAM see P092
	QUINTOX see P037
	RAT AND MICE BAIT see P001
	RAT-A-WAY see P001
	RAT-B-GON see P001
	RAT-O-CIDE #2 see P001
	RAT-GUARD see P001
	RAT-KILL see P001
	RAT-MIX see P001
	RATS-NO-MORE see P001
	RAT-OLA see P001
	RATOREX see P001
	RATTUNAL see P001
	RAT-TROL see P001
	RO-DETH see P001
	RO-DEX see P108
	ROSEX see P001
	ROUGH & READY MOUSE MIX see P001
	SANASEED see P108
	SANTOBRITE see P090
	SANTOPHEN see P090
	SANTOPHEN 20 see P090
	SCHRADAN see P085
P103	Selenourea
P104	Silver Cyanide
	SMITE see P105
	SPARIC see P020
	SPOR-KIL see P092
	SPRAY-TROL BRAND RODEN-TROL see P001
	SPURGE see P020
P105	Sodium azide
	Sodium azomedn see P001
P106	Sodium cyanide
	Sodium fluoroacetate see P058
	SODIUM WARFARIN see P001
	SOLFARIN see P001
	SOLFOBLACK BB see P048
	SOLFOBLACK SB see P048
P107	Strontium sulfide
P108	Strychnine and salts
	SUBTEX see P020
	SYSTAM see P085
	TAG FUNGICIDE see P092
	TEKWAISA see P071
	TEMIC see P070
	TEMIK see P070
	TERM-I-TROL see P090
P109	Tetraethyldithiopyrophosphate
P110	Tetraethyl lead
P111	Tetraethylpyrophosphate
P112	Tetranitromethane
	Tetraphosphonic acid, hexaethyl ester see P062
	TETROSULFUR BLACK PB see P048
	TETROSULPHUR PBR see P048
P113	Thallic oxide
	Thallium peroxide see P113
P114	Thallium selenide
P115	Thallium (I) sulfate
	THIFOR see P092
	THIMUL see P092
	THIODAN see P050
	THIOSEP see P050

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	THIONEX see P050
	THIOPHENIT see P071
P116	Thiosemicarbazide
	Thiosultan tionel see P050
P117	Thiuram
	THOMPSON S WOOD FIX see P090
	TIOVEL see P050
P118	Trichloromethanethiol
	TWIN LIGHT RAT AWAY see P001
	USAF RH-8 see P069
	USAF EK-4890 see P002
P119	Vanadic acid ammonium salt
P120	Vanadium pentoxide
	VOFATOX see P071
	WANADU see P120
	WARCOUMIN see P001
	WARFARIN SODIUM see P001
	WARFICIDE see P001
	WOFOTOX see P072
	YANOCK see P057
	YASOKNOCK see P058
	ZIARNIK see P092
P121	Zinc cyanide
P122	Zinc phosphide (R,T)
	ZOOCOUMARIN see P001

[1] The Agency included those trade names of which it was aware, an omission of a trade name does not imply that the omitted material is not hazardous. The material is hazardous if it is listed under its generic name.

	AAF see U005
U001	Acetaldehyde
U002	Acetone (I)
U003	Acetonitrile (I,T)
U004	Acetophenone
U005	2-Acetylaminofluorene
U006	Acetyl chloride (C,T)
U007	Acrylamide
	Acetylene tetrachloride see U209
	Acetylene trichloride see U228
U008	Acrylic acid (I)
U009	Acrylonitrile
	AEROTHENE TT see U226
	3-Amino-5-(p-acetamidophenyl) 1H-1,2,4-triazole, hydrate see U011
U010	6-Amino-1,1a,2,8,8a,8b-hexahydro-8-(hydroxymethyl)8-methoxy-5-methylcarbamate azirino(2',3',3,4)-pyrrolo(1,2-a) indole-4, 7-dione (ester)
U011	Amitrole
U012	Aniline (I)
U013	Asbestos
U014	Auramine
U015	Azaserine
U016	Benz(c)acridine
U017	Benzal chloride
U018	Benz(a)anthracene
U019	Benzene
U020	Benzenesulfonyl chloride (C,R)
U021	Benzidine
	1,2-Benzisothiazolin-3-one, 1,1-dioxide see U202
	Benzo(a)anthracene see U018
U022	Benzo(a)pyrene
U023	Benzotrichloride (C,R,T)
U024	Bis(2-chloroethoxy)methane
U025	Bis(2-chloroethyl) ether
U026	N,N-Bis(2-chloroethyl)-2-naphthylamine
U027	Bis(2-chloroisopropyl) ether
U028	Bis(2-ethylhexyl) phthalate
U029	Bromomethane
U030	4-Bromophenyl phenyl ether
U031	n-Butyl alcohol (I)
U032	Calcium chromate
	Carbolic acid see U188
	Carbon tetrachloride see U211
U033	Carbonyl fluoride
U034	Chloral
U035	Chlorambucil
U036	Chlordane
U037	Chlorobenzene
U038	Chlorobenzilate
U039	p-Chloro-m-cresol
U040	Chlorodibromomethane
U041	1-Chloro-2,3-epoxypropane
	CHLOROETHENE NU see U226
U042	Chloroethyl vinyl ether
U043	Chloroethene
U044	Chloroform (I,T)
U045	Chloromethane (I,T)
U046	Chloromethyl methyl ether
U047	2-Chloronaphthalene
U048	2-Chlorophenol
U049	4-Chloro-o-toluidine hydrochloride
U050	Chrysene
	C I 23060 see U073
U051	Cresote
U052	Cresols
U053	Crotonaldehyde
U054	Cresylic acid
U055	Cumene
	Cyanomethane see U003
U056	Cyclohexane (I)
U057	Cyclohexanone (I)
U058	Cyclophosphamide
U059	Daunomycin
U060	DDD
U061	DDT
U062	Diallate
U063	Dibenz(a,h)anthracene
	Dibenz(a,h)anthracene see U063
U064	Dibenz(a,i)pyrene
U065	Dibromochloromethane
U066	1,2-Dibromo-3-chloropropane
U067	1,2-Dibromoethane
U068	Dibromomethane
U069	Di-n-butyl phthalate
U070	1,2-Dichlorobenzene
U071	1,3-Dichlorobenzene
U072	1,4-Dichlorobenzene
U073	3,3'-Dichlorobenzidine
U074	1,4-Dichloro-2-butene
	3,3'-Dichloro-4,4'-diaminobiphenyl see U073
U075	Dichlorodifluoromethane
U076	1,1-Dichloroethane
U077	1,2-Dichloroethane
U078	1,1-Dichloroethylene
U079	1,2-trans-dichloroethylene
U080	Dichloromethane
	Dichloromethylbenzene see U017
U081	2,4-Dichlorophenol
U082	2,6-Dichlorophenol
U083	1,2-Dichloropropane
U084	1,3-Dichloropropene
U085	Diepoxybutane (I,T)
U086	1,2-Diethylhydrazine
U087	0,0-Diethyl-S-methyl ester of phosphorodithioic acid
U088	Diethyl phthalate
U089	Diethylstilbesterol
U090	Dihydrosafrole
U091	3,3'-Dimethoxybenzidine
U092	Dimethylamine (I)
U093	p-Dimethylaminoazobenzene
U094	7,12-Dimethylbenz(a)anthracene
U095	3,3'-Dimethylbenzidine
U096	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	Dimethylcarbamoyl chloride
U098	1,1-Dimethylhydrazine
U099	1,2-Dimethylhydrazine
U100	Dimethylnitrosoamine
U101	2,4-Dimethylphenol
U102	Dimethyl phthalate
U103	Dimethyl sulfate
U104	2,4-Dinitrophenol
U105	2,4-Dinitrotoluene
U106	2,6-Dinitrotoluene
U107	Di-n-octyl phthalate
U108	1,4-Dioxane
U109	1,2-Diphenylhydrazine
U110	Dipropylamine (I)
U111	Di-n-propylnitrosamine
	EBDC see U114
	1,4-Epoxybutane see U213
U112	Ethyl acetate (I)
U113	Ethyl acrylate (I)
U114	Ethylenebisdithiocarbamate
U115	Ethylene oxide (I,T)
U116	Ethylene thiourea
U117	Ethyl ether (I,T)
U118	Ethyl methacrylate
U119	Ethyl methanesulfonate
	Ethylnitrile see U003
	Fremasier T23P see U235
U120	Fluoranthene
U121	Fluorotrichloromethane
U122	Formaldehyde
U123	Formic acid (C,T)
U124	Furan (I)
U125	Furfural (I)
U126	Glycidylaldehyde
U127	Hexachlorobenzene
U128	Hexachlorobutadiene
U129	Hexachlorocyclohexane
U130	Hexachlorocyclopentadiene
U131	Hexachloroethane
U132	Hexachlorophene
U133	Hydrazine (R,T)
U134	Hydrofluoric acid (C,T)
U135	Hydrogen sulfide
	Hydroxybenzene see U188
U136	Hydroxydimethyl arsine oxide
	4,4'-(Imidocarbonyl)bis(N,N-dimethyl)aniline see U014
U137	Indeno(1,2,3-cd)pyrene
U138	Iodomethane
U139	Iron Dextran
U140	Isobutyl alcohol
U141	Isosafrole
U142	Kepone
U143	Lasiocarpine
U144	Lead acetate
U145	Lead phosphate
U146	Lead subacetate
U147	Maleic anhydride
U148	Maleic hydrazide
U149	Malononenitrile
	MEK Peroxide see U160
U150	Melphalan
U151	Mercury
U152	Methacrylonitrile
	Methyl alcohol see U154
U153	Methyl chlorocarbonate
	Methyl chloroform see U226
U157	3-Methylcholanthrene
	Methyl chloroformate see U156
U158	4,4'-Methylene-bis (2-chloroaniline)
U159	Methyl ethyl ketone (MEK) (I,T)
U160	Methyl ethyl ketone peroxide (R)
	Methyl iodide see U138
U161	Methyl isobutyl ketone
U162	Methyl methacrylate (R,T)
U163	N-Methyl-N' nitro N nitrosoguanidine
U164	Methylthiouracil
	Mitomycin C see U010
U165	Naphthalene
U166	1,4-Naphthoquinone
U167	1-Naphthylamine
U168	2-Naphthylamine
U169	Nitrobenzene (I,T)
	Nitrobenzol see U169
U170	4-Nitrophenol
U171	2-Nitropropane (I)
U172	N-Nitroso-di-n-butylamine
U173	N-Nitrosodiethanolamine
U174	N-Nitrosodiethylamine
U175	N-Nitroso-di-n-propylamine
U176	N-Nitroso-n-ethylurea
U177	N-Nitroso-n-methylurea
U178	N-Nitroso-n-methylurethane
U179	N-Nitrosopiperidine
U180	N-Nitrosopyrrolidine
U181	5-Nitro-o-toluidine
U182	Paraldehyde
	PCNB see U185
U183	Pentachlorobenzene
U184	Pentachloroethane
U185	Pentachloronitrobenzene
U186	1,3-Pentadiene (I)
	Perc see U210
	Perchloroethylene see U210
U187	Phenacetin
U188	Phenol
U189	Phosphorous sulfide (R)
U190	Phthalic anhydride
U191	2-Picoline
U192	Pronamide
U193	1,3-Propane sultone
U194	n-Propylamine (I)
U196	Pyridine
U197	Quinones
U200	Reserpine
U201	Resorcinol
U202	Saccharin
U203	Safrole
U204	Selenious acid
U205	Selenium sulfide (R,T)
	Silvex see U233
U206	Streptozotocin
	2,4,5-T see U232
U207	1,2,4,5-Tetrachlorobenzene
U208	1,1,1,2-Tetrachloroethane
U209	1,1,2,2-Tetrachloroethane
U210	Tetrachloroethene
	Tetrachloroethylene see U210
U211	Tetrachloromethane
U212	2,3,4,6-Tetrachlorophenol
U213	Tetrahydrofuran (I)
U214	Thallium (I) acetate
U215	Thallium (I) carbonate
U216	Thallium (I) chloride
U217	Thallium (I) nitrate
U218	Thioacetamide
U219	Thiourea
U220	Toluene
U221	Toluenediamine
U222	o-Toluidine hydrochloride
U223	Toluene diisocyanate
U224	Toxaphene
	2,4,5-TP see U233
U225	Tribromomethane
U226	1,1,1-Trichloroethane
U227	1,1,2-Trichloroethane
U228	Trichloroethene
	Trichloroethylene see U228
U229	Trichlorofluoromethane
U230	2,4,5-Trichlorophenol
U231	2,4,6-Trichlorophenol
U232	2,4,5-Trichlorophenoxyacetic acid
U233	2,4,5-Trichlorophenoxypropionic acid and alpha, alpha, Trichlorotoluene see U023
	TRI-CLENE see U228
U234	Trinitrobenzene (R,T)
U235	Tris(2,3-dibromopropyl) phosphate
U236	Trypan blue
U237	Uracil mustard
U238	Urethane
	Vinyl chloride see U043
	Vinylidene chloride see U078
U239	Xylene

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INSTRUCTIONS

For each waste type generated in Section 4.1, complete accompanying information in the matrix of Section 4.2.

Section 4.2 Indicate those wastes generated at your facility which are stored on-site for more than 90 days.

Indicate those wastes generated at your facility which receive treatment prior to final disposal, the location of treatment (on-site or off-site), and the method of treatment.

Indicate the location (on-site or off-site) and the method of final disposal. If the method of *disposal* is not listed, please mark the "Other" column and specify at the bottom of that page: for example, Sun Company reclamation of waste #13, crank-case oil.

For any company owned operation, whether on-site or off-site, check the appropriate column under Company Ownership. If not company owned leave blank.

4.2 Waste Storage, Treatment, and Disposal

I.D. Number	Waste Types	Stored On-Site More Than 90 Days	Treatment Prior to Final Disposal: Location: On-Site	Treatment Prior to Final Disposal: Location: Off-Site	Treatment Prior to Final Disposal: Method: Thermal (Incineration)	Treatment Prior to Final Disposal: Method: Physical	Treatment Prior to Final Disposal: Method: Chemical	Final Disposal: Location: On-Site	Final Disposal: Location: Off-Site	Final Disposal: Method: Landfill	Final Disposal: Method: Land Farming	Final Disposal: Method: Pits, Ponds and Lagoons	Final Disposal: Method: Deep Well	Final Disposal: Method: Other (Specify Below)	Company Ownership: Transportation	Company Ownership: Treatment	Company Ownership: Disposal
1	Spent Catalyst							X		X	X				X	X	X
2	Spent Clays							X			X				X	X	X
3	Leaded Tank Bottoms							X	X		X					X	X
4	Unleaded Tank Bottoms							X	X		X					X	X
5	Dissolved Air Flotation Float							X			X					X	X
6	Heat Exchanger Bundle Cleaning Sludge							X	X		X		X			X	X
7	API Separator Sludge							X	X		X		X			X	X
8	Slop Oil Emulsion Solids							X	X		X		X			X	X
	Wastewater Treatment Plant Sludge							X			X				X	X	X
10	Septic Tank Solids																
11	Water Treatment Plant Sludge																
12	Garbage/Refuse								X	X							
13	Crank Case Oil																
14	Spent Solvents																
15	Dredge Spoil																
16	Drilling Mud																
17	Tailings																
18	Assorted Lab Wastes																
19	Industrial Painting Residues																
	Discarded Commercial Chemicals (specify from EPA list)																
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
	Other (specify)																
31																	
32																	
33																	
34																	
35																	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)

Other Disposal Methods - _____

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INSTRUCTIONS

Section 4.2.2 If your facility uses or has, at anytime in the past, used a storage or disposal facility, provide the information required regarding such facilities. Indicate the type of such a facility or facilities.

Section 4.2.2 If your facility uses or has, at any time in the past, used a storage disposal facility, provide the information required regarding such facilities. Indicate the type of such a facility or facilities.

Give its (their) size in appropriate units: i.e., acres, gallons, etc.

List the first and last calendar years during which it was used. If it is still active, write "Current" in the "Last Year" column.

List the types of wastes for which it was primarily used. (Use the identification numbers from Item 4.1 representing waste types.)

Describe briefly any security measures currently in effect to prevent unauthorized access: i.e., fencing, 24-hour patrolling, locking, etc.

Indicate whether ground water has been, or is currently being, monitored.

S (B) 00934

QUESTIONNAIRE

4.2.2 Active and Inactive Company-Utilized Waste Facilites

Type of Facility				Size	Location		Calendar Years When Used		Primary Wastes Involved	Security Measures to Prevent Unauthorized Access	Any Previous or Current Ground Water Monitoring	
Pits, Ponds, Lagoons	Landfill	Well	Landfarm		on-site	Off-site	First Year	Last Year			yes	no
X				12,600,000 gal.	X		1953	Present	Refinery Waste Water	Fenced, Guard		X
			X	17 Acres	X		1976	Present	API Sep. Sludge / Leaded Tk Btms	Fenced Guard	X	
X				2 Acres	X		1950	1977	Refinery and Drilling Wastes	Fenced, locked Signs		X
	X			17,000 cu. yds	X		1953	1978	Spent Catalyst	Fenced Guard		X
X				2,700,000 gal.	X		1953	Present	Lime Clay Catalyst	Fenced Guard		X
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	

NO INSTRUCTIONS NECESSARY

S (B) 00936

4.3 Regulatory Agency Requirements

4.3.1 Did you receive quidelines from your parent organization explaining the RCRA requirements for notifying EPA of hazardous waste activities? [X] Yes [ ] No

4.3.2 Were you required to file EPA Form 8700-12 (2-80) "Notification of Hazardous Waste Activity"? [X] Yes [ ] No [ ] Unknown

4.3.3 If so, did you file the form with EPA by August 18, 1980? [X] Yes [ ] No

4.3.4 If so, have you received an EPA ID Number * as proof that EPA received the form by August 18, 1980? [X] Yes [ ] No

4.3.5 If you are responding for multiple facilities, how many such notifications were filed? _____

* EPA I.D. No. WAS RECEIVED PRIOR TO FILING OF EPA FORM 8700-12 (2-80). NO CONFIRMATION OF RECEIPT OF FORM RECEIVED FROM EPA TO DATE.

INSTRUCTIONS

Section 4.3.6 *Indicate whether your facility has been subject to any official actions, such as those listed. for violations of hazardous waste regulations. If this questionnaire applies to a multiple facility, indicte which specific facility(ies) was(were) involved.*

If an official action was taken other than one of those listed, specify under "Other".

Indicate date (month/year) of official action.

Indicate if any of the penalties listed were imposed. If a fine was imposed, list the amount. If other penalties were imposed, specify under "Other".

Indicate the current status of the violation source.

If additional space is required, Xerox a blank copy of the table, complete it, and attach it to the back cover of the questionnaire.

QUESTIONNAIRE

4.3.6 Hazardous Waste Violations

		(1)	(2)	(3)	(4)	(5)	
Name of Facility (for multiple facilities only)							(1)
Type of Violation		None					(2)
Official Action	Notice of Violation						(3)
	Administrative Order						(4)
	Civil Action						(5)
	Criminal Action						(6)
	Other*						(7)
Date	mo. yr.						(8)
Agency							(9)
Penalty Imposed	None						(10)
	Fine (list amount)						(11)
	Operation Halted						(12)
	Facility Closed						(13)
	Other*						(14)
Status of Violation	Corrected						(15)
	Uncorrected						(16)
	Other*						(17)

*"Other"

INSTRUCTIONS

Section 4.4 This section is to be completed for *service stations ONLY.* If you do not have the information requested, respond with your best estimate.

If you use estimated, rather than recorded/established figures, indicate this with "E" following the number.

QUESTIONNAIRE

4.4 For Service Stations Only

4.4.1 How many service stations in the area covered by this questionnaire have service bays which perform engine oil changes? _____

4.4.2 How many such service stations generate more than 300 gallons of used crankcase oil per month? _____

4.4.3 For stations which generate less than 300 gallons per month, how many have a used crankcase oil storage capacity greater than 300 gallons? _____

4.4.4 How many such service stations disposed of their used crankcase oil via:

Reclaimer/recycler _____

Road oiler _____

Other _____

INSTRUCTIONS FOR
Section 5.0 - Wastewater Discharge

5.1 *Indicate in the first row those types of wastewater discharged from your facility. For each type of wastewater so checked, provide the other information in terms of the* **number** *of outfalls.*

Definitions:

Outfall - any discernible, confined, and discrete conveyancy, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure from which any fluid may be discharged. That is, an outfall is **not** limited to just a pipe or flume.

Primary treatment - sedimentation to remove gross solids, oil/water separation.

Secondary treatment - biological treatment to reduce organic loads.

Advanced treatment - processes beyond secondary treatment designed to remove organic and inorganic solids.

Waters of the United States - any stream, river, ocean, lake, mud flat, sand flat, wetland, slough, prairie pothole, wet meadow, playa lake, or natural pond.

Land application - spreading or spraying on the surface of the land where the intent is infiltration through the soil and/or evapotranspiration.

Non-point runoff - sheet flow where the wastewater leaves your facility (mark this row with an "X", if appropriate, because **number** *of outfalls is inappropriate).*

S (B) 00942

5.0 WASTEWATER DISCHARGE QUESTIONNAIRE

5.1 Type of Wastewater	(1) Process Wastewater	(2) Produced* Water	(3) Sanitary Wastewater	(4) Cooling Water	(5) Boiler Blowdown	(6) Ballast Water	(7) Stormwater
Check if generated at your facility	X		X	X	X	X	X
Total number of discrete outfalls	1		0	1	1	1	4
Total number of outfalls receiving:							
No treatment	0			0	0	0	3
Primary treatment	1			1	1	1	1
Secondary treatment	1			1	1	1	1
Advanced treatment	1			1	1	1	1
Total number of outfalls by method of disposal							
Point source to a surface water of the United States	1			1	1	1	4
Publically owned treatment works			1				
Publically owned stormwater conveyance system							
Land application							
Well							
Total number of outfalls monitored at least quarterly and reported to state/federal agency	1			1	1	1	1
Total number of outfalls covered by NPDES permit (issued or pending)	1			1	1	1	4
Total number of outfalls covered by state permit (issued or pending)	1			1	1	1	4

S (B) 00943

* From oil and gas exploration and production operations.

*This Refinery has a total of 4 discrete outfalls
Coloumns 1, 4, 5, 6, 7 are included in one outfall
The remaining 3 Outfalls are for stormwater only

NO INSTRUCTIONS NECESSARY

QUESTIONNAIRE

5.1.1 Of the storm water outfalls, how many contain dry weather flow? 0

5.1.2 How many of the storm water outfalls containing dry weather flow are monitored at least quarterly with results reported to EPA or a state agency? _____

5.2 Analytical Laboratory Control

5.2.1 Do you use your own *in-house* laboratory for analyzing wastewater effluent samples? [X] Yes [ ] No

5.2.2 *IF SO,* when was the last time wastewater effluent samples were split for analysis by an independent laboratory?

12 - 80
Month Year

5.2.3 If samples wre split for analysis by an independent laboratory, were the results compatible with those from your in-house analysis? [X] Yes [ ] No

5.2.4 If you use *outside laboratory* facilities for wastewater effluent sample analysis, do you split samples? [X] Yes [ ] No

5.2.5 Do you retain all sampling and analytical records for a minimum of three years? [X] Yes [ ] No

5.2.6 Do you operate any continuous on-line wastewater monitoring equipment? [X] Yes [ ] No

5.2.7 If so, is all of this monitoring equipment included in a statistically-based quality control maintenance program? [X] Yes [ ] No

INSTRUCTIONS

Section 5.3.1 *Under each year listed, give the total number of Wastewater Discharge Permit Exceedences* for each wastewater parameter listed. Indicate "0" (zero) if there were none for a given parameter/year. Leave a blank space for any parameter not monitored.*

EXAMPLE:

Wastewater Parameter	Number of Wastewater Discharge Permit Exceedences for Each Year			
	1977	1978	1979	1980
BOD	0	0	2	1
COD			4	2
TOC				

* Exceedences - Occasions when concentrations of parameters extablished by NPDES Permit or other regulation are exceeded or surpassed.

S (B) 00946

QUESTIONNAIRE

5.3 Regulatory Agency Actions

5.3.1 Number of Wastewater Discharge Permit Exceedences for Each Year

Wastewater Parameter	1977	1978	1979	1980	TOTALS
(1) BOD	2	5	1	8	16
(2) COD	1	3	0	3	7
(3) TOC	0	0	0	0	0
(4) TSS	9	8	0	2	19
(5) Oil and Grease	0	0	0	0	0
(6) Ammonia	0	0	0	0	0
(7) pH	0	4	1	0	5
(8) Sulfide	0	0	0	0	0
(9) Hexavelent Chromium	5	2	0	0	7
(10) Total Chromium	0	0	0	0	0
(11) Lead	0	0	0	0	0
(12) Zinc	0	0	0	0	0
Other					
(13) Phenol	1	2	3	0	6
(14)					
(15)					
TOTALS	18 (1)	24 (2)	5 (3)	13 (4)	60 (5)

5.3.2 Does your facility have an existing compliance schedule for wastewater discharge written into your NPDES or state permit? [ ] Yes [X] No

5.3.3 If so, are you meeting the deadlines? [ ] Yes [ ] No

INSTRUCTIONS

Section 5.3.4 *Indicate whether your facility has been subject to any official actions, such as those listed, for violations of wastewater discharge regulations. If this questionnaire applies to a multiple facility, indicate which specific facility(ies) was(were) involved.*

If an official action was taken other than one of those listed, specify under "Other".

If any of the penalties listed were imposed, so indicate it. If a fine was imposed, list the amount. If other penalties were imposed, specify under "Other".

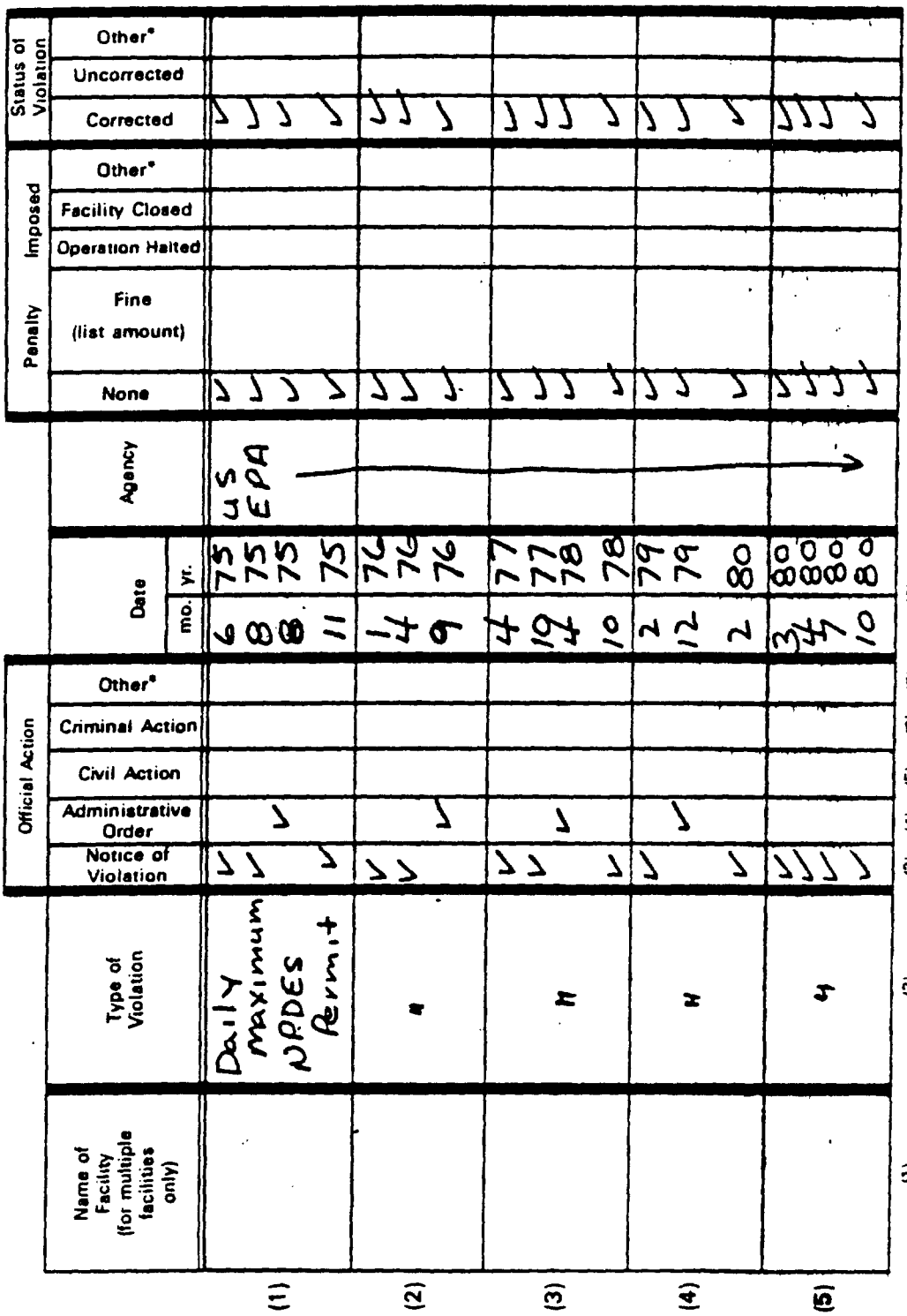
Indicate the current status of the violation source.

If additional space is required, Xerox and complete as many copies of the form as needed.

S (B) 00948

QUESTIONNAIRE

5.3.4 Wastewater Discharge Violations



		(1)	(2)	(3)	(4)	(5)
Name of Facility (for multiple facilities only)	(1)					
Type of Violation	(2)	Daily Maximum NPDES Permit	"	"	"	"
Official Action: Notice of Violation	(3)	✓ ✓ ✓	✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓ ✓
Official Action: Administrative Order	(4)	✓	✓	✓	✓	
Official Action: Civil Action	(5)					
Official Action: Criminal Action	(6)					
Official Action: Other*	(7)					
Date: mo.	(8)	6 8 8 11	1 4 9	4 10 4 10	2 12 2	3 4 10
Date: yr.	(8)	75 75 75 75	76 76 76	77 77 78 78	79 79 80	80 80 80 80
Agency	(9)	US EPA →	→	→	→	→
Penalty Imposed: None	(10)	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓
Penalty Imposed: Fine (list amount)	(11)					
Penalty Imposed: Operation Halted	(12)					
Penalty Imposed: Facility Closed	(13)					
Penalty Imposed: Other*	(14)					
Status of Violation: Corrected	(15)	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓
Status of Violation: Uncorrected	(16)					
Status of Violation: Other*	(17)					

*"Other"

S (B) 00949

INSTRUCTIONS FOR
Section 6.0 — DRINKING WATER QUALITY AND GROUND WATER PROTECTION — UNDERGROUND INJECTION CONTROL (UIC)

Section 6.1

If this questionnaire is addressed to a single facility or single source, respond in the spaces between the double horizontal lines. If it is addressed to a multiple facility or a single facility with more than one source, list the separate facilities or sources in the right hand column and respond for each one.

- **Source**

6.1.1 If the source of your facility's drinking water is a municipal water supply system (or private company or authority serving customers other than your facility), indicate this as a "Public Water Supply". If the source is a well, spring, or surface water (lake) on a property owned or controlled by your facility, or if you buy bottled water for facility personnel use, so indicate.

- **Treatment**

6.1.2 If you have indicated a private well, spring, or surface water as your facility's drinking water source, indicate the type (s) of treatment to which the water is subject. Or, if you use a public water supply and you subject it to further treatment, so indicate. (If bottled water is used, Items 6.1.2 and 6.1.3 do not apply.)

- **Monitoring**

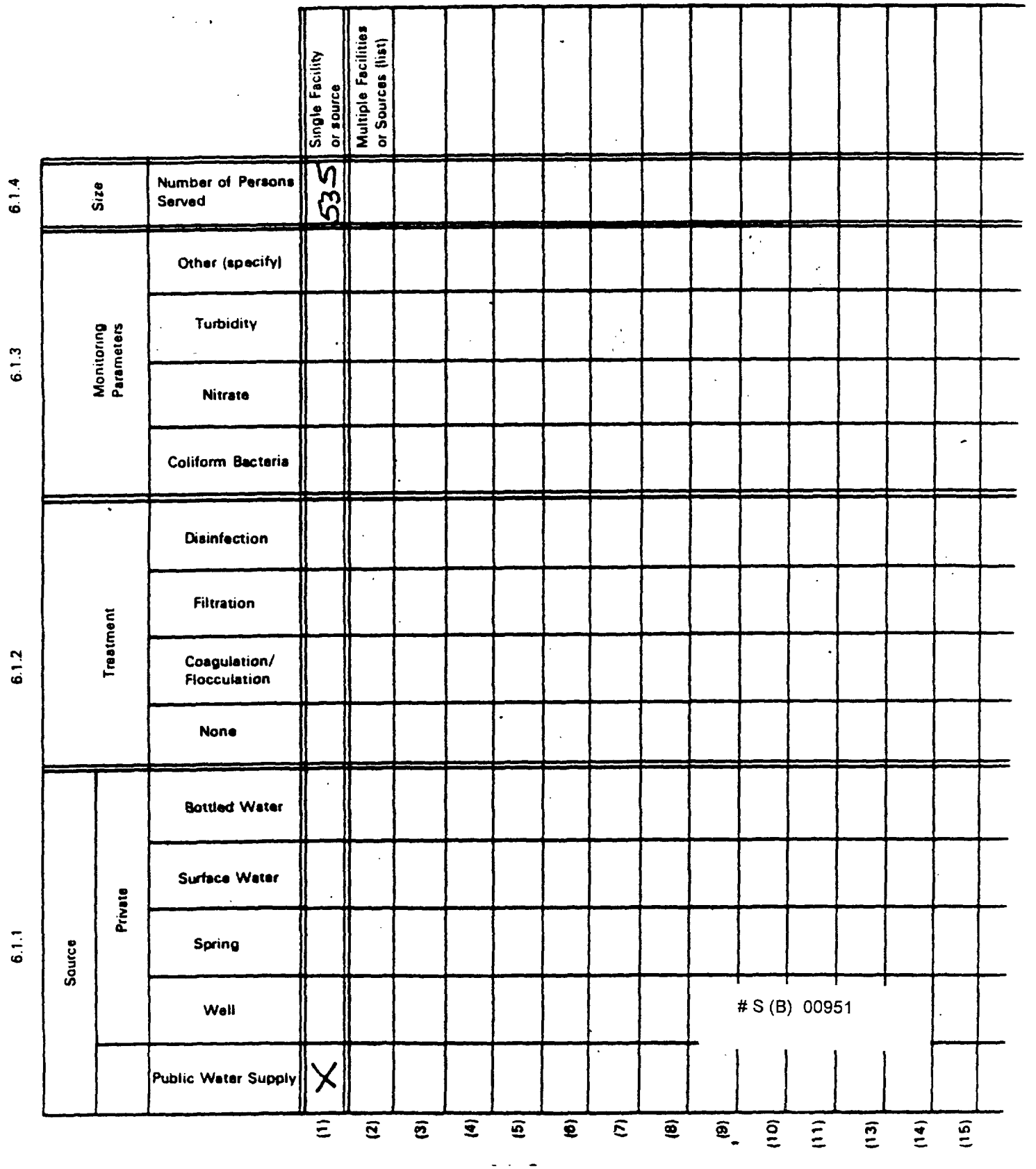
6.1.3 If you monitor your water supply, whether public or private, indicate the parameters for which it is monitored. Blanks in all four spaces will indicate "no monitoring". List any additional monitoring parameters by source at the bottom of the page.

- **Size**

6.1.4 Indicate the average number of persons served by this supply for at least 60 days out of the year.

QUESTIONNAIRE

6.0 DRINKING WATER QUALITY AND GROUND WATER PROTECTION — UNDERGROUND INJECTION CONTROL (UIC)



NO INSTRUCTIONS NECESSARY

S (B) 00952

QUESTIONNAIRE

6.1.5 If the drinking water supply for your facility is from *either* a *public* or a *private* source (other than bottled water):

Do you report results of monitoring to U.S. EPA or the state agency responsible for this activity?

[ ] Yes [X] No

6.1.6 If the drinking water supply for your facility is from *either* a public or a *private* source (other than bottled water):

Do you provide bulk amounts of water to individuals or companies outside the Sun Company organization?

[X] Yes [ ] No

S (B) 00953

INSTRUCTIONS

6.2.3 to 6.2.6 *On page 26-Q indicate the total number of wells at your facility in each Class.*

Class II and Class III Wells are subdivided into categories based on types of use. Give the subtotals of Class II and Class III Wells in each category.

Background and Definitions

EPA's consolidated permit regulations (published in the Federal Register on 19 May 1980) cover a Federal-state system of controls designed to insure that well injection practices do not endanger drinking water sources.

*"Underground injection" or "well injection" means the subsurface emplacement of fluids through a bored, drilled, or driven well; or through a dug well, where the depth of the well

driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

Injection wells are divided into Classes I to V as defined below.

Class I wells inject hazardous waste *beneath* the lowermost formation containing, within one-quarter mile of the well bore, an underground source of drinking water.

Class II wells are used for injections in conjunction with the production or underground storage of petroleum or natural gas.

Class II wells are used for the injection of fluids for the extraction of minerals or energy.

Class IV wells either: discharge hazardous waste directly *into* underground sources of drinking water, or discharge hazardous waste *above* underground sources of drinking water.

Class V wells are all injection wells which do not fit Class I to IV definitions.

S (B) 00954

6.2 Underground Injection* Control (UIC)

6.2.1 Do you have any underground injection wells at your facility?

[ ] Yes [ ] No

IF NOT, proceed to Section 6.3

6.2.2 *IF SO,* what is the total number of all underground injection wells at your facility? _____

UIC WELL CLASSIFICATION		NO. OF WELLS IN CTGY.	TOTAL NO. OF WELLS IN CLASS	
6.2.3	Class I Wells			(1)
6.2.4	Class II Wells Used for the injection of produced water or other fluids which are:			
	(Category 1) brought to the surface in connection with conventional oil or natural gas production			(2)
	(Category 2) used to enhance recovery of oil or natural gas			(3)
	(Category 3) liquid hydrocarbons for storage			(4)
	Total wells in Class II			(5)
6.2.5	Class III Wells Used for the injection of fluids for the extraction of minerals or energy:			
	(Category 1) mining of sulfur by the Frasch process			(6)
	(Category 2) solution mining of minerals			(7)
	(Category 3) in situ combusion of fossil fuel			(8)
	(Category 4) recovery of geothermal energy			(9)
	Total wells in Class III			(10)
6.2.6	Class IV Wells			(11)
6.2.7	Class V Wells All injection wells not in Classes I—IV			(12)

NO INSTRUCTIONS NECESSARY

QUESTIONNAIRE

6.3 Ground Water Protection and Monitoring

6.3.1 Monitoring System

1. Does your facility have ground water monitoring wells? [X] Yes [ ] No

[IF NOT, proceed to Section 6.3.2]

2. IF SO, how many monitoring wells? 3

3. Are the locations of these wells shown on a map maintained at the facility? [X] Yes [ ] No

4. Do you have well construction details relative to the following?

— Total depth [X] Yes [ ] No
— Length of casing [X] Yes [ ] No
— Diameter of casing [X] Yes [ ] No
—Screened or slotted interval [X] Yes [ ] No

6.3.2 Is information on record at your facility with regard to the following parameters of the ground water flow system at your facility?

1. Type and sequence of subsurface deposits [X] Yes [ ] No
2. Depth to ground water [X] Yes [ ] No
3. Fluctuation of water table [ ] Yes [X] No
4. Direction of ground water flow [X] Yes [ ] No
5. Point of discharge [ ] Yes [X] No
6. Use (s) of ground water within ¼ mile of the facility [X] Yes [ ] No
7. Direction to point of use [X] Yes [ ] No

S (B) 00957

NO INSTRUCTIONS NECESSARY

S (B) 00958

6.3.3 Monitoring Results

1. Have monitoring wells been sampled?

[X] Yes [ ] No

IF NOT, proceed to Section 7.0

2. IF SO, give the date of the latest sampling

0 9 (Month) 8 0 (Year)

3. If sampling is done periodically, indicate the frequency:
   yearly X
   quarterly_____
   monthly_____
   other (specify)_____

4. Was a laboratory analysis of samples conducted by a qualified professional?

[X] Yes [ ] No

5. Have the sampling data been reported to a regulatory agency?

[ ] Yes [X] No

6. Has any professional person experienced in hydrogeology and/or water quality interpretation reviewed these data?

[ ] Yes [X] No

7. Have sampling data results indicated a significant deterioration of water quality?

[ ] Yes [X] No

INSTRUCTIONS FOR
Section 7.0 — POLYCHLORINATED BIPHENYLS (PCBs)

Section 7.1.3 *Supply the required number for transformers or the matrix provided. Transformers without testing data or manufacturer's specifications regarding PCB concentrations should be entered under "Unknown".*

BACKGROUND ON EPA PCB REGULATIONS

On 31 May 1979, the U.S. EPA published in the Federal Register (44FR31514) the Final Ban Rule for PCBs which applies to any substance, mixture or item with 50 ppm or greater PCB. PCB Waste oil is forbidden from being used as a sealant, coating, or dust control agent.

The Final Rule says that EPA can grant exemptions from the PCB manufacturing/importation ban effective 2 July 1979—or from the PCB processing/distribution in commerce prohibition effective 1 July 1979.

In general, anyone wanting an exemption must petition EPA for it. An exemption, valid for only one year, must be granted annually through a formal rulemaking. In some instances, individuals may not have to seek separate exemptions when the Agency grants "class" exemptions for some processing and distribution in commerce bans.

The 31 May 1979 Federal Register, Section 750.31 (a), lists and describes the categories that may file class exemption petitions. If your activity is not listed in Section 750.31 (a), you must file a petition on an individual basis.

The Ban Rule says that EPA can grant exemptions, known as authorizations, to enable the continued manufacturing, processing, distribution in commerce, or use of PCBs in a non-totally enclosed manner after 2 July 1979.

EPA may propose and grant an authorization without a specific request from those who will benefit from the authorization. Also, the authorization can be valid for any time period that EPA finds appropriate.

The following non-totally enclosed PCB activities have already been authorized by EPA (beside each, is the Rule section to refer to for details):

- servicing PCB Transformers and PCB-Contaminated Transformers (Section 761.31 (a));
- use in and servicing of Railroad Transformers (Section 761.31 (b));
- use in and servicing of Mining Equipment (Section 761.31 (c));
- use in Heat Transfer Systems (Section 761.31 (d));
- use in Hydraulic Systems (Sectin 761.31 (e));
- use in Natural Gas Pipeline Compressors (Section 761.31 (i));

QUESTIONNAIRE

7.0 POLYCHLORINATED BIPHENYLS (PCBs)

7.0.1 Are you familiar with servicing, storage, disposal, and record keeping requirements established in EPA's May 31, 1979 Final Ban Rule for PCBs?

[X] Yes [ ] No

If not, please re-read the background discussion on page 29-I.

7.1 Transformers

7.1.1 Do you have any facility-owned transformers in active service or stored on-site?

[X] Yes [ ] No

[*IF NOT,* proceed to Section 7.2.]

7.1.2 *IF SO,* have you conducted, or are you presently conducting a survey of your facility's transformers?

[X] Yes [ ] No

7.1.3

Transformers with PCB Concentration of:	Total No. of Transformers (1)	No. Labeled (2)	No. in Active Service (3)	No. in Storage or Inactive (4)	Maximum Length of Time Stored (5)
>500 ppm	18	18	16	2	9 years
50-500 ppm	8	8	8		
<50 ppm	35		35		
Unknown Concentration					

INSTRUCTIONS

7.2.2 Enter the appropriate numbers for capacitors on the matrix provided.

S (B) 00962

QUESTIONNAIRE

7.2 Capacitors

7.2.1 Have you conducted, or are you presently conducting a survey of your facility's capacitors?

[X] Yes [ ] No

2.2

Capacitors with PCB Concentration of:	Total Number of Capacitors (1)	Number Labeled (2)	size: No. with < 3 lbs. Dielectric fluid (3)	size: No. with > 3 lbs. dielectric fluid (4)	No. in Active Service (5)	No. in Storage of Inactive (6)	Maximum Length of Time Stored (7)
>500 ppm	40	40		40		40	2 years
50-500 ppm							
< 50 ppm	32			32	32		
Unknown Concentration							

S (B) 00963

INSTRUCTIONS

Section 7.3 The hydraulic fluid in such equipment as compressors, cherry pickers, etc. may contain PCBs.

QUESTIONNAIRE

7.3 Other Equipment

7.3.1 Other than transformers and capacitors, are you aware of any other types of equipment at your facility which contain PCBs?

[ ] Yes [X] No

7.3.2 *IF SO,* list such items below, give the total number of each type of equipment, and the concentration of PCBs (in ppm) they contain.

	Type of Equipment	Number	Concentration PCB (ppm)
(1)			
(2)			
(3)			
(4)			
(5)			
(6)			
	(1)	(2)	(3)

INSTRUCTIONS FOR
Section 8.0 — ASBESTOS

Definitions:

* *Asbestos* means actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite. "Friable asbestos material" means any material that contains more than one percent (1%) asbestos by weight and that can be crumbled, pulverized, or reduced to powder, when dry, by hand.

** *Renovation* means the removing or stripping of friable asbestos materials used on any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member.

From:

Environmental Protection Agency Regulations on National Emission Standards for Hazardous Air Pollutants (40 CFR 61; 38 FR 8820, April 6, 1973; Amended as shown in Code of Federal Regulations, Volume 40, Revised as of July 1, 1978; 43 FR 47692, October 16, 1978; 44 FR 7714, February 7, 1979; 44 FR 55174, September 25, 1979; 44 FR 65399, November 13, 1979)

QUESTIONNAIRE

8.0 ASBESTOS*

8.1 Are you familiar with EPA's regulations on National Emission Standards for Asbestos, a hazardous air pollutant?

[X] Yes [ ] No

8.2 Do you have asbestos at your facility?

[X] Yes [ ] No

8.3 Have you renovated** any equipment involving asbestos in the past year?

[X] Yes [ ] No

8.4 Do you plan to renovate any equipment in the next year?

[X] Yes [ ] No

8.5 Are you familiar with EPA's required written notice of intention to renovate such equipment?

[X] Yes [ ] No

8.6 Do you have an on-site active or inactive facility in which asbestos-containing material is being or has been deposited?

[ ] Yes [X] No

8.7 Are you familiar with the EPA regulations which apply to owners of such facility, e.g. do you have a chain link fence around such a facility?

[X] Yes [ ] No

8.8 Are you in compliance with these regulations?

[X] Yes [ ] No [ ] Unknown

NO INSTRUCTIONS NECESSARY

S (B) 00968

QUESTIONNAIRE

8.9 Are you familiar with the EPA criteria for an acceptable asbestos disposal facility?

[X] Yes [ ] No

8.10 Have you disposed of any asbestos-containing material in such a facility since July 1977?

[X] Yes [ ] No [ ] Unknown

8.11 Have you disposed of any asbestos-containing material in a *non-complying* facility since July 1979?

[ ] Yes [X] No

INSTRUCTIONS FOR
Section 9.0 — SPILL REPORTING AND PREVENTION PLANNING

Section 9.1.2 For each reportable spill of oil or hazardous waste to waters of the United States at your facility since July 1977, supply, in the space provided: a brief description including the type and quantity of material spilled, the date of the spill, cause of the spill, and remedial measures taken.

EXAMPLE:

9.1.2 Reportable Oil or Hazardous Material Spills to Water of the U.S. since July 1977. [Give the required information on spills under the headings indicated below.]

Spill Description	Date	Cause	Remedial Measures
Fuel oil	06/17/79	Forklift ruptured drum	Time Off

9.0 SPILL REPORTING AND PREVENTION PLANNING

9.1 Reporting

9.1.1 Who and/or what is the title of the job function(s) at your facility responsible for reporting spills to the regulatory agencies:

J. R. Kampfhenkel — Chief Environmental Enginee
Name — Title

9.1.2 Reportable oil or Hazardous Material Spills to kWater of the U.S. since July 1977.
(Give the required information on spills under the headings indicated below.)

	Spill Description	Date (mo./day/yr.)	Cause	Remedial Measures
(1)	Crude Oil	11-5-77	Dock Hose Leak	Replaced Hose + Clean u
(2)	Sunsol 100	11-7-77	Line leak	Repaired leak + Clean
(3)	Slop Oil	1-22-78	Sewer Vent	Repaired + Clean
(4)	Gas Oil	4-30-78	Boom Support Leak	New Seal + Clean
(5)	Fuel Oil	4-17-78	Pipe Rusted Out	Repaired
(6)	Crude Oil	5-18-78	Trashunder Valve Seat	Repaired Valve
(7)	Crude Oil	7-6-78	Relief Valve	-
(8)	Crude Oil	5-15-79	Hose leak	Blind Hose
(9)	Gas Oil	6-11-79	Relief Valve	Repaired Valve
(10)	Lt. Cycle Oil / Lt. Cycle Oil	6-19-79 / 4-17-80	FLANGE GASKET / Relief Valve	REPLACED GASKET / -
	#2 Fuel Oil	7-8-80	-	-
	Natural Gasoline (1)	9-11-80 (2)	Line Leak (3)	Repaired Leak (4)
	Lt Cycle Oil	11-12-80	Inexperienced Dockman	Disciplined
	Gas Oil	12-3-80	Leaking Boot on Line	Replaced Boot Clean-up

S (B) 00971

NO INSTRUCTIONS NECESSARY

S (B) 00972

QUESTIONNAIRE

9.2 Non-transportation Related Planning

9.2.1 Do you have a Spill Prevention Control and Countermeasure (SPCC) Plan in your files?

[X] Yes [ ] No

9.2.2 IF NOT, is there an internal letter documenting that you do not need an SPCC Plan?

[ ] Yes [ ] No

9.2.3 IF SO, when was the SPCC last up-dated?

05 / 80
mo yr

9.2.4 Was the SPCC Plan certified by a licensed professional engineer?

[X] Yes [ ] No

9.2.5 Have any significant changes in your facility's operations occurred since the last modification/up-date of the SPCC Plan?

[ ] Yes [X] No

INSTRUCTIONS

Background

9.3 On January 31, 1981, the Coast Guard issued revised regulations for "Oil Pollution Prevention-Vessels and Marine Oil Transfer Facilites" (33 CFR Parts 154, 155, and 156).

§154.300 (a) requires that "The facility operator of each facility to which this part applies shall submit, with the letter of intent, an operations manual."

§154.325 (a) states that "The letter of adequacy is a letter, from the COTP to the facility operator certifying that the operations manual meets the requirements of this part."

§155.720 requires "... procedures that meet the requirements of this part and Part 156."

§155.740 states that the procedures mentioned above,"...must be available for inspection by the COTP or OCMI..."

§155.820 and §156.150 require that records be maintained

QUESTIONNAIRE

9.3 Transportation Related Planning

9.3.1 For Facilities

(1) Does your facility require an operation manual according to 33 CFR, Part 154?

[X] Yes [ ] No [ ] Unknown

(2) IF SO, does your facility have one?

[X] Yes [ ] No [ ] Unknown

(3) Does your facility require a letter of adequacy according to Section 154.325?

[X] Yes [ ] No [ ] Unknown

(4) *IF SO,* does your facility have one?

[ ] Yes [X] No [ ] Unknown

9.3.2 For Vessels

(1) Do you require procedures according to Section 155.720?

[ ] Yes [ ] No [ ] Unknown

(2) *IF SO,* are they properly available as required in Section 155.740?

[ ] Yes [ ] No [ ] Unknown

(3) Are your records complete and up-to-date according to Section 155.820 and Section 156.150?

[ ] Yes [ ] No [ ] Unknown

NO INSTRUCTIONS NECESSARY

QUESTIONNAIRE

10.0 SURFACE MINING CONTROL AND RECLAMATION ACT (SMCRA) N/A

10.1 Is this an underground _____ or surface _____ mine?

10.2 Does your facility operate in a state that has submitted a program to obtain primacy to implement SMCRA?

[ ] Yes [ ] No

10.3 Has this state obtained final approval to implement SMCRA?

[ ] Yes [ ] No

10.4 Has your facility filed a SMCRA permit application by August 3, 1980?

[ ] Yes [ ] No

10.5 If not, what is the basis for claiming exemption from SMCRA?

_____

_____

_____

10.6 Does your permit application include a plan for the protection of water during operation and reclamation?

[ ] Yes [ ] No

10.7 Does your permit application include a plan for protection of vegetation and wildlife during operation and reclamation?

[ ] Yes [ ] No

10.8 Do you foresee any problems in obtaining a final SMCRA permit?

[ ] Yes [ ] No

10.9 If so, please explain _____

_____

_____

NO INSTRUCTIONS NECESSARY

QUESTIONNAIRE

11.0 TOXIC SUBSTANCES CONTROL ACT (TSCA): Section 8(e)

11.1 Are you the individual responsible for implementing TSCA Section 8(e) at your facility?

[ ] Yes [X] No

11.2 If not, have you consulted the appropriate knowledgable persons before completing Section 11?

[X] Yes [ ] No

11.3 Are you familiar with the provisions of Section 8(e) of the Toxic Substance Control Act which requires any person who is manufacturing, processing, or distributing chemicals, and obtains information of any substantial risk of injury to health or the environment by said chemical substance or mixture, to report this information to EPA?

[X] Yes [ ] No

11.4 Are you familiar with what is meant by "substantial risk to health or the environment:" i.e., what type of injury to health or the environment is to be reported?

[X] Yes [ ] No

11.5 Describe the mechanism in place in your facility for reporting such "substantial risk" information to EPA through Sun Company personnel: Information sent to Sun Co. Regional Medical Rep. in Dallas, Tx

11.6 To whom, outside of Sun Company, may an employee report such "substantial risk" information? EPA - Region VI Dallas, Tx. Dr. Bryon Niebruegge who reviews and reports to Sun Co. TSCA Committee

11.7 Have their been any such internal or external reports made at your facility?

[ ] Yes [X] No

11.8 If so, how many? _____

11.9 Please explain the disposition of these reports: _____

_____

_____

S (B) 00979

NO INSTRUCTIONS NECESSARY

S (B) 00980

QUESTIONNAIRE

12.0 MISCELLANEOUS FEDERAL LAWS AND REGULATIONS

12.1 Corps of Engineer Permits for Dredge and Fill Projects

1. Are you familiar with Clean Water Act Section 404 provisions for Dredge and Fill Permits?

   [ ] Yes [X] No

2. Have you ever applied for a Dredge and Fill permit for this facility?

   [ ] Yes [ ] No

3. How many permits have been granted? _____

4. How many permits have been denied? _____

5. If any permits have been denied, please explain _____

   _____

12.2 Coastal Zone Management Act

1. Does your facility operate in a state with a designated coastal zone?

   [X] Yes [ ] No

2. Does this state have a fully approved Coastal Zone Management Plan?

   [ ] Yes [X] No

3. Are you familiar with the provisions of this Coastal Zone Management Plan in terms of how it might affect the operational expansion of your facility?

   [ ] Yes [ ] No

4. Has this Coastal Zone Management Plan affected your expansion/ modernization planning?

   [ ] Yes [ ] No

5. If so, please explain _____

   _____

   _____

NO INSTRUCTIONS NECESSARY

S (B) 00982

12.3 Endangered Species Act

1. Has your facility's expansion/modernization been impeded by the Endangered Species Act?

[ ] Yes [X] No

2. If so, please explain _____

_____

_____

12.4 Antiquities Act of 1906

1. Has your facility been impacted by this Act?

[X] Yes [ ] No

2. If so, please explain Certain areas of the refinery have been found to contain old bones and other artifacts

12.5 Deepwater Ports Act

1. Has your facility or related transportation services been affected by this law?

[ ] Yes [X] No

12.6 Marine Protection, Research, and Sanctuaries Act

1. Does your facility now engage in any ocean disposal activites?

[ ] Yes [X] No

2. Have any of your dredge and fill activities been affected by this law?

[ ] Yes [X] No

3. If so, please explain _____

_____

_____

INSTRUCTIONS FOR
Section 13.0 — ENVIRONMENTAL PROGRAM EVALUATION

Sections 13.0 calls for subjective judgments and valuations. Your opinions, perceptions and priorities are required input.

QUESTIONNAIRE

13.0 ENVIRONMENTAL PROGRAM EVALUATION

13.1 List in descending order of importance your three most significant environmental problems.

1. Solid Waste - Unavailability of off-site treatment and disposal facilities for Hazardous Wastes
2. Solid Waste - Availability of approved technology for treatment and disposal of Hazardous Wastes
3. Method of implementing fugitive emissic program

13.2 Rate the significance of the following factors in solving the problems you have identified above or in improving general compliance.
[Check one column for each factor.]

Factor	Insignificant	Contributing	Important	Critical
(1) Additional personnel			X	
(2) Training of personnel at your facility			X	
(3) Additional information on regulatory matters			X	
(4) Capital improvements			X	
(5) Additional laboratory and/or engineering support			X	
(6) Operating improvements			X	
(7) Maintenance improvements			X	
(8) Local management awareness			X	
(9) Greater legal support			X	
	(1)	(2)	(3)	(4)

S (B) 00985

INSTRUCTIONS FOR
Section 14.0 — QUESTIONNAIRE FEEDBACK

Please give the name and title of the person responsible for completing this questionnaire and the date of its completion. The responsible person (Questionnaire Respondent) is to sign in the space provided.

QUESTIONNAIRE

14.0 QUESTIONNAIRE FEEDBACK

14.1 Approximately how many man-hours were required to complete this questionnaire? 30

14.2 What suggestion can you make for improving this questionnaire?

Improve Clarity of questions

14.3 Do you feel that there were any benefits to your facility to be derived from completing this questionnaire?

[X] Yes [ ] No

IF SO, what were they?

Record Evaluation
Management Awareness

Questionnaire Respondent:

J. H. Alston
G. Myers
Name

Title

J. H. Alston
G. Myers
Signature

12-19-80
Date

(512) 241-4811
Telephone Number

Reviewed 1-19/80

S (B) 00987

INSTRUCTIONS

NOTES

- Use these pages (43-Q and 44-Q) for completing responses for which there was insufficient room in the body of the questionnaire.
- Number your responses to correspond to the question being answered.
- Attach additional completed matrix tables to the back cover of this questionnaire; include your Questionnaire Number from the front cover on each page.

QUESTIONNAIRE

NOTES

Pg. 10-Q Materials Handled

Truck

SS-250
SS-245
SS-170
SS-290
SS-280
Gasoline
Propane-Propylene
Kerosene
Diesel
Propane
Butane
Iso-butane

R-R Tank Cars

Cumene
Cresylic Acid
O-xylene
Benzene
Propane-Propylene
Coke
Pseudocumene
Toluene
SS-145
SS-100
SS-250
SS-245
SS-177
SS-290
SS-280
Hydrofluoric Acid
Sodium Hydroxide

Barge and Ship

Gas 0.1
SS-100
Naphtha
Styrene
SS-145
Xylene
#2 Fuel Oil
Gasoline
Benzene
Toluene
Cumene
Pseudocumene
JP-4
Crude

QUESTIONNAIRE

NOTES

Please list and attach all additional pages here.

Page No.	No. of Copies

INTEROFFICE CORRESPONDENCE

SUBJECT: HAZARDOUS CHEMICALS HANDBOOK

DATE: January 31, 1979

OFFICE: Corpus Christi Refinery - Loss Control Department

FROM: M. K. Powell

TO: All Supervisors

It has come to my attention that there are several copies still around of a red, one-inch, 3-ring binder entitled "Hazardous Chemicals Handbook". This book apparently was put togetner in the early 1960's and lists the hazardous properties, preventative measures, and first aid treatment for many chemicals found in the refinery.

The information presented in the Handbook was excellent information .... at the time that it was published. We have learned a great deal about the toxicity and industrial hygiene of these chemicals since that time. As a result, much of the information in the Handbook based upon what we know now is misleading and sometimes even wrong.

For example, benzene is no longer thought to cause an employee to "laugh, shout, curse, or sing" as an indication of overexposure.

Rather than trying to update and republish this handbook, please destroy all copies. We will be issuing Material Safety Data Sheet notebooks in the near future. These notebooks will provide this type information based upon current knowledge.

M. K. Powell

MKP/vp

S (B) 00992

Does this correspondence really have to be filed?