Monsanto

FROM (NAME & LOCATION): Chester F. Moore - W. G. Krummrich Plant

DATE: February 4, 1972 CC:

SUBJECT: VOLUNTARY REPORT FOR THE FEDERAL EPA SURVEY OF INDUSTRIAL WASTE WATER DISCHARGES

REFERENCE:

TO :

Messrs.

~~R. M.~~ Blowers
C. F. Buckley
M. R. Foresman
P. E. Heisler
G. A. Hippe
P. B. Hodges (3) - G. O.
D. B. Hosmer - G. O.

Attached for your information is a copy of the report submitted to the Federal EPA as applicable to the discharges from the WGK Plant into the Sauget Village sewer system.

Chester F. Moore

/ghw

CER 082375

PAUL HODGES DEPOSITION
May 31 - June 1, 1994
EXHIBIT NO. 37

IN-10 REV 11-65

CONFIDENTIAL 92-CV-204-WDS

WATER_PCB-SD0000005668

OMB No. 158-R0010 Approval Expires 30 Sep 74

ENVIRONMENTAL PROTECTION AGENCY

Office of Water Programs

Report of Industrial Wastewater Discharges

NOTICE

Please read carefully the instructions and notes below before attempting to complete this report.

a. If your facility has filed or will be filing an application with the U.S. Army Corps of Engineers for a permit to discharge into navigable waters, completion of this form should be governed by the following:

1. Where there is no discharge other than to navigable waters and there are no personnel or facilities for treatment of wastewater prior to discharge: complete Items 1 through 5, 8 and 9 of Section I and return the report with a statement to that effect.
2. Where there is no discharge other than to navigable waters but wastewater treatment is provided before discharge: complete Items 1 through 5, 8 and 9 of Section I and a full Section III.
3. Where there are discharges other than to navigable waters, e.g. to municipal facilities, surface containments, etc.: complete Items 1 through 5, 8 and 9 of Section I, a Section II for each discharge other than those to navigable waters and a full Section III where treatment of wastewater before discharge is involved.

(b.) If your facility is not required to obtain a Corps of Engineers discharge permit, complete Section I, disregarding Items 6, 7, 10 and 11. Complete a Section II for each discharge and a Section III where treatment of wastewater before discharge is involved.

c. All information contained in this report will, upon request, be made available to the public for inspection and copying. Confidential treatment may be extended to specific information which the reporting company considers to constitute trade secrets or commercial or financial information of a confidential nature. Such information must be reported on a separate sheet entitled "Confidential Answers" and must clearly indicate the item to which it applies. Confidentiality will be extended if the reporting company can clearly demonstrate to the satisfaction of the Administrator of the Environmental Protection Agency or his authorized representative that the disclosure of such information to the general public would divulge methods or processes entitled to protection as trade secrets or would reveal commercial or financial information of a confidential nature. In no event will identification of the contents and frequency of a discharge be recognized as confidential or privileged information.

d. Submission of information requested on this form is voluntary.

e. Indicate type of report by circling either a.1., a.2., a.3., or b. above.

SECTION I. GENERAL INFORMATION

1. State (standard abbreviation): I L

U.S. Army Corps of Engineers Application No.: ___ ___ ___ ___ ___ ___ ___ (Div. Dist. Type Seq. No.)

Code No. (to be assigned by EPA):

2. Name of reporting company, agency or other organization:
MONSANTO INDUSTRIAL CHEMICALS COMPANY

3. Mailing address of reporting company, agency or other organization
800 No. LINDBERGH BLVD.
ST. LOUIS, MISSOURI
63166

4. Name, telephone number, title and mailing address of authorized agent for coordination and correspondence regarding this report
Name: CHESTER F. MOORE
Telephone Number: 618-271-5535
Title: ENGINEERING SPECIALIST
Mailing Address: MONSANTO COMPANY
W. G. KRUMMRICH PLANT
SAUGET, ILLINOIS 62201

Signature and title of principal officer responsible for completing and forwarding this report

Signature: GERALD L. BRATSCH
Title: PLANT MANAGER

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5. Date 11 mo 23 day 71 yr

6. Check if facility is new [ ] or existing [ ]

7. Name of facility

8. Name of plant where discharge will occur
W. G. KRUMMRICH PLANT

9. Full mailing address of plant named in item 8 above
SAUGET, ILLINOIS 62201

10. Name of receiving water(s) to which plant discharges or will discharge (list all)

11. Check if water is discharged directly to navigable waters [ ]

12. If activity is temporary in nature, estimate its duration in months

13. List intake sources

Source	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal or private water supply system	52.62
Surface water body	0
Ground water	57.76
Other	0

14. Describe water usage within the plant

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Cooling water	6.46 6/6
Boiler feed water	6.6 5/5
Process water	3.8 3/3
Sanitary system*	.1 5/5
Other	.2 5/5

15. List volume of discharges or losses other than into navigable waters

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal waste treatment system	10.73
Surface containment	0
Underground disposal	0
Waste acceptance firms	0
Evaporation	.5 0/5
Consumption	.1 5/5

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1300

* Indicate number employees served per day

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SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION

1. Discharge described below is
a. Present [X] b. Proposed new or changed [ ]

2. Implementation schedule [ ]

(Office use only)

Name of corporate boundaries within which the point of discharge is located

3. State: ILLINOIS
4. County: ST. CLAIR
5. City or Town: SAUGET

6. Discharge Serial No.: 001

State the precise location of the point of discharge

7. Latitude 90 Degrees: 10 Min: 20 Sec.
8. Longitude 36 Degrees: 35 Min: 41 Sec.

9. Name of waterway or other point of discharge
SAUGET VILLAGE SEWER
SAUGET, ILLINOIS 62201

10. Has application for water quality certification or description of impact been made? If so, give date:

Date: ___ mo ___ day ___ yr

Check if certificate is attached to form [ ]

Name Issuing Agency: ___

11. Narrative description of activity (include terms of general 4-digit Standard Industrial Classification, and specific manufacturing process)

GENERAL: MANUFACTURE OF INDUSTRIAL INORGANIC AND ORGANIC CHEMICALS.

SPECIFIC: PRODUCTION OF CHEMICALS LISTED IN ITEM 13 BELOW.

12. Standard Industrial Classification Code number	13. Principal products	14. Amount of principal products produced per day
SIC 281 AND 2818	a. ORGANICS	a. 418,900
	b. CHLOR-ALKALI	523,500
	c. CHLORINATED PHOSPHORUS COMPOUNDS	137,500

15. Principal raw materials	16. Amount of principal raw materials consumed per day	17. Number of batch discharges per day
		47

18. Average gallons per batch discharge	19. Date discharge began	20. Date discharge will begin
3800.	SINCE ___ mo ___ day 17 yr	___ mo ___ day ___ yr

21. Describe waste abatement practices

- ALL PROCESS UNITS DISCHARGING INTO THE SEWER SYSTEM UTILIZE ONE OR MORE OF THE FOLLOWING TO MINIMIZE WASTES ENTERING THE EFFLUENT: ESEGRE, RECOVE, RECYCL, LEVAPO, OMONIT, WCONTR.
- ABATEMENT PRACTICES CURRENTLY USED FOR CONTROL OF DISCHARGES FROM THE CHLOR-ALKALI PROCESS ARE: ESEPAR, ESEGRA, EMERGE, DEHING, DELIMI, RECOVE, RECYCL, LOCALS, CNEUTR, CCHEMI, PSEDIM, TSANDF, TSOTHR (COAL AND POLISH FILTRITION), EMERGE OMONIT ANT WCONTR.
- ALL WASTE STREAMS DISCHARGE TO THE SAUGET VILLAGE WASTE TREATMENT PLANT FOR FURTHER TREATMENT.

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22. PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE

Discharge Serial No. 001 | (Office use only)

Parameter and Code	Intake: Untreated Intake Water (1)	Intake: Treated Intake Water (1)	Discharge: Average (Daily) (2)	Discharge: Minimum (Operating Year) (3)	Discharge: Maximum (Operating Year) (4)	Discharge: Sample Frequency (5)	Discharge: Continuous Monitoring (6)	Discharge: (7)
Flow (Gallons per day) 00056		2,534,400	3,096,000	5,630,400	5,630,400	5,630,400 SEE NOTE 1	OTHR	ABS
pH 00400		7.0	7.1	2	2	2	OTHR	ABS
Temperature (Winter) (°F) 74028		62	45	69	69	69	OTHR	ABS
Temperature (Summer) (°F) 74027		70	82	NOT AVAILABLE			OTHR	ABS

23. DISCHARGE CONTENTS

PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT
Color 00080			Aluminum 01105			Nickel 01067		
Turbidity 00070			Antimony 01097			Selenium 01147		
Radioactivity 74050			Arsenic 01002			Silver 01077		
Hardness 00900			Beryllium 01012			Potassium 00937		
Solids 00500			Barium 01007			Sodium 00929		
Ammonia 00610			Boron 01022			Titanium 01152		
Organic Nitrogen 00605			Cadmium 01027			Tin 01102		
Nitrate 00620			Calcium 00916			Zinc 01092		
Nitrite 00615			Cobalt 01037			Algicides 74051		
Phosphorus 00665			Chromium 01034			Oil and Grease 00550		
Sulfate 00945			Copper 01042			Phenols 32730		
Sulfide 00745			Iron 01045			Surfactants 38260		
Sulfite 00740			Lead 01051			Chlorinated Hydrocarbons 74052		
Bromide 71870			Magnesium 00927			Pesticides 74053		
Chloride 00940			Manganese 01055			Fecal Streptococci Bacteria 74054		
Cyanide 00720			Mercury 71900			Coliform Bacteria 74056		
Fluoride 00951			Molybdenum 01062					

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24a. Have all known hazardous or potentially hazardous substances in your plant been inventoried?

☐ Yes ☐ No

24b. If yes, have steps been taken to insure that there exists no possibility of any such known hazardous or potentially hazardous substance entering this discharge?

☐ Yes ☐ No

25. Remarks

NOTES:
1. SINGLE 24 HR. CONTINUOUS SAMPLE.
2. (CONTINUED ON ATTACHMENT A).

The information above completes the basic reporting which is requested of all plants. Those plants whose discharge results from an activity included within any of the Standard Industrial Classification Code (SIC Code) categories listed below are also requested to complete Parts A and B of this Section.

CRITICAL INDUSTRIAL GROUPS

SIC	098	FISH HATCHERIES, FARMS, AND PRESERVES
SIC	10–14	DIVISION B – MINING
SIC	201	MEAT PRODUCTS
SIC	202	DAIRY PRODUCTS
SIC	203	CANNED PRESERVED FRUITS, VEGETABLES (EXCEPT SEAFOODS, SIC 2031 AND 2036)
SIC	2031, 2036	CANNED AND CURED FISH AND SEAFOODS; FRESH OR FROZEN PACKAGED FISH AND SEAFOODS
SIC	204	GRAIN MILL PRODUCTS
SIC	206	SUGAR
SIC	207	CONFECTIONARY AND RELATED PRODUCTS
SIC	208	BEVERAGES
SIC	209	MISCELLANEOUS FOOD PREPARATIONS AND KINDRED PRODUCTS
SIC	22	TEXTILE MILL PRODUCTS
SIC	23	APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS
SIC	242	SAWMILLS AND PLANING MILLS
SIC	2432	VENEER AND PLYWOOD
SIC	2491	WOOD PRESERVING
SIC	26	PAPER AND ALLIED PRODUCTS
SIC	281	INDUSTRIAL INORGANIC AND ORGANIC CHEMICALS (EXCEPT SIC 2818)
SIC	2818	INDUSTRIAL ORGANIC CHEMICALS
SIC	282	PLASTIC MATERIALS AND SYNTHETIC RESINS, SYNTHETIC RUBBER, SYNTHETIC AND OTHER MAN-MADE FIBERS, EXCEPT GLASS
SIC	283	DRUGS
SIC	284	SOAP, DETERGENTS, AND CLEANING PREPARATIONS, PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS
SIC	285	PAINTS, VARNISHES, LACQUERS, ENAMELS, AND ALLIED PRODUCTS
SIC	2871	FERTILIZERS
SIC	2879	AGRICULTURAL PESTICIDES, AND OTHER AGRICULTURAL CHEMICALS, NOT ELSEWHERE CLASSIFIED
SIC	2891	ADHESIVES AND GELATIN
SIC	2892	EXPLOSIVES
SIC	29	PETROLEUM REFINING AND RELATED INDUSTRIES
SIC	3011, 3069	TIRES AND INNER TUBES; FABRICATED RUBBER PRODUCTS, NOT ELSEWHERE CLASSIFIED
SIC	3079	MISCELLANEOUS PLASTIC PRODUCTS
SIC	311	LEATHER TANNING AND FINISHING
SIC	32	STONE, CLAY, GLASS, AND CONCRETE PRODUCTS
SIC	331	BLAST FURNACES, STEEL WORKS, AND ROLLING AND FINISHING MILLS
SIC	332	IRON AND STEEL FOUNDRIES
SIC	333, 334	PRIMARY SMELTING AND REFINING OF NONFERROUS METALS; SECONDARY SMELTING AND REFINING OF NONFERROUS METALS
SIC	336	NONFERROUS FOUNDRIES
SIC	347	COATING, ENGRAVING, AND ALLIED SERVICES
SIC	35	MACHINERY, EXCEPT ELECTRICAL
SIC	36	ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES
SIC	37	TRANSPORTATION EQUIPMENT (EXCEPT SHIP BUILDING AND REPAIRING, SIC 3731)
SIC	3731	SHIP BUILDING AND REPAIRING
SIC	491	ELECTRIC COMPANIES AND SYSTEMS
SIC	493	COMBINATION COMPANIES AND SYSTEMS

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Item 25

Notes (continued)

2. The decision to report on but two discharges for the W. G. Krummrich Plant was based on the following:

   a) There is a very complicated network of sewers from the process units but they all collect into two main sewers discharging from the plant.

   b) There are over 100 different chemical products manufactured. These products are for internal use as well as for sales and can be grouped into about 7 different chemical families.

   c) To respond at this time for either (1) each process unit, or (2) each chemical family, would not be possible in the time allowed. In addition, it would be extremely time consuming and costly.

   d) In order to respond with data as requested on the questionnaire, it was assumed that this report for our plant discharges would satisfy your requirements, at this time, for the national inventory of industrial wastewater discharges being compiled.

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PART A

(Note: Submission of Part A is requested of all activities whose processes are listed on page 3 above.)

(Office use only)

Discharge Serial No. 001

INFORMATION REQUESTED OF SPECIFIED INDUSTRIES

Intake — SEE NOTE 3, B-4 — Discharge — SEE NOTE 1, B-4

PARAMETER AND CODE	(1) (DAILY AVG. CONCENTRATION) UNTREATED INTAKE WATER	(2) (DAILY AVG. CONCENTRATION) TREATED INTAKE WATER	(3) MAXIMUM CONCENTRATION PER PROCESS UNIT	(4) MAXIMUM POUNDS PER DAY	(5) DAILY AVG. CONCENTRATION	(6) AVERAGE POUNDS PER DAY	(7) SAMPLE TYPE	(8) SAMPLE FREQUENCY	(9) METHOD OF ANALYSIS	(10) CONTINUOUS MONITORING	(11)
ALKALINITY (as $CaCO_3$) 00410	223	117	0	0	0	0	0	CONT	OTHR		ABS
B.O.D. 5-DAY 00310	52	<5	166	7,785	7,785	166	7,785	CONT	OTHR		ABS
CHEMICAL OXYGEN DEMAND (C.O.D.) 00340	150	14	705	33,064	33,064	705	33,064	CONT	OTHR		ABS
TOTAL SOLIDS 00500	520	290	3,675	172,357	172,357	3,675	172,357	CONT	OTHR	SEE NOTE 2, B-4	ABS
TOTAL DISSOLVED SOLIDS 70300	490	275	3,560	166,964	166,964	3,560	166,964	CONT	OTHR		ABS
TOTAL SUSPENDED SOLIDS 00530	5	2	42	1,970	1,970	42	1,970	CONT	OTHR		ABS
TOTAL VOLATILE SOLIDS 00505	125	95	530	24,857	24,857	530	24,857	CONT	OTHR		ABS
AMMONIA (as N) 00610	0.70	0.30	82	3,846	3,846	82	3,846	CONT	OTHR		ABS
KJELDAHL NITROGEN 00625	1.5	0.90	84	3,940	3,940	84	3,940	CONT	OTHR		ABS
NITRATE (as N) 00620	<0.05	0.75	0.10	4.7	4.7	0.10	4.7	CONT	OTHR		ABS
PHOSPHORUS TOTAL (as P) 00665	0.5	<0.1	0.6	28	28	0.6	28	CONT	OTHR		ABS

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TABLE A
Guide for Completion of Part A

PARAMETER & UNIT	METHOD	REFERENCES			SIGNIFICANCE IN REPORTING DATA
		STANDARD METHODS 13TH ED. 1971	A.S.T.M. STANDARDS Pt. 23 1970	W.Q.O. METHODS 1971	
ALKALINITY AS $Ca\ CO_3$ Mg/liter	ELECTROMETRIC TITRATION TECHNICON METHYL ORANGE METHOD	p. 370	p. 154	p. 6	X.
B.O.D. 5-DAY Mg/liter	MODIFIED WINKLER METHOD OR PROBE METHOD	p. 489	p. 712	p. 15	X.
CHEMICAL OXYGEN DEMAND (C.O.D.) Mg/liter	DICHROMATE REFLUX METHOD	p. 495	–	p. 17	X.
TOTAL SOLIDS Mg/liter	GRAVIMETRIC, 105°C. METHOD	p. 535	–	p. 280	X.
TOTAL DISSOLVED (FILTERABLE) SOLIDS Mg/liter	GLASS FIBER FILTRATION METHOD, 180°C.	p. 539	–	p. 275	X.
TOTAL SUSPENDED (NON-FILTERABLE) SOLIDS Mg/liter	GLASS FIBER FILTRATION METHOD, 103–105°C.	p. 537	–	p. 278	X.
TOTAL VOLATILE SOLIDS Mg/liter	GRAVIMETRIC METHOD 550°C.	p. 536	–	p. 282	X.
AMMONIA (as N) Mg/liter	DISTILLATION-NESSLERIZATION METHOD OR TECHNICON-DIGESTION & PHENOLATE METHOD	p. 453	–	p. 134	.XX
KJELDAHL NITROGEN Mg/liter	DIGESTION-DISTILLATION METHOD OR TECHNICON-DIGESTION & PHENOLATE METHOD	p. 469	–	p. 149	.XX
NITRATE (as N) Mg/liter	BRUCINE SULFATE METHOD OR TECHNICON-HYDRAZINE REDUCTION METHOD	p. 461	–	p. 170	.XX
TOTAL PHOSPHORUS (as P) Mg/liter	PERSULFATE DIGESTION & SINGLE REAGENT METHOD OR TECHNICON-MANUAL DIGESTION & SINGLE REAGENT OR STANNOUS CHLORIDE	p. 526	–	p. 235	.XX

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PART B DISCHARGE DESCRIPTION

(Note: Submission of Part B is requested of all activities who have completed Part A. Only those parameters specifically indicated in the instructions are to be reported by a particular industry)

(Office use only)

Discharge Serial No. 001

B-1. PHYSICAL AND BIOLOGICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-1)

	Intake	Discharge					
PARAMETER AND CODE	UNTREATED INTAKE WATER (1)	TREATED INTAKE WATER (2)	AVERAGE (DAILY) (3)	MINIMUM (OPERATING YEAR) (4)	MAXIMUM (OPERATING YEAR) (5)	SAMPLE FREQUENCY SEE NOTE 1, B-4 (6)	CONTINUOUS MONITORING (7)
COLOR 00080	50	5	DOES NOT CONFORM	X	DOES NOT CONFORM	0	A
SPECIFIC CONDUCTANCE 00095							
TURBIDITY 00070				X			
FECAL STREPTOCOCCI BACTERIA 74054				X			
FECAL COLIFORM BACTERIA 74055				X			
TOTAL COLIFORM BACTERIA 74056				X			

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PART B

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Discharge Serial No. 001

B-2. CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake — SEE NOTE 3, B-4 — Discharge — SEE NOTE 1, B-4

PARAMETER AND CODE	(1) UNTREATED INTAKE WATER	(2) TREATED INTAKE WATER	(3) MAXIMUM CONCENTRATION	(4) MAXIMUM POUNDS PER DAY PER PROCESS UNIT	(5) MAXIMUM POUNDS PER DAY	(6) DAILY AVG. CONCENTRATION	(7) AVERAGE POUNDS PER DAY	(8) SAMPLE TYPE	(9) SAMPLE FREQUENCY	(10) METHOD OF ANALYSIS	(11) CONTINUOUS MONITORING
ACIDITY (as $CaCO_3$) 00435	0	0	2,080	97,552	97,552	2,080	97,552	X	0		A
TOTAL ORGANIC CARBON (T.O.C.) 00680	55	5	198	9,286	9,286	198	9,286	X	0	B-4	A
TOTAL HARDNESS 00900											
NITRITE (as N) 00615										See Note 2,	
ORGANIC NITROGEN 00605											
PHOSPHORUS-ORTHO (as P) 70507											
SULFATE 00945	24	18	12	563	563	12	563	X	0		A
SULFIDE 00745	0.1	<0.1	0.1	4.7	4.7	0.1	4.7	X	0		A
SULFITE 00740											
BROMIDE 71870											

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PART B

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Discharge Serial No. 001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

PARAMETER AND CODE	Intake: UNTREATED INTAKE WATER (1)	Intake: TREATED INTAKE WATER (2)	Discharge: MAXIMUM CONCENTRATION (3)	Discharge: MAXIMUM POUNDS PER DAY PER PROCESS UNIT (4)	Discharge: MAXIMUM POUNDS PER DAY (5)	Discharge: DAILY AVG. CONCENTRATION (6)	Discharge: AVERAGE POUNDS PER DAY (7)	SAMPLE TYPE (8)	SAMPLE FREQUENCY (9)	METHOD OF ANALYSIS (10)	CONTINUOUS MONITORING (11)
CHLORIDE 00940	49	20	2,500	117,250	117,250	2,500	117,250	X	0		A
CYANIDE 00720	<0.01	0.01	0.22	10	10	0.22	10	X	0		A
FLUORIDE 00951	0.3	0.8	0.3	14	14	0.3	14	X	0		A
ALUMINUM-TOTAL 01105	<50	<50	2,000	94	94	2,000	94	X	0	B-4	A
ANTIMONY-TOTAL 01097										SEE NOTE 2,	
ARSENIC-TOTAL 01002	10	<10	20	0.9	0.9	20	0.9	X	0		A
BARIUM-TOTAL 01007											
BERYLLIUM-TOTAL 01012											
BORON-TOTAL 01022											
CADMIUM-TOTAL 01027	<10	<10	100	4.7	4.7	100	4.7	X	0		A

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WATER_PCB-SD0000005679

PART B

(Office use only)

Discharge Serial No. 001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake	Discharge										
PARAMETER AND CODE	(1) UNTREATED INTAKE WATER	(2) TREATED INTAKE WATER	(3) MAXIMUM CONCENTRATION	(4) MAXIMUM POUNDS PER DAY PER PROCESS UNIT	(5) MAXIMUM POUNDS PER DAY	(6) DAILY AVG. CONCENTRATION	(7) AVERAGE POUNDS PER DAY	(8) SAMPLE TYPE	(9) SAMPLE FREQUENCY	(10) METHOD OF ANALYSIS	(11) CONTINUOUS MONITORING
CALCIUM-TOTAL 00916	71	44	140	6,566	6,566	140	6,566	X	O		A
CHROMIUM-TOTAL 01034	<50	<50	<50	<2.3	<2.3	<50	<2.3	X	O		A
COBALT-TOTAL 01037	<100	<100	<100	<4.7	<4.7	<100	<4.7	X	O		A
COPPER-TOTAL 01042	<50	<50	2,000	93.8	93.8	2,000	93.8	X	O	SEE NOTE 2, B-4	A
IRON-TOTAL 01045	1900	50	42,000	1,970	1,970	42,000	1,970	X	O		A
LEAD-TOTAL 01051	<10	<10	4,700	220	220	4,700	220	X	O		A
MAGNESIUM-TOTAL 00927	26.5	16	32.5	1,524	1,524	32.5	1,524	X	O		A
MANGANESE-TOTAL 01055	800	<50	600	28	28	600	28	X	O		A
MERCURY-TOTAL 71900	<1	<1	5	0.23	0.23	5	0.23	X	O		A
MOLYBDENUM-TOTAL 01062											

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PART B

(Office use only)

Discharge Serial No. 001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

	Intake		Discharge								
PARAMETER AND CODE	(1) UNTREATED INTAKE WATER	(2) TREATED INTAKE WATER	(3) MAXIMUM CONCENTRATION	(4) MAXIMUM POUNDS PER DAY PER PROCESS UNIT	(5) MAXIMUM POUNDS PER DAY	(6) DAILY AVG. CONCENTRATION	(7) AVERAGE POUNDS PER DAY	(8) SAMPLE TYPE	(9) SAMPLE FREQUENCY	(10) METHOD OF ANALYSIS	(11) CONTINUOUS MONITORING
NICKEL-TOTAL 01067											
POTASSIUM-TOTAL 00937	5.0	3.0	625	29,312	29,312	625	29,312	X	O		A
SELENIUM-TOTAL 01147											
SILVER-TOTAL 01077										B-4	
SODIUM-TOTAL 00929	57	14	210	9,849	9,849	210	9,849	X	O	2,	A
THALLIUM-TOTAL 01059										SEE NOTE	
TIN-TOTAL 01102											
TITANIUM-TOTAL 01152	<100	<100	300	14	14	300	14	X	O	V	A
ZINC-TOTAL 01092	<50	50	6,000	281	281	6,000	281	X	O		A
OIL AND GREASE 00550	20	<1	14	657	657	14	657	X	O		A

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PART B

(Office use only)

Discharge Serial No. 001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2).

	Intake		Discharge								
PARAMETER AND CODE	(1) UNTREATED INTAKE WATER	(2) TREATED INTAKE WATER	(3) MAXIMUM CONCENTRATION	(4) MAXIMUM POUNDS PER DAY PER PROCESS UNIT	(5) MAXIMUM POUNDS PER DAY	(6) DAILY AVG. CONCENTRATION	(7) AVERAGE POUNDS PER DAY	(8) SAMPLE TYPE	(9) SAMPLE FREQUENCY	(10) METHOD OF ANALYSIS	(11) CONTINUOUS MONITORING
PHENOLS 32730			7,000	328	328	7,000	328	X	O		A
SURFACTANTS 38260										-	
ALGICIDES* 74051		1								B-4	
CHLORINATED HYDRO-CARBONS* (EXCEPT PESTICIDES) 74052 ORGANICS	A	A	<1	<470	<470	<1	<470	X	O	SEE NOTE 2,	A
PESTICIDES* 74053		1									

*Name specific compound(s) and fill in the required data for each. Use extra blanks at the end of the form and the "Remarks" space as necessary.

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PART B

(Office use only)

Discharge Serial No. 001

B-3. RADIOACTIVE PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-3)

	Intake	Discharge					
PARAMETER AND CODE	(1) UNTREATED INTAKE WATER	(2) TREATED INTAKE WATER	(3) AVERAGE (DAILY)	(4) MINIMUM (OPERATING YEAR) / MAXIMUM (OPERATING YEAR)	(5) SAMPLE FREQUENCY	(6) CONTINUOUS MONITORING	(7)
ALPHA-TOTAL 01501				X			
ALPHA COUNTING ERROR 01502				X			
BETA-TOTAL 03501				X			
BETA COUNTING ERROR 03502				X			
GAMMA-TOTAL 05501				X			
GAMMA COUNTING ERROR 05502				X			
TRITIUM-TOTAL 07000				X			
TRITIUM COUNTING ERROR 07001				X			

B-4. REMARKS NOTES:

1. SINGLE 24 HR. CONTINUOUS SAMPLE.
2. (CONTINUED ON ATTACHMENT B).

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Discharge Serial No.
001

B-4 (continued)

Notes:

2. All results certified as being determined using either APHA Standard Methods (13th Edition 1971) or procedures by the FWPCA (Nov. 1969).

3. For purposes and intent of this report

   a) Maximum and daily average concentrations (columns 3 and 6) are considered same.

   b) Maximum pounds per day per process unit, maximum pounds per day and average pounds per day (columns 4, 5 and 7) are considered same.

Attachment B
(to Page 7B of 7)

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SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION

1. Discharge described below is a. Present [X] b. Proposed new or changed [ ]	2. Implementation schedule [ ]	(Office use only)

Name of corporate boundaries within which the point of discharge is located

State	County	City or Town	6. Discharge Serial No.
3. ILLINOIS	4. ST. CLAIR	5. SAUGET	002

State the precise location of the point of discharge	9. Name of waterway or other point of discharge
7. Latitude 90 Degrees; 10 Min; 20 Sec.	SAUGET VILLAGE SEWER
8. Longitude 38 Degrees; 35 Min; 41 Sec.	SAUGET, ILLINOIS 62201

10. Has application for water quality certification or description of impact been made? If so, give date:

Date	Check if certificate is attached to form	Name Issuing Agency
mo day yr	[ ]	

11. Narrative description of activity (include terms of general 4-digit Standard Industrial Classification, and specific manufacturing process)

GENERAL: MANUFACTURE OF INDUSTRIAL INORGANIC AND ORGANIC CHEMICALS.

SPECIFIC: PRODUCTION OF CHEMICALS LISTED IN ITEM 13 BELOW.

12. Standard Industrial Classification Code number	13. Principal products	14. Amount of principal products produced per day
SIC 281 AND 2818	a. ORGANICS	a. 462,600
	b. MINERAL ACIDS	b. 1,025,500
	c. PHOSPHORUS PENTASULFIDE	c. 105,700
	d. SODIUM SULFITE	d. 114,700

15. Principal raw materials	16. Amount of principal raw materials consumed per day	17. Number of batch discharges per day
		23

18. Average gallons per batch discharge	19. Date discharge began	20. Date discharge will begin
1620.	SINCE mo day 17 yr	mo day yr

21. Describe waste abatement practices

- ALL PROCESS UNITS DISCHARGING INTO THE SEWER SYSTEM UTILIZE ONE OR MORE OF THE FOLLOWING TO MINIMIZE WASTES ENTERING THE EFFLUENT: ESEGRE, RECOVE, RECYCL, LEVAPO, OMONIT, WCONTR.

- ALL WASTE STREAMS DISCHARGE TO THE SAUGET VILLAGE WASTE TREATMENT PLANT FOR FURTHER TREATMENT.

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22. PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE

Discharge Serial No. 002 | (Office use only)

Parameter and Code	Intake: Untreated Intake Water (1)	Intake: Treated Intake Water (1)	Discharge: Average (Daily) (2)	Discharge: Minimum (Operating Year) (3)	Discharge: Maximum (Operating Year) (4)	Discharge: Sample Frequency (5)	Discharge: Continuous Monitoring (6)	Discharge: (7)
Flow (Gallons per day) 00056		3,297,600	1,800,000	5,097,600	5,097,600	5,097,600	SEE NOTE 1 OTHR	ABS
pH 00400		7.0	7.1	2	2	2	OTHR	ABS
Temperature (Winter) (°F) 74028		62	45	79	79	79	OTHR	ABS
Temperature (Summer) (°F) 74027		70	82	NOT AVAILABLE			OTHR	ABS

23. DISCHARGE CONTENTS

PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT
Color 00080			Aluminum 01105			Nickel 01067		
Turbidity 00070			Antimony 01097			Selenium 01147		
Radioactivity 74050			Arsenic 01002			Silver 01077		
Hardness 00900			Beryllium 01012			Potassium 00937		
Solids 00500			Barium 01007			Sodium 00929		
Ammonia 00610			Boron 01022			Titanium 01152		
Organic Nitrogen 00605			Cadmium 01027			Tin 01102		
Nitrate 00620			Calcium 00916			Zinc 01092		
Nitrite 00615			Cobalt 01037			Algicides 74051		
Phosphorus 00665			Chromium 01034			Oil and Grease 00550		
Sulfate 00945			Copper 01042			Phenols 32730		
Sulfide 00745			Iron 01045			Surfactants 38260		
Sulfite 00740			Lead 01051			Chlorinated Hydrocarbons 74052		
Bromide 71870			Magnesium 00927			Pesticides 74053		
Chloride 00940			Manganese 01055			Fecal Streptococci Bacteria 74054		
Cyanide 00720			Mercury 71900			Coliform Bacteria 74056		
Fluoride 00951			Molybdenum 01062					

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24a. Have all known hazardous or potentially hazardous substances in your plant been inventoried?

☐ Yes ☐ No

24b. If yes, have steps been taken to insure that there exists no possibility of any such known hazardous or potentially hazardous substance entering this discharge?

☐ Yes ☐ No

25. Remarks

NOTES:
1. SINGLE 24 HR. CONTINUOUS SAMPLE.
2. (CONTINUED ON ATTACHMENT A).

The information above completes the basic reporting which is requested of all plants. Those plants whose discharge results from an activity included within any of the Standard Industrial Classification Code (SIC Code) categories listed below are also requested to complete Parts A and B of this Section.

CRITICAL INDUSTRIAL GROUPS

SIC	098	FISH HATCHERIES, FARMS, AND PRESERVES
SIC	10–14	DIVISION B – MINING
SIC	201	MEAT PRODUCTS
SIC	202	DAIRY PRODUCTS
SIC	203	CANNED PRESERVED FRUITS, VEGETABLES (EXCEPT SEAFOODS, SIC 2031 AND 2036)
SIC	2031, 2036	CANNED AND CURED FISH AND SEAFOODS; FRESH OR FROZEN PACKAGED FISH AND SEAFOODS
SIC	204	GRAIN MILL PRODUCTS
SIC	206	SUGAR
SIC	207	CONFECTIONARY AND RELATED PRODUCTS
SIC	208	BEVERAGES
SIC	209	MISCELLANEOUS FOOD PREPARATIONS AND KINDRED PRODUCTS
SIC	22	TEXTILE MILL PRODUCTS
SIC	23	APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS
SIC	242	SAWMILLS AND PLANING MILLS
SIC	2432	VENEER AND PLYWOOD
SIC	2491	WOOD PRESERVING
SIC	26	PAPER AND ALLIED PRODUCTS
SIC	281	INDUSTRIAL INORGANIC AND ORGANIC CHEMICALS (EXCEPT SIC 2813)
SIC	2818	INDUSTRIAL ORGANIC CHEMICALS
SIC	282	PLASTIC MATERIALS AND SYNTHETIC RESINS, SYNTHETIC RUBBER, SYNTHETIC AND OTHER MAN-MADE FIBERS, EXCEPT GLASS
SIC	283	DRUGS
SIC	284	SOAP, DETERGENTS, AND CLEANING PREPARATIONS, PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS
SIC	285	PAINTS, VARNISHES, LACQUERS, ENAMELS, AND ALLIED PRODUCTS
SIC	2871	FERTILIZERS
SIC	2879	AGRICULTURAL PESTICIDES, AND OTHER AGRICULTURAL CHEMICALS, NOT ELSEWHERE CLASSIFIED
SIC	2891	ADHESIVES AND GELATIN
SIC	2892	EXPLOSIVES
SIC	29	PETROLEUM REFINING AND RELATED INDUSTRIES
SIC	3011, 3069	TIRES AND INNER TUBES; FABRICATED RUBBER PRODUCTS, NOT ELSEWHERE CLASSIFIED
SIC	3079	MISCELLANEOUS PLASTIC PRODUCTS
SIC	311	LEATHER TANNING AND FINISHING
SIC	32	STONE, CLAY, GLASS, AND CONCRETE PRODUCTS
SIC	331	BLAST FURNACES, STEEL WORKS, AND ROLLING AND FINISHING MILLS
SIC	332	IRON AND STEEL FOUNDRIES
SIC	333, 334	PRIMARY SMELTING AND REFINING OF NONFERROUS METALS; SECONDARY SMELTING AND REFINING OF NONFERROUS METALS
SIC	336	NONFERROUS FOUNDRIES
SIC	347	COATING, ENGRAVING, AND ALLIED SERVICES
SIC	35	MACHINERY, EXCEPT ELECTRICAL
SIC	36	ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES
SIC	37	TRANSPORTATION EQUIPMENT (EXCEPT SHIP BUILDING AND REPAIRING, SIC 3731)
SIC	3731	SHIP BUILDING AND REPAIRING
SIC	491	ELECTRIC COMPANIES AND SYSTEMS
SIC	493	COMBINATION COMPANIES AND SYSTEMS

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Item 25

Notes (continued)

2. The decision to report on but two discharges for the W. G. Krummrich Plant was based on the following:

   a) There is a very complicated network of sewers from the process units but they all collect into two main sewers discharging from the plant.

   b) There are over 100 different chemical products manufactured. These products are for internal use as well as for sales and can be grouped into about 7 different chemical families.

   c) To respond at this time for either (1) each process unit, or (2) each chemical family, would not be possible in the time allowed. In addition, it would be extremely time consuming and costly.

   d) In order to respond with data as requested on the questionnaire, it was assumed that this report for our plant discharges would satisfy your requirements, at this time, for the national inventory of industrial wastewater discharges being compiled.

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PART A

(Note: Submission of Part A is requested of all activities whose processes are listed on page 3 above.)

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Discharge Serial No. 002

INFORMATION REQUESTED OF SPECIFIED INDUSTRIES

Intake — SEE NOTE 3, B-4 — Discharge — SEE NOTE 1, B-4

PARAMETER AND CODE	(DAILY AVG. CONCENTRATION) UNTREATED INTAKE WATER (1)	(DAILY AVG. CONCENTRATION) TREATED INTAKE WATER (2)	MAXIMUM CONCENTRATION PER PROCESS UNIT (3)	MAXIMUM POUNDS PER DAY (4)	DAILY AVG. CONCENTRATION (5)	AVERAGE POUNDS PER DAY (6)	SAMPLE TYPE (7)	SAMPLE FREQUENCY (8)	METHOD OF ANALYSIS (9)	CONTINUOUS MONITORING (10)	(11)
ALKALINITY (as $CaCO_3$) 00410	223	117	0	0	0	0	0	CONT	OTHR		ABS
B.O.D. 5-DAY 00310	52	<5	63	2,678	2,678	63	2,678	CONT	OTHR		ABS
CHEMICAL OXYGEN DEMAND (C.O.D.) 00340	50	14	330	14,025	14,025	330	14,025	CONT	OTHR		ABS
TOTAL SOLIDS 00500	520	290	2,390	101,575	101,575	2,390	101,575	CONT	OTHR	2, B-4	ABS
TOTAL DISSOLVED SOLIDS 70300	490	275	2,285	97,112	97,112	2,285	97,112	CONT	OTHR		ABS
TOTAL SUSPENDED SOLIDS 00530	5	2	10	425	425	10	425	CONT	OTHR	SEE NOTE	ABS
TOTAL VOLATILE SOLIDS 00505	125	95	350	14,875	14,875	350	14,875	CONT	OTHR		ABS
AMMONIA (as N) 00610	0.70	0.30	8.5	361	361	8.5	361	CONT	OTHR		ABS
KJELDAHL NITROGEN 00625	1.5	0.90	35	1,487	1,487	35	1,487	CONT	OTHR		ABS
NITRATE (as N) 00620	<0.05	0.75	0.75	31.9	31.9	0.75	31.9	CONT	OTHR		ABS
PHOSPHORUS TOTAL (as P) 00665	0.5	<0.1	0.6	28	28	0.6	28	CONT	OTHR		ABS

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TABLE A
Guide for Completion of Part A

PARAMETER & UNIT	METHOD	REFERENCES			SIGNIFICANCE IN REPORTING DATA
		STANDARD METHODS 13TH ED. 1971	A.S.T.M. STANDARDS Pt. 23 1970	W.Q.O. METHODS 1971	
ALKALINITY AS Ca CO_3 Mg/liter	ELECTROMETRIC TITRATION TECHNICON METHYL ORANGE METHOD	p. 370	p. 154	p. 6	X.
B.O.D. 5-DAY Mg/liter	MODIFIED WINKLER METHOD OR PROBE METHOD	p. 489	p. 712	p. 15	X.
CHEMICAL OXYGEN DEMAND (C.O.D.) Mg/liter	DICHROMATE REFLUX METHOD	p. 495	–	p. 17	X.
TOTAL SOLIDS Mg/liter	GRAVIMETRIC, 105°C. METHOD	p. 535	–	p. 280	X.
TOTAL DISSOLVED (FILTERABLE) SOLIDS Mg/liter	GLASS FIBER FILTRATION METHOD, 180°C.	p. 539	–	p. 275	X.
TOTAL SUSPENDED (NON-FILTERABLE) SOLIDS Mg/liter	GLASS FIBER FILTRATION METHOD, 103–105°C.	p. 537	–	p. 278	X.
TOTAL VOLATILE SOLIDS Mg/liter	GRAVIMETRIC METHOD 550°C.	p. 536	–	p. 282	X.
AMMONIA (as N) Mg/liter	DISTILLATION-NESSLERIZATION METHOD OR TECHNICON-DIGESTION & PHENOLATE METHOD	p. 453	–	p. 134	.XX
KJELDAHL NITROGEN Mg/liter	DIGESTION-DISTILLATION METHOD OR TECHNICON-DIGESTION & PHENOLATE METHOD	p. 469	–	p. 149	.XX
NITRATE (as N) Mg/liter	BRUCINE SULFATE METHOD OR TECHNICON-HYDRAZINE REDUCTION METHOD	p. 461	–	p. 170	.XX
TOTAL PHOSPHORUS (as P) Mg/liter	PERSULFATE DIGESTION & SINGLE REAGENT METHOD OR TECHNICON-MANUAL DIGESTION & SINGLE REAGENT OR STANNOUS CHLORIDE	p. 526	–	p. 235	.XX

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PART B DISCHARGE DESCRIPTION

(Note: Submission of Part B is requested of all activities who have completed Part A. Only those parameters specifically indicated in the instructions are to be reported by a particular industry)

(Office use only)

Discharge Serial No. 002

B-1. PHYSICAL AND BIOLOGICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-1)

	Intake	Discharge					
PARAMETER AND CODE	UNTREATED INTAKE WATER (1)	TREATED INTAKE WATER (2)	AVERAGE (DAILY) (3)	MINIMUM (OPERATING YEAR) (4)	MAXIMUM (OPERATING YEAR) (5)	SAMPLE FREQUENCY SEE NOTE 1, B-4 (6)	CONTINUOUS MONITORING (7)
COLOR 00080	50	5	DOES NOT CONFORM	X	DOES NOT CONFORM	0	A
SPECIFIC CONDUCTANCE 00095							
TURBIDITY 00070				X			
FECAL STREPTOCOCCI BACTERIA 74054				X			
FECAL COLIFORM BACTERIA 74055				X			
TOTAL COLIFORM BACTERIA 74056				X			

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PART B

(Office use only)

Discharge Serial No. 002

B-2. CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake — SEE NOTE 3, B-4 — Discharge — SEE NOTE 1, B-4

PARAMETER AND CODE	(1) UNTREATED INTAKE WATER	(2) TREATED INTAKE WATER	(3) MAXIMUM CONCENTRATION	(4) MAXIMUM POUNDS PER DAY PER PROCESS UNIT	(5) MAXIMUM POUNDS PER DAY	(6) DAILY AVG. CONCENTRATION	(7) AVERAGE POUNDS PER DAY	(8) SAMPLE TYPE	(9) SAMPLE FREQUENCY	(10) METHOD OF ANALYSIS	(11) CONTINUOUS MONITORING
ACIDITY (as $CaCO_3$) 00435	0	0	1,670	70,975	70,975	1,670	70,975	X	0		A
TOTAL ORGANIC CARBON (T.O.C.) 00680	55	5	150	6,375	6,375	150	6,375	X	0		A
TOTAL HARDNESS 00900		1								SEE NOTE 2, B-4	
NITRITE (as N) 00615											
ORGANIC NITROGEN 00605											
PHOSPHORUS-ORTHO (as P) 70507											
SULFATE 00945	24	18	12	510	510	12	510	X	0		A
SULFIDE 00745	0.1	<0.1	1.6	68	68	1.6	68	X	0		A
SULFITE 00740											
BROMIDE 71870											

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PART B

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Discharge Serial No. 002

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake		Discharge									
PARAMETER AND CODE	(1) UNTREATED INTAKE WATER	(2) TREATED INTAKE WATER	(3) MAXIMUM CONCENTRATION	(4) MAXIMUM POUNDS PER DAY PER PROCESS UNIT	(5) MAXIMUM POUNDS PER DAY	(6) DAILY AVG. CONCENTRATION	(7) AVERAGE POUNDS PER DAY	(8) SAMPLE TYPE	(9) SAMPLE FREQUENCY	(10) METHOD OF ANALYSIS	(11) CONTINUOUS MONITORING
CHLORIDE 00940	49	20	2,050	87,125	87,125	2,050	87,125	X	O		A
CYANIDE 00720	<0.01	0.01	<0.01	<0.4	<0.4	<0.01	<0.4	X	O		A
FLUORIDE 00951	0.3	0.8	0.35	14.9	14.9	0.35	14.9	X	O		A
ALUMINUM-TOTAL 01105	<50	<50	500	21	21	500	21	X	O	SEE NOTE 2, B-4	A
ANTIMONY-TOTAL 01097											
ARSENIC-TOTAL 01002	10	<10	<10	<0.4	<0.4	<10	<0.4	X	O		A
BARIUM-TOTAL 01007											
BERYLLIUM-TOTAL 01012											
BORON-TOTAL 01022											
CADMIUM-TOTAL 01027	<10	<10	<10	<0.4	<0.4	<10	<0.4	X	O		A

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PART B

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Discharge Serial No. 002

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake		Discharge										
PARAMETER AND CODE	UNTREATED INTAKE WATER (1)	TREATED INTAKE WATER (2)	MAXIMUM CONCENTRATION (3)	MAXIMUM POUNDS PER DAY PER PROCESS UNIT (4)	MAXIMUM POUNDS PER DAY (5)	DAILY AVG. CONCENTRATION (6)	AVERAGE POUNDS PER DAY (7)	SAMPLE TYPE (8)	SAMPLE FREQUENCY (9)	METHOD OF ANALYSIS (10)	CONTINUOUS MONITORING (11)
CALCIUM-TOTAL 00916	71	44	67	2,848	2,848	67	2,848	X	0		
CHROMIUM-TOTAL 01034	<50	<50	250	10.6	10.6	250	10.6	X	0		
COBALT-TOTAL 01037	<100	<100	<100	<4.2	<4.2	<100	<4.2	X	0	B-4	
COPPER-TOTAL 01042	<50	<50	100	4.3	4.3	100	4.3	X	0	2,	
IRON-TOTAL 01045	1,900	50	4,100	174	174	4,100	174	X	0	SEE NOTE	
LEAD-TOTAL 01051	<10	<10	250	10.6	10.6	250	10.6	X	0		
MAGNESIUM-TOTAL 00927	26.5	16	19.5	829	829	19.5	829	X	0	5	
MANGANESE-TOTAL 01055	800	<50	650	27.6	27.6	650	27.6	X	0		
MERCURY-TOTAL 71900	<1	<1	5	0.21	0.21	5	0.21	X	0		
MOLYBDENUM-TOTAL 01062											

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PART B

(Office use only)

Discharge Serial No. 002

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

	Intake		Discharge								
PARAMETER AND CODE	(1) UNTREATED INTAKE WATER	(2) TREATED INTAKE WATER	(3) MAXIMUM CONCENTRATION	(4) MAXIMUM POUNDS PER DAY PER PROCESS UNIT	(5) MAXIMUM POUNDS PER DAY	(6) DAILY AVG. CONCENTRATION	(7) AVERAGE POUNDS PER DAY	(8) SAMPLE TYPE	(9) SAMPLE FREQUENCY	(10) METHOD OF ANALYSIS	(11) CONTINUOUS MONITORING
NICKEL-TOTAL 01067											
POTASSIUM-TOTAL 00937	5.0	3.0	175	7,437	7,437	175	7,437	X	0		A
SELENIUM-TOTAL 01147										SEE NOTE 2, B-4	
SILVER-TOTAL 01077											
SODIUM-TOTAL 00929	57	14	800	34,000	34,000	800	34,000	X	0		A
THALLIUM-TOTAL 01059											
TIN-TOTAL 01102											
TITANIUM-TOTAL 01152	<100	<100	1,300	55	55	1,300	55	X	0		A
ZINC-TOTAL 01092	<50	50	350	15	15	350	15	X	0		A
OIL AND GREASE 00550	20	<1	31	1,317	1,317	31	1,317	X	0		A

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PART B.

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Discharge Serial No. 002

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake		Discharge									
PARAMETER AND CODE	(1) UNTREATED INTAKE WATER	(2) TREATED INTAKE WATER	(3) MAXIMUM CONCENTRATION	(4) MAXIMUM POUNDS PER DAY	(5) DAILY AVG. CONCENTRATION	(6) AVERAGE POUNDS PER DAY	(7) SAMPLE TYPE	(8) SAMPLE FREQUENCY	(9) METHOD OF ANALYSIS	(10) CONTINUOUS MONITORING	(11
PHENOLS 32730			7000	298	298	7000	298	X	0		A
SURFACTANTS 38260										SEE NOTE 2, B-4	
ALGICIDES* 74051											
CHLORINATED HYDRO-CARBONS* (EXCEPT PESTICIDES) 74052 ORGANICS	A	A	NONE		IDENTIFIED			X	0		A
PESTICIDES* 74053											

*Name specific compound(s) and fill in the required data for each. Use extra blanks at the end of the form and the "Remarks" space as necessary.

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PART B

(Office use only)

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B-3. RADIOACTIVE PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-3)

Intake		Discharge						
PARAMETER AND CODE	UNTREATED INTAKE WATER (1)	TREATED INTAKE WATER (2)	AVERAGE (DAILY) (3)	MINIMUM (OPERATING YEAR) (4)	MAXIMUM (OPERATING YEAR) (5)	SAMPLE FREQUENCY (6)	CONTINUOUS MONITORING (7)
ALPHA-TOTAL 01501				X			
ALPHA COUNTING ERROR 01502				X			
BETA-TOTAL 03501				X			
BETA COUNTING ERROR 03502				X			
GAMMA-TOTAL 05501				X			
GAMMA COUNTING ERROR 05502				X			
TRITIUM-TOTAL 07000				X			
TRITIUM COUNTING ERROR 07001				X			

B-4. REMARKS NOTES:

1. SINGLE 24 HR. CONTINUOUS SAMPLE.
2. (CONTINUED ON ATTACHMENT B).

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EPA Form 7500-1 (7-71)

* GPO : 1971 O - 441-071

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B-4 (continued)

Notes:

2. All results certified as being determined using either APHA Standard Methods (13th Edition 1971) or procedures by the FWPCA (Nov. 1969).

3. For purposes and intent of this report

   a) Maximum and daily average concentrations (columns 3 and 6) are considered same.

   b) Maximum pounds per day per process unit, maximum pounds per day and average pounds per day (columns 4, 5 and 7) are considered same.

Attachment B
(To page 7B of 7)

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SECTION III. WASTE TREATMENT FACILITIES COST AND MANPOWER INFORMATION

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1. Give approximate expenditures (in thousands of dollars) for existing and future wastewater treatment facilities and/or in-plant control processes. (See instructions)

IN-PLANT TREATMENT * — Original Facility - Type	1953-65 — Year Placed in Operation	700 — Original Cost
VILLAGE PRIMARY *** — Facility Addition 1 - Type	1965 — Year Placed in Operation	270 — 1st Addition Cost
IN-PLANT TREATMENT * — Facility Addition 2 - Type	1966-71 — Year Placed in Operation	1,130 — 2nd Addition Cost
— Facility Addition 3 - Type	— Year Placed in Operation	— 3rd Addition Cost
IN-PLANT TREATMENT ** — Facilities to be Constructed this Year	1972 — This Year	250 — This Year's Expenditures
IN-PLANT TREATMENT ** — Facilities to be Constructed Next Year - Type	1973 — Next Year	1,000 — Next Year's Expenditures
IN-PLANT & VILLAGE *** — Facilities to be Constructed Next Year + 1 - Type	1974 — Next Year + 1	3,000 — Next Year + 1 Expenditures
— Facilities to be Constructed Next Year + 2 - Type	— Next Year + 2	— Next Year + 2 Expenditures
— Facilities to be Constructed Next Year + 3 - Type	— Next Year + 3	— Next Year + 3 Expenditures
— Facilities to be Constructed Next Year + 4 - Type	— Next Year + 4	— Next Year + 4 Expenditures

2. List expenditures (in thousands of dollars) for the operation and maintenance of your facility. (See instructions for calculation of operation and maintenance expenditures)

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	1970	1971	1972	1973	1974	1975	1976
	Past Year	Present Year	Next Year	Next Year + 1	Next Year + 2	Next Year + 3	Next Year + 4
Expenditures ****	130	373	408	450	550	900	900

3. Remarks

* SEE SECTION II, p.1, ITEM 2.1 FOR CODING OF IN-PLANT TREATMENT IN USE. INCLUDES CHLOR-ALKALI FACILITIES.

** SIMILAR MEASURES TO THOSE DESCRIBED IN SEC. II, p.1, ITEM 2.1 ARE PLANNED AS APPROPRIATE TO THE PROBLEMS ENCOUNTERED

*** MONSANTO SHARED THE COST OF PSEDIM TREATMENT IN 1965 WITH THE VILLAGE OF SAUGET AND OTHER INDUSTRIES AND WILL SHARE THE COST OF ADDITIONAL SECONDARY TREATMENT IN 1974. DOLLARS SHOWN ARE MONSANTO'S SHARE

**** EXPENDITURES SHOWN INCLUDE DEPRECIATION \$'s OF 70, 113, 135, 150, 200, 200 & 200 RESPECTIVELY.

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4. For each of the categories below, list the current number of employees (full time/part time) doing water pollution control work and estimate the total number of employees for each of the next five calendar years. (See Instructions)

	Number Full Time Currently Employed (1)	Number Part Time Currently Employed (2)	1972 Total Number Next Year (3)	1973 Total Number Next Year + 1 (4)	1974 Total Number Next Year + 2 (5)	1975 Total Number Next Year + 3 (6)	1976 Total Number Next Year + 4 (7)
Superintendant		2	2	2	2	2	2
Engineer/San. Engineer	4	12	16	16	16	16	16
Chemist		3	3	4	4	4	4
Biologist							
Lab. Technician	1	11	12	12	14	14	14
Senior Operator/ Foreman		2	2	4	4	4	4
Equipment Operator	4	8	12	16	16	20	20
Instrument Repairman		2	2	3	3	3	3
Maintenance Man		4	4	6	6	6	6
Attendant							
Unskilled							
Clerical		1	1	2	2	2	2
Others (Specify) ENGRG. TECHNICIANS	3	3	3	3	3	3	3
Others (Specify)							
Others (Specify)							

5. Remarks

THE ABOVE TABLE IS AN ESTIMATE OF THE NUMBER OF PERSONNEL WHO HAVE BEEN OR WILL BE ASSIGNED FULL OR PART TIME POLLUTION CONTROL DUTIES ON A PERMANENT BASIS.

IT IS ESTIMATED THAT 20% OF OUR ENGINEERING STAFF IS OCCUPIED WITH POLLUTION CONTROL WORK WHEN TEMPORARY ASSIGNMENTS ARE INCLUDED.

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