126 H

US Environmental

Please Note Our NEW Address

409 Boot Road
Downingtown, PA 19335
Phone: (610) 518-5800 • Fax: (610) 518-0500

Please Note Our NEW Address

Fax

To:	Paul Negrin Cc: Andrew Caltagirone	From:	Wendy Moncak
Company:	PVSC	Pages	18 (including cover)
Fax:	973-344-2951	Phone:	
Re:		Date:	3/31/2006

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please e-mail

● Comments:

Paul,

Please find attached Stepan's completed application and updated analysis. If you could please recertify this waste stream and call me to setup a time to audit Stepan I would appreciate it. If you have any questions please give me a call at 610-518-5800.

Thank You,

Wendy Moncak

Driven by the Future

Powered by Pride

PASSAIC VALLEY SEWERAGE COMMISSIONERS
LIQUID WASTE ACCEPTANCE PROGRAM
APPLICATION FOR **INDUSTRIAL LIQUID WASTE**

THIS APPLICATION TO BE COMPLETED BY WASTE GENERATOR

1. Waste Generator Name: STERRAY COMPANY
2. Waste Generator Address: #2 Fourth Street
   Fieldsboro, NJ Zip Code: 08505
3. Waste Generator Telephone Number: 609-298-1222 Fax No.: 609-298-7950
4. Waste Generator US EPA ID No. (if any): NJD 041762840
5. Person to contact concerning information provided in this application:
   Name of Contact: DAN CALLAHAN
   Title: Environmental & Regulatory Manager
   Phone No.: 609-324-2586 Fax No.: 609-298-7950
   Address: #2 Fourth Street Fieldsboro, NJ
   Zip Code: 08505

BILLING INFORMATION

6. Billing Contact Name: US ENVIRONMENTAL, INC
7. Billing Contact Address: 251 Norwood Road
   Downingtown, PA Zip Code: 19335
8. Billing Contact Telephone Number: 610-518-5800 Fax No.: 610-518-0500

FACILITY INFORMATION [COMPLETE 9-12 ONLY IF DIFFERENT FROM 1-4 ABOVE]

9. Facility Name: SAME AS ABOVE
10. Facility Address: _____
    _____ Zip Code: _____
11. Facility Telephone Number: _____ Fax No.: _____
12. Facility US EPA ID No. (if any): _____
13. Facility NPDES or NJPDES No. (if any): _____

14. Brief description of manufacturing or other activity performed at facility: Manufacturer of Surfactants and Specialty Chemicals
List SIC CODE # with description: 2843

15. Is the Liquid Waste subject to applicable categorical pretreatment standard(s)? ~~Yes~~/No NO
If so, list current control authority: _____

****NOTE: **IF THE WASTE IS SUBJECT TO A CATEGORICAL PRE-TREATMENT STANDARD, CONTACT PVSC FOR A "*CATEGORICAL WASTE ADDENDUM*" TO THIS APPLICATION.**

16. List the industrial category for the Liquid Waste, if applicable: N/A
Subpart (s): _____

17. List the pre-treatment control authority which you are currently reporting to: N/A

18. Is facility in compliance? Yes/No N/A If not, and if compliance date has passed, explain actions being taken to get into compliance: _____

PRETREATMENT

19. Does the Liquid Waste exceed any of the applicable categorical pretreatment standard(s) for this Liquid Waste?
~~Yes~~/No N/A

RCRA

20. Does the Liquid Waste come from a facility, or any portion of the facility, that is regulated as a Federal and/or State Resource Conservation and Recovery Act (RCRA) facility for treatment, storage, or disposal?
~~Yes~~/No NO If YES, explain: _____

IF YOUR RESPONSE IS "YES" TO ANY OF THE QUESTIONS NUMBERED 21 THROUGH 26 OR 28, PLEASE DO NOT PROCEED ANY FURTHER WITH THIS APPLICATION BECAUSE THE LIQUID WASTE CANNOT BE ACCEPTED FOR TREATMENT AT THE PASSAIC VALLEY SEWERAGE COMMISSIONERS WWTP.

21. Is the Liquid Waste a listed RCRA hazardous waste (40 CFR 261, N.J.A.C. 7:26G-1 et seq.) (F, P, K, U listed waste)?
~~Yes~~/No NO

22. Is the Liquid Waste a characteristic RCRA hazardous waste (40 CFR 261, N.J.A.C. 7:26G-1 et seq.) (D waste)?
~~Yes~~/No NO

23. Is the Liquid Waste a mixture of a RCRA hazardous waste (40 CFR 261, N.J.A.C. 7:26G-1 et seq.) with a non-hazardous waste?
~~Yes~~/No NO

24. Is the Liquid Waste derived from a listed RCRA hazardous waste (40 CFR 261, N.J.A.C. 7:26G-1 et seq.)?
~~Yes~~/No NO

25. Is the Liquid Waste the product of a spill/cleanup of a listed RCRA hazardous waste (40 CFR 261, N.J.A.C. 7:26G-1 et seq.)?
~~Yes~~/No NO

26. Was the Liquid Waste a listed RCRA hazardous (40 CFR Part 261) as generated and rendered RCRA non-hazardous by pretreatment? Yes/No NO

27. Please provide any exclusions which may render the waste RCRA non-hazardous (40 CFR 261, N.J.A.C. 7:26G-1 et seq.) N/A

OTHER

28. Does the Liquid Waste contain substances in concentrations that are regulated by the Toxic Substances Control Act (TSCA) (40 CFR Subchapter R) including PCBs (40 CFR 761)?: Yes/No NO

IF YOUR RESPONSE IS "YES" TO ANY OF THE QUESTIONS NUMBERED 21 THROUGH 26 OR 28 ABOVE, PLEASE DO NOT PROCEED ANY FURTHER WITH THIS APPLICATION. THE LIQUID WASTE CANNOT BE ACCEPTED FOR TREATMENT AT THE PASSAIC VALLEY SEWERAGE COMMISSIONERS (PVSC) WWTP. ANY PERSON DISCHARGING SUCH LIQUID WASTE VIA TRUCK TO PVSC'S WWTP FOR TREATMENT WILL BE SUBJECT TO PUNISHMENT INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

PROPERTIES OF THE LIQUID WASTE

29. Name of Liquid Waste: Process Wastewater

Sludge ____ Graywater X

30. Description of process generating the Liquid Waste: Equipment Cleanouts, Area Washdowns, product wash water from surfactant manufacturing, see attached flow diagram.
(Attach process flow diagram)

31. Principal raw materials used in the process generating the Liquid Waste: Surfactants used by manufacturers of detergents, shampoos, lotions, toothpaste and cosmetics that depend on surfactants to achieve foaming and cleansing properties

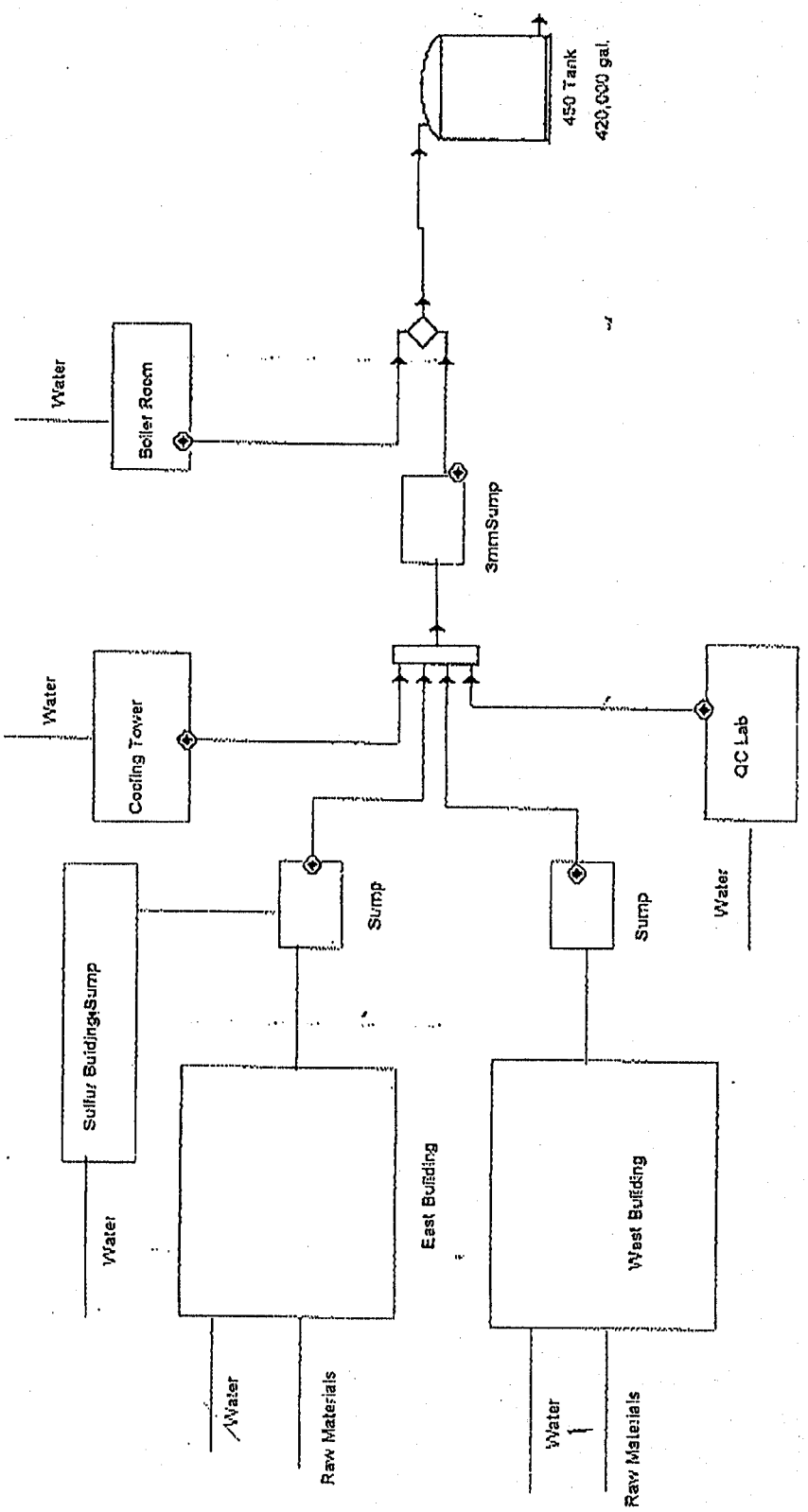
32. Principal products (or service) from which the Liquid Waste is generated: SEE #31

33. Has the Liquid Waste been pretreated? Yes/No YES
If so, describe pretreatment process in use: A defoamer is added prior to loading tank trailers for off site treatment and disposal at Passaic Valley Sewerage Commissioners
(Attach pretreatment process flow diagram)

DRC
5-9-03
STEPAN, FIELDSBORO

EXHIBIT

Wasterwater Generation Areas



34. Is the Liquid Waste generated as a result of a site cleanup/compliance activity?: ~~Yes~~ No NO
If so, describe cleanup/compliance activity and the regulatory program: _____

35. Estimated quantity of Liquid Waste to be delivered:

Estimated gallons per week: _____
Estimated gallons per year: 10,000,000
Estimated length of disposal services needed (months, years, one time, etc.):
on going for an indefinite number of years

PLEASE NOTE THAT FOR DISPOSAL SERVICES EXTENDING BEYOND ONE YEAR, A COMPLETED LIQUID WASTE ACCEPTANCE PROGRAM "APPLICATION FOR INDUSTRIAL LIQUID WASTE" MUST BE SUBMITTED ANNUALLY.

36. Liquid Waste Composition (major components and CAS numbers):

Component	Concentration Range (wt.% or ppm) Lower	Upper	Typical
Water	96	99	98
Sodium Xylene Sulfonate	0	1	0.5
Sodium Lauryl Sulfate	0	1	0.5
Sodium Dodecyl benzene Sulfonate	0	1	0.5
Ammonium Laurylether Sulfate	0	1	0.5
TOTAL			100%

37. Is Liquid Waste currently disposed at one or more facilities? If so, please provide the following information for the current facility or facilities:

FACILITY 1

Facility Name: Passaic Valley Sewerage Commissioners
Facility Address: 600 Wilson Avenue
Newark, NJ 07105
Type of Facility: POTW
Facility Permit Number: NJ0021016
Type of Permit: NPDES
Is Liquid Waste handled as RCRA hazardous or non-hazardous waste by this facility? NO
Provide any limitations on the Liquid Waste imposed by this facility _____

FACILITY 2

Facility Name: None
Facility Address _____
Type of Facility _____
Facility Permit Number _____
Type of Permit _____
Is Liquid Waste handled as RCRA hazardous or non-hazardous waste by this facility? _____
Provide any limitations on the Liquid Waste imposed by this facility _____

38. Is or has the facility ever been connected to a municipal sewer system? Yes/No YES

If so, explain why this Liquid Waste is not discharged to the sewer The Amount of Flow would hydraulically over-load the small local system

39. Is there a separate component of the Liquid Waste stream disposed at other facilities, such as a sludge component? Yes/No NO

If so, is the separate component disposed as a RCRA hazardous waste? Yes/No N/A
If so, indicate RCRA hazardous waste code(s) N/A

40. Is the Liquid Waste subject to reporting requirements under New Jersey Sludge Quality Assurance Regulations, also referred to as SQAR (N.J.A.C 7:14-4 et seq.), or the equivalent in the generator's state?: Yes/No NO

If so, attach copies of SQAR or equivalent reports for the last six (6) months to this form.

41. Is the Liquid Waste known to gel or solidify? Yes/No NO

42. Is the Liquid Waste known to be incompatible or reactive with other chemicals? Yes/No NO

If so, list incompatibility(ies) _____

ANALYSIS OF LIQUID WASTE

43. Does Liquid Waste contain separate phase organic material (floating or sinking oils or solvents) or solids? Yes/No NO If yes, please list all phases _____

44. Analysis for all separate phases of the Liquid Waste must be performed on a representative sample collected:

Samples collected by: _____
_____ Date: _____

Samples analyzed by: _____
_____ Date: _____

Products being manufactured when sample was collected: _____
_____

ALL SEPARATE PHASES MUST BE SAMPLED SEPARATELY. ALL SEPARATE PHASES MUST BE ANALYZED SEPARATELY AND REPORTED BY A STATE CERTIFIED ANALYTICAL LABORATORY (IN ALL ANALYSES PROVIDED). THE ANALYSES SUBMITTED MUST BE FOR THE LIQUID WASTE STREAM THAT IS THE SUBJECT OF THIS APPLICATION.

List State laboratory certification number _____.

45. Analysis for all separate phases of the Liquid Waste must be performed on a representative sample collected for the waste stream:

For a GRAYWATER (typically less than 2% Total Solids) analyze for the parameters listed in Table 1A. Analysis for any metals listed in Table 1A should be for Total Metals (NOT TCLP METALS, WHICH ARE REQUIRED IN TABLE 3). Attach a complete laboratory analysis for all results listed in Table 1A including the Chain-of-Custody and signed Lab Certification.

Table 1A – GRAYWATER

Parameter	Value	Limit (mg/L)	Parameter	Value	Limit (mg/L)
Total Solids	20,165		Arsenic (As)	<0.005	0.15
Volatile Solids	14,220		Cadmium (Cd)	<0.001	0.19
Total Suspended Solids	448		Chromium Total (Cr)	0.019	Suspended
Volatile Suspended Solids	5,296		Copper (Cu)	0.046	3.02
Petroleum Hydrocarbons	33	100	Lead (Pb)	<0.005	0.54
Biochemical Oxygen Demand (BOD)	162		Molybdenum (Mo)	0.03	Suspended
Chemical Oxygen Demand (COD)	30,900		Mercury (Report to 0.XXX)	< 2e-05	0.080
Total Organic Carbon (TOC)	6,255		Selenium (Se)	<0.005	
Ortho Phosphates as P	0.26		Nickel (Ni)	0.032	5.9
Ammonia as NH_3	6.1		Zinc (Zn)	0.085	1.67
Kjeldahl N as N	5.5				
			OTHER: (2)		
TTO (Report to 0.XXX) (1)					
TTVO (Report to 0.XXX) (1)					

(1) If required by Categorical Pretreatment Standards.
(2) List results for major components listed in question 36 and any additional parameters required by Categorical Pretreatment Standards.

For a SLUDGE (typically greater than 2% Total Solids) analyze for the parameters listed in Table 1B. Analysis for any metals listed in Table 1B should be for Total Metals (NOT TCLP METALS, WHICH ARE REQUIRED IN TABLE 3). Attach a complete laboratory analysis for all results listed in Table 1B including the Chain-of-Custody and signed Lab Certification.

Table 1B – SLUDGE

Parameter	Value	Parameter	Value (mg/kg)	Limit (mg/kg)
Total Solids		Arsenic (As)		41
Volatile Solids		Cadmium (Cd)		39
Total Suspended Solids		Chromium Total (Cr)		1,200
Petroleum Hydrocarbons		Copper (Cu)		1,500
Ortho Phosphates as P		Lead (Pb)		300
Ammonia as NH_3		Mercury (Hg)		17
Kjeldahl N as N		Molybdenum (Mo)		Suspended
		Nickel (Ni)		420
		Selenium (Se)		100
		Zinc (Zn)		2,800
		OTHER: (2)		
TTO (Report to 0.XXX) (1)				
TTVO (Report to 0.XXX) (1)				

(1) If required by Categorical Pretreatment Standards.
(2) List results for major components listed in question 36 and any additional parameters required by Categorical Pretreatment Standards.

46. List RCRA hazardous waste characterization analytical laboratory results and indicate which contaminants exceed regulatory levels. Attach RCRA hazardous waste characterization analytical laboratory results listed below. Analyses must be performed on a representative sample collected for the Liquid Waste that is the subject of this application.

IF ANY OF THE RCRA HAZARDOUS WASTE CHARACTERIZATION ANALYTICAL DATA VALUES EXCEED REGULATORY LEVELS, THE LIQUID WASTE CANNOT BE ACCEPTED FOR TREATMENT AT THE PASSAIC VALLEY SEWERAGE COMMISSIONERS (PVSC) WWTP. ANY PERSON DISCHARGING SUCH LIQUID WASTE VIA TRUCK TO PVSC'S WWTP FOR TREATMENT WILL BE SUBJECT TO PUNISHMENT INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

Table 2 – RCRA TOXICITY CHARACTERISITICS

Waste Characteristic	Regulatory Level	Value	Exceeds Regulatory Level?	
			Yes	No
D001: Ignitability	liquids with a flash point below 140° F or 60° C	> 200		X
D002: Corrosivity	liquids with a pH below 2 and above 12.5	4.98		X
D003: Reactivity	liquids that are chemically unstable and readily undergo violent change, are susceptible to detonation, react violently with water, or emit toxic fumes. Reactive sulfide above 500 ppm; reactive cyanide above 250 ppm.	120		X

Toxicity Characteristic Leachate Procedure or TCLP:

TABLE 3

Maximum Concentration of Contaminants for the Toxicity Characteristic

EPA HW No. {1}	Contaminant	CAS No.{2}	Regulatory Level (mg/L)	Value (mg/L)	Exceeds Regulatory Level?	
					Yes	No
D004	Arsenic	7440-38-2	5.0	<0.005		X
D005	Barium	7440-39-3	100.0	0.013		X
D006	Cadmium	7440-43-9	1.0	<0.005		X
D007	Chromium	7440-47-3	5.0	0.019		X
D008	Lead	7439-92-1	5.0	<0.005		X
D009	Mercury	7439-97-6	0.2	<2e-05.		X
D010	Selenium	7782-49-2	1.0	<0.005		X
D011	Silver	7440-22-4	5.0	<0.005		X
D012	Endrin	72-20-8	0.02	<0.0025		X
D013	Lindane	58-89-9	0.4	<0.0025		X
D014	Methoxychlor	72-43-5	10.0	<0.0025		X
D015	Toxaphene	8001-35-2	0.5	<0.0025		X
D016	2,4-D	94-75-7	10.0	<0.0025		X
D017	2,4,5-TP (Silvex)	93-72-1	1.0	<0.0025		X
D018	Benzene	71-43-2	0.5	<0.01		X
D019	Carbon tetrachloride	56-23-5	0.5	<0.01		X
D020	Chlordane	57-74-9	0.03	<0.0025		X
D021	Chlorobenzene	108-90-7	100.0	<0.01		X
D022	Chloroform	67-66-3	6.0	<0.01		X
D023	o-Cresol	95-48-7	{4} 200.0	<200.0		X
D024	m-Cresol	108-39-4	{4} 200.0	<200.0		X
D025	p-Cresol	106-44-5	{4} 200.0	<200.0		X
D026	Cresol		{4} 200.0	<200.0		X
D027	1,4 - Dichlorobenzene	106-46-7	7.5	<0.01		X
D028	1,2 - Dichloroethane	107-06-2	0.5	<0.01		X
D029	1,1 - Dichloroethylene	75-35-4	0.7	<0.01		X
D030	2,4 - Dinitrotoluene	121-14-2	{3} 0.13	<0.001		X
D031	Heptachlor (and its epoxide)	76-44-8	0.008	<0.0025		X

TABLE 3 (cont.)

Maximum Concentration of Contaminants for the Toxicity Characteristic (cont.)

EPA HW No. {1}	Contaminant	CAS No.{2}	Regulatory Level (mg/L)	Value (mg/L)	Exceeds Regulatory Level?	
					Yes	No
D032	Hexachlorobenzene	118-74-1	{3} 0.13	<0.001		X
D033	Hexachlorobutadiene	87-68-3	0.5	<0.001		X
D034	Hexachloroethane	67-72-1	3.0	<0.001		X
D035	Methyl ethyl ketone	78-93-3	200.0	<0.001		X
D036	Nitrobenzene	98-95-3	2.0	<0.001		X
D037	Pentachlorophenol	87-86-5	100.0	<0.001		X
D038	Pyridine	110-86-1	{3} 5.0	<0.001		X
D039	Tetrachloroethylene	127-18-4	0.7	<0.01		X
D040	Trichloroethylene	79-01-6	0.5	<0.01		X
D041	2,4,5-Trichlorophenol	95-95-4	400.0	<0.001		X
D042	2,4,6-Trichlorophenol	88-06-2	2.0	<0.001		X
D043	Vinyl chloride	75-01-4	0.2	<0.01		X

{1} Hazardous waste number.

{2} Chemical abstracts service number.

{3} Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

{4} If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

[55 FR 11862, Mar. 29, 1990, as amended at 55 FR 22684, June 1, 1990; 55 FR 26987, June 29, 1990; 58 FR 46049, Aug. 31, 1993]

NOTE: VERBAL COMMUNICATION

Verbal communication by the applicant shall not be accepted and no representative, agent or employee of PVSC is authorized to accept any verbal communication from the applicant to vary, alter or modify the terms of this application. Similarly, no representative, agent, or employee of PVSC has been authorized to make any representations or to vary, alter or modify the terms hereof. No additions, changes or modifications, renewals or extensions hereof, shall be binding unless reduced to writing and signed by the applicant and PVSC.

CERTIFICATION:

I certify under penalty of law that this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete. I am aware that there are significant penalties for submitting false, information, including the possibility of fine and imprisonment.

I further certify that:

The analytical data presented herein or attached hereto were derived from testing a representative sample of the Liquid Waste collected in accordance with 40 CFR 261.20 (c) or equivalent rules.

The Liquid Waste is not a "hazardous waste" as defined by Federal regulation and/or State regulation.

The Liquid Waste meets all applicable Federal categorical pretreatment standards.

The Liquid Waste does not contain regulated radioactive materials or regulated concentrations of PCBs.

All relevant information about the Liquid Waste regarding known or suspected hazards in the possession of the Generator has been disclosed.

If any changes occur in the character of the Liquid Waste, the Generator shall notify PVSC in writing prior to providing the material for disposal.

If the applicant is a corporation, a corporate resolution is attached granting me the authority to sign the application on behalf of the corporation.

Name of signing official: DANIEL R. CALLAHAN
PRINT

ENVIRONMENTAL & REGULATORY MANAGER
TITLE

11-17-04
DATE

Daniel R. Callahan
SIGNATURE

* APPLICATION MUST BE SIGNED BY ONE OF THE FOLLOWING:

a. Principal Officer of Corporation
b. President or Owner of Company
c. General Partner if a Partnership
d. Plant Manager or Authorized Representative

Rev. 11/25/03

Douglassville Location:
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196
Fax: (610) 327-6864

NJ DEP Cert #PA925
NY LAB ID NO.: 11828
PA DEP Cert #06-409

Blue Marsh
LABORATORIES • INC
Professional testing for the critical decision

Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

LAB #: 41468-1

Client: U S Environmental
251 Norwood Road
Downingtown, PA 19335

Attn: Richard Weaver

Project: Stepan

Received: 10/20/2004

Sample Type: Waste Water
Sample ID: Waste Water
Collected By: Richard Weaver
Collected: 10/19/04 9:42
Source:

Print Date: November 04, 2004
Report Date: November 04, 2004

Abstract / Test	Result	Qls	Units	PQL	MDL	Method	Init	Analysis Date
Ammonia								
Ammonia as N	6.1		mg/L	0.95	0.19	350.3	DW-DV	10/21/04 8:11
BOD								
Biochemical Oxygen Demand	162.		mg/L	2	2.0	SM5210B	DCC-DV	10/22/04 16:00
COD								
Chemical Oxygen Demand	30900.		mg/L	500	5.0	Hach8000	DW-DV	10/29/04 7:15
Cyanide Reactive								
Cyanide Rx	0.093		mg/L	0.008	0.0080	SW846 9014	DW-DV	11/3/04 13:45
Flashpoint - aq								
Flashpoint	>200		mg/L		1.0	SW846 1010	DCC-DV	10/22/04 11:30
Metals 200.7-aq								
Arsenic	< 0.005		mg/L	0.005	0.0050	200.7	KJP-DV	10/25/04 9:51
Cadmium	< 0.001		mg/L	0.001	0.0010	200.7	KJP-DV	10/25/04 9:51
Chromium	0.161		mg/L	0.005	0.0050	200.7	KJP-DV	10/25/04 9:51
Copper	0.046		mg/L	0.005	0.0050	200.7	KJP-DV	10/25/04 9:51
Lead	< 0.005		mg/L	0.005	0.0050	200.7	KJP-DV	10/25/04 9:51
Molybdenum	0.03		mg/L	0.005	0.0050	200.7	KJP-DV	10/25/04 9:51
Nickel	0.032		mg/L	0.005	0.0050	200.7	KJP-DV	10/25/04 9:51
Selenium	< 0.005		mg/L	0.005	0.0050	200.7	KJP-DV	10/25/04 9:51
Zinc	0.085		mg/L	0.005	0.0050	200.7	KJP-DV	10/25/04 9:51
ortho phosphorus								
Phosphorus	0.26		mg/L	0.01	0.010	365.2	DW-DV	10/28/04 8:45
Sulfide, reactive								
Sulfide, reactive	120.		mg/L	1	1.3	9030B	DC-DV	11/2/04 9:00

This report is intended to be reproduced in its entirety only. The result(s) in this report apply to only the indicated sample(s) submitted within 30 days from the report date, otherwise full payment is expected. Net 30 days.

Douglassville Location:
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196
Fax: (610) 327-6864

NJ DEP Cert #PA925
NY LAB ID NO.: 11828
PA DEP Cert #06-409

Blue Marsh
LABORATORIES • INC
Professional testing for the critical decision

Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

LAB #: 41468-1

Client: U S Environmental
251 Norwood Road
Downingtown, PA 19335

Attn: Richard Weaver

Project: Stepan
Received: 10/20/2004

Sample Type: Waste Water
Sample ID: Waste Water
Collected By: Richard Weaver
Collected: 10/19/04 9:42
Source:
Print Date: November 04, 2004
Report Date: November 04, 2004

Abstract	Test	Result	Qls	Units	PQL	MDL	Method	Init	Analysis Date
TCLP Ext									
	TCLP Extraction - TCLP	DONE				0.	1311	KJP-DV	10/21/04 8:00
TCLP Herbicides									
	2,4,5-TP (Silvex) - TCLP	< 0.025		mg/L	0.03	0.50	8321A	MJM-DV	11/2/04 12:00
	2,4-D - TCLP	< 0.025		mg/L	0.03	0.50	8321A	MJM-DV	11/2/04 12:00
TCLP Metals									
	Arsenic - TCLP	< 0.005		mg/L	0.005	0.0050	6010B	KJP-DV	10/21/04 15:19
	Barium - TCLP	0.013		mg/L	0.005	0.0050	6010B	KJP-DV	10/21/04 15:19
	Cadmium - TCLP	< 0.005		mg/L	0.005	0.0050	6010B	KJP-DV	10/21/04 15:19
	Chromium - TCLP	0.019		mg/L	0.005	0.0050	6010B	KJP-DV	10/21/04 15:19
	Lead - TCLP	< 0.005		mg/L	0.005	0.0050	6010B	KJP-DV	10/21/04 15:19
	Selenium - TCLP	< 0.005		mg/L	0.005	0.0050	6010B	KJP-DV	10/21/04 15:19
	Silver - TCLP	< 0.005		mg/L	0.005	0.0050	6010B	KJP-DV	10/21/04 15:19
TCLP Metals - Mercury									
	Mercury - TCLP	< 2e-05.		mg/L	0.0000	0.000020	7471A	KJP-DV	10/21/04 11:45
TCLP Pesticides									
	Chlordane-technical - TCLP	< 0.0025		mg/l	0.003	0.0050	8081A	MJM-DV	10/30/04 12:04
	Endrin - TCLP	< 0.0025		mg/l	0.003	0.0050	8081A	MJM-DV	10/30/04 12:04
	g-BHC (Lindane) - TCLP	< 0.0025		mg/l	0.003	0.0050	8081A	MJM-DV	10/30/04 12:04
	Heptachlor - TCLP	< 0.0025		mg/l	0.003	0.0050	8081A	MJM-DV	10/30/04 12:04
	Heptachlor epoxide - TCLP	< 0.0025		mg/l	0.003	0.0050	8081A	MJM-DV	10/30/04 12:04
	Methoxychlor - TCLP	< 0.0025		mg/l	0.003	0.0050	8081A	MJM-DV	10/30/04 12:04
	Toxaphene - TCLP	< 0.0025		mg/l	0.003	0.0050	8081A	MJM-DV	10/30/04 12:04
TCLP pH - Init Final									
	Final TCLP pH - TCLP	4.98		s.u.	0.01	0.010	150.1	KJP-DV	10/21/04 8:00
	Initial TCLP pH - TCLP	5.01		s.u.	0.01	0.010	150.1	KJP-DV	10/20/04 14:00

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267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

LAB #: 41468-1

Client: U S Environmental
251 Norwood Road
Downingtown, PA 19335

Attn: Richard Weaver

Project: Stepan
Received: 10/20/2004

Sample Type: Waste Water
Sample ID: Waste Water
Collected By: Richard Weaver
Collected: 10/19/04 9:42
Source:

Print Date: November 04, 2004
Report Date: November 04, 2004

Abstract | Test	Result	Qls	Units	PQL	MDL	Method	Init	Analysis Date
TCLP SemiVolatiles								
2,4,5-Trichlorophenol - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
2,4,6-Trichlorophenol - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
2,4-Dinitrotoluene - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
2-Methylphenol - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
3,4-Methylphenol - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
Hexachlorobenzene - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
Hexachlorobutadiene - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
Hexachloroethane - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
Nitrobenzene - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
Pentachlorophenol - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
Pyridine - TCLP	< 0.001		mg/l	0.001	0.100	8270C	MJM-DV	10/21/04 19:04
TCLP Volatiles								
1,1-Dichloroethene - TCLP	< 0.01		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
1,2-Dichloroethane - TCLP	< 0.01		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
1,4-Dichlorobenzene - TCLP	< 0.01		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
2-Butanone - TCLP	4.56		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
Benzene - TCLP	< 0.01		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
Carbon tetrachloride - TCLP	< 0.01		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
Chlorobenzene - TCLP	< 0.01		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
Chloroform - TCLP	< 0.01		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
Tetrachloroethene - TCLP	< 0.01		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
Trichloroethene - TCLP	< 0.01		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
Vinyl chloride - TCLP	< 0.01		mg/l	0.01	0.0010	8260B	MJM-DV	10/29/04 18:19
TOC-aq								
Total Organic Carbon (TOC)	6255.		mg/L	100	1.0	415.1	DW-DV	10/29/04 8:00
Total Solids-aq								
Total Solids	20165.		mg/L	8	8.0	160.3	DC-DV	10/26/04 10:25

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- CERTIFICATE OF ANALYSIS -

LAB #: 41468-1

Client: U S Environmental
251 Norwood Road
Downingtown, PA 19335

Attn: Richard Weaver

Project: Stepan

Received: 10/20/2004

Sample Type: Waste Water
Sample ID: Waste Water
Collected By: Richard Weaver
Collected: 10/19/04 9:42
Source:

Print Date: November 04, 2004
Report Date: November 04, 2004

Abstract / Test	Result	Qls	Units	PQL	MDL	Method	Init	Analysis Date
TPH - aq								
TPH	33.		mg/L	5	5.0	1664A	MJM-DV	11/3/04 15:45
TSS								
Total Suspended Solids (TSS)	448.		mg/L	4	1.0	160.2	DJC-DV	10/22/04 9:05
Vol Suspended Solids								
Volatile Suspended Solids	5296.		mg/L	1	1.0	160.4	DCC-DV	10/22/04 12:30
WC-160.4-aq								
Total Volatile Solids (TVS)	14220.		mg/L	1	1.0	160.4	DCC-DV	10/26/04 12:30
WC-351.1-aq								
Total Kjeldahl Nitrogen (TKN)	5.5		mg/L	5.0	0.10	351.1	DW-DV	10/25/04 13:15

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Abstract	Test	Result	Qls	Units	PQL	MDL	Method	Init	Analysis Date

Reviewed and Approved by;

Debbie Wanner
Laboratory Manager

< - indicates the result was non-detect or a result below the laboratories reporting detection limit
D - indicates the sample was diluted
E - indicates an estimated value outside of the calibration range of the analysis
B - indicates that the analyte was found in the method blank associated with the sample
T - indicates that the sample was analyzed out of hold
I - indicates that there was matrix interference
Q - indicates that the sample was analyzed without all quality control being in compliance
H - exceeds permit limit

DV - in the 'Init' column indicates that the sample was analyzed at our Douglassville, PA facility
PR - in the 'Init' column indicates that the sample was analyzed at our Princeton, NJ facility
SB - in the 'Init' column indicates that the sample was analyzed at a sub-contracted laboratory

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