

GENERATOR'S WASTE MATERIAL PROFILE SHEET

PLEASE PRINT IN INK OR TYPE (EPA 12-plate)

SUBMITTED TO WASTE TECH SERVICES
DATE: April, 1990

WTS -003

Waste Profile Sheet Code

A. GENERAL INFORMATION

1. Generator Name: PPG Industries, Inc. 2. Generator USEPA ID: LAD 008086506
3. Facility Address: P. O. Box 1000 4. Generator State ID: Same
Lake Charles, LA
(Columbia Southern Road) 5. Zip Code: 70602
6. Technical Contact: William H. Cooper 7. Title: Assoc. Research Chemist 8. Phone: (318) 491 - 4250

B. MAIL WASTE TECH SERVICES

INVOICES TO 1. ☒ Generating Facility (A, above), or

2. Company Name: _____ 3. Phone: () -
4. Address: _____
5. Zip Code: _____

C. 1. NAME OF WASTE WTU Surge Pond Sludge
2. PROCESS GENERATING WASTE Production of Chlorinated Hydrocarbons
3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☒ No If yes, DO NOT COMPLETE this form.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color: <u>Black</u>	2. Does the waste have a strong incidental odor? ☐ No ☒ Yes If known, describe: _____	3. Physical State @ 70°F: ☐ Solid ☒ Semi-Solid ☐ Liquid ☐ Powder Other: _____	4. Layers: ☒ Multilayered ☐ Bi-layered ☐ Single Phased	5. Specific Gravity: Range: <u>1.2</u> - <u>1.4</u>	6. Free Liquids: ☒ Yes ☐ No Volume: <u><10</u>
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7. pH: ☐ ≤ 2 ☒ > 2-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10- <12.5 ☐ ≥ 12.5 ☐ Range _____ ☐ N

8. Liquid Flash Point: ☐ < 73°F ☒ 73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☐ None ☒ Closed Cup ☐ Open Cu

E. CHEMICAL COMPOSITION

	RANGE		
	MIN.	MAX.	
1. Chlorinated Hydrocarbons	15	30	%
Water	10	50	%
Ash	15	25	%
	-	-	%
	-	-	%
	-	-	%
	-	-	%
	-	-	%
	-	-	%
	-	-	%
	-	-	%

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%.

TOTAL: 100+ %

2. Indicate if this waste contains any of the following:

	NONE	or	LESS THAN	or	ACTUAL
PCB's	☐	<	50 ppm	-	26 ppm
Cyanides	☐	<	50 ppm	UNK	ppm
Phenolics	☐	<	50 ppm	UNK	ppm
Sulfides	☐	<	50 ppm	UNK	ppm

F. METALS Indicate if this waste contains any of the following:

METAL	1. ☐ EP TOX/TCLP	or	2. ☒ Total	LESS THAN	or	ACTUAL
				(Parts Per Million)		
Arsenic	☐ < 5	☐ < 500				0.88
Barium	☐ < 100					24.55
Cadmium	☐ < 1	☐ < 100				<0.50
Chromium	☐ < 5					54.25
Lead	☐ < 5	☐ < 500				4.37
Mercury	☐ < 0.2	☐ < 20				11.0
Selenium	☐ < 1	☐ < 100				<0.0
Silver	☐ < 5					<1.6
Chromium-Hex	☐ < 5	☐ < 500				UNK
Copper	☐ < 5					31.0
Nickel	☐ < 5	☐ < 134				24.7
Thallium	☐ < 5	☐ < 130				UNK
Zinc	☐ < 5					UNK
Antimony	☐ <					<5.0

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GENERATOR'S WASTE MATERIAL PROFILE SHEET (C ntinued)

WIS-003

Waste Profile Sheet Code

G. OTHER HAZARDOUS CHARACTERISTICS

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)?
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds?
3. Indicate if this waste is any of the following:

☐ Yes ☒ No
☒ Yes ☐ No

- | | |
|--|--|
| ☐ RCRA Reactive | ☐ Radioactive |
| ☐ Water Reactive | ☐ Etiological |
| ☐ Explosive | ☐ Pesticide Manufacturing Waste |
| ☐ Shock Sensitive | ☐ Other |
| ☐ Pyrophoric | ☒ None of the above |

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION

	LESS THAN	or	ACTUAL
Beryllium	☐ < 5000 ppm		<0.56 ppm
Potassium	☐ < 5000 ppm		UNK ppm
Sodium	☐ < 5000 ppm		1500 ppm
Total Bromine	☐ < 2 %		UNK %
Total Chlorine	☐ < 35 %		17.65 %
Total Fluorine	☐ < 1 %		UNK %
Total Sulfur			UNK %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available

1. Heat Value (BTU/lb): Range 500 - 1000
2. Water: 28.6
3. Viscosity (cps): 4000-20000 @ ☒ 72 °F ☐ 100° F ☐ 150°
4. Ash: 21 %
5. Settleable solids: -
6. Vapor Pressure @ STP (mm/Hg): -
7. Is this waste a pumpable liquid? ☒ Yes ☐ No
Type of pump? -
8. Can this waste be heated to improve flow? ☐ Yes ☒ No
9. Is this waste soluble in water? ☐ Yes ☒ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☒ Yes ☐ No

J. TRANSPORTATION INFORMATION

1. Is this a DOT Hazardous Material? ☒ Yes ☐ No
2. Anticipated Annual Volume/Units: 1500 / Tons
3. Proper Shipping Name: Waste Flammable Liquid, n.o.s. ORM-E
4. Hazard Class: Flammable Liquid
5. I.D. #: NA9189
6. Additional Description: (DO01/F024
7. Method of Shipment: ☒ Bulk Liquid ☐ Bulk Solid ☐ Drum (Type/Size): / Other: -
8. CERCLA Reportable Quantity (RQ): 1
9. RQ Units (lb/kg): 1b
10. USEPA Hazardous Waste? ☒ Yes ☐ No
11. USEPA Hazardous Waste Number(s): DO01/F024
12. State Hazardous Waste? ☒ Yes ☐ No
13. State Hazardous Waste Number(s): DO01/F024

K. SPECIAL HANDLING INFORMATION

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. William H. Cooper
Signature

Assoc. Res. Chemist

2. Title

William H. Cooper

April 9, 1990

3. Name (Type or Print)

4. Date

SL 046389

WASTE ANALYSIS REPORT

Environmental Laboratory
PPG Industries, Inc., Lake Charles, LA WTS-003

Sample - WTU Surge Pond Sludge (Derivatives)
Location of Sample - Around perimeter of Pond, 10 feet from bank, 1' depth
Sample Collector - W.H. Cooper, W.P. Hebert
Sample Method/Device - Long handle dipper, Random grabs
Date of Sampling - 7/1/88 1305
Date All Analyses Completed - 7/15/88 Report Submitted by: F. Annor Corbelli
8/27/88

ANALYSIS RESULTS

Test Parameters		Standard	Lab Log Sample Identification Number			
Ignitability () - N/A		140 F min	766			766
Corrosivity () - N/A	pH	2 - 12.5	3.2			
	inch/yr	0.250 max				
Reactivity () - N/A						
EP Toxicity (mg/L) () - N/A	As	5.0 max				
	Ba	100.0 max				
	Cd	1.0 max				
	Cr	5.0 max				
	Pb	5.0 max				
	Hg	0.2 max				
	Se	1.0 max				
	Ag	5.0 max				
Other Parameters (if needed) () - N/A	CHLORINATED HYDROCARBONS (wt %)					
	Chloroethane	(VC)				
	Chloroethane	(EC)	ND			
	Dichloromethane	(DC12)			Heat Value	95.7 BTU/lb.
	1,1-Dichloroethane	(VDC)			Chlorine	2.88%
	1,1-Dichloroethane	(DC1)	ND			
	1,2-Dichloroethane	(cis/trans)			Water	36.75%
	Trichloromethane	(CHC13)	ND		Density	1.287 g/ml
	1,2-Dichloroethane	(KDC)	0.24 %		Sodium	0.71%
	1,1,1-Trichloroethane	(TC)			Ash	47.43%
	Tetrachloromethane	(CC14)	0.14 %			
	Trichloroethane	(Trichlor)	0.17 %			
	1,1,2-Trichloroethane	(TCE)	0.09 %			
	1,1,1,2-Tetrachloroethane (unsym)		0.06 %			
	1,1,2,2-Tetrachloroethane (sym)		0.17 %			
	Tetrachloroethane	(Perchlor)	0.61 %			
	Pentachloroethane	(Penta)	0.10 %			
	Hexachloroethane	(Hexa)	0.08 %			
	Hexachlorobutadiene	(HCBD)	0.41 %			
	Para-Dichlorobenzene		0.03 %			
	UNKNOWN		1.44 %			
	TOTAL CLC		3.48 %			

LL 766

TEST PROCEDURE

Parameter	Method Used																																																
Ignitability ☐ N/A	☐ Pensky-Martens Closed Cup Tester ASTM Standard D-93-79 ☐ Setaflash Closed Cup Tester ASTM Standard D-3278-78 ☐ Other (specify)																																																
Corrosivity (pH) ☐ N/A	☒ SW-846 Method 9040 pH Measurement ☐ Other (specify)																																																
Corrosivity (inch/yr) ☐ N/A	☐ National Association of Corrosion Engineers Standard TM-01-69 ☐ Other (specify)																																																
Reactivity ☐ N/A (One affirmative answer will classify waste reactive)	1) Normally unstable without detonating? 2) Reacts violently with water? 3) Forms potentially explosive mixture with water? 4) Cyanide or sulfide bearing waste which can generate toxic gases, vapor or fumes under pH conditions between 2 and 12.5? 5) Capable of detonation or explosive reaction if subjected to strong initiating source or if heated under confinement? 6) Readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure? 7) Forbidden Class A, or Class B explosive as defined in 49 CFR 173.51, 173.53, and/or 173.98?																																																
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* Toxicity Characteristic Leaching Procedure

LABORATORY IDENTIFICATION

Laboratory: <u>PPG Env Lab Lake Charles</u>	Test Parameters Analyzed and Date
Analyst(s): <u>Grizelle Brunett</u>	<u>Water, Ash, Heat Value, Cl, CLHC, pH</u> <u>7/7/88</u>
<u>Gil Ford</u>	<u>Sodium</u> <u>7/15/88</u>

cc: File
Anne Corbello

✓File

SL 046391

WASTE ANALYSIS REPORT

Environmental Laboratory
PPG Industries, Inc., Lake Charles, LA WTS-003

Sampl

- WTU Surge Pond Sludge

Location of Sample

- Derivatives, West bank of Surge Pond Near Pumps...

Sample Collector

- Joyce Williams

— Sample Method/Device - Spot grab, scoop

Date of Sampling

- 6/29/88

Date All Analyses Completed - 7/15/88

Report Submitted by: F. Anne Corbell
8/20/88

ANALYSIS RESULTS

ANALYSIS RESULTS			Lab Log Sample Identification Number				
Test Parameters		Standard	769				
Ignitability () - N/A		140 F min					
Corrosivity () - N/A	pH	2 - 12.5					
	inch/yr	0.250 max					
Reactivity () - N/A							
EP Toxicity (mg/L) () - N/A	As	5.0 max					
	Ba	100.0 max					
	Cd	1.0 max					
	Cr	5.0 max					
	Pb	5.0 max					
	Hg	0.2 max					
	Se	1.0 max					
	Ag	5.0 max					
Other Parameters (if needed) () - N/A	CHLORINATED HYDROCARBONS (wt %)						
	Chloroethene (VC)						
	Chloroethane (EC)		Heat Value		756. BTU/lb.		
	Dichloromethane (M ₂ Cl ₂)		Chlorine		22.165%		
	1,1-Dichloroethene (VDC)						
	1,1-Dichloroethane (DCE)	0.10 %	Water		39.45%		
	1,2-Dichloroethene (cis/trans)						
	Trichloromethane (CHCl ₃)	0.36 %	Density		1.378 g/ml		
	1,2-Dichloroethane (EDC)	2.35 %					
	1,1,1-Trichloroethane (MC)		Sodium		0.12 %		
	Tetrachloromethane (CCl ₄)	0.24 %	Ash		24.163%		
	Trichloroethene (Trichlor)	0.92 %					
	1,1,2-Trichloroethane (TCE)	0.69 %					
	1,1,1,2-Tetrachloroethane (unsym)	0.38 %					
	1,1,2,2-Tetrachloroethane (sym)	0.06 %					
	Tetrachloroethene (Perchlor)	3.02 %					
	Pentachloroethane (Penta)	0.57 %					
	Hexachloroethane (Hexa)	0.59 %					
	Hexachlorobutadiene (HCBD)	2.65 %					
	para-Dichlorobenzene	0.06 %					
	UNKNOWN		15.36				
	TOTAL CLC		27.34				

LL 769

TEST PROCEDURE

Parameter	Method Used																																																
Ignitability ☐ N/A	☐ Pensky-Martens Closed Cup Tester ASTM Standard D-93-79 ☐ Setaflash Closed Cup Tester ASTM Standard D-3278-78 ☐ Other (specify)																																																
Corrosivity (pH) ☐ N/A	☒ SW-846 Method 9040 pH Measurement ☐ Other (specify)																																																
Corrosivity (inch/yr) ☐ N/A	☐ National Association of Corrosion Engineers Standard TM-01-69 ☐ Other (specify)																																																
Reactivity ☐ N/A (One affirmative answer will classify waste reactive)	1) Normally unstable without detonating? 2) Reacts violently with water? 3) Forms potentially explosive mixture with water? 4) Cyanide or sulfide bearing waste which can generate toxic gas s, vapor or fumes under pH conditions between 2 and 12.5? 5) Capable of detonation or explosive reaction if subjected to strong initiating source or if heated under confinement? 6) Readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure? 7) Forbidden Class A, or Class B explosive as defined in 49 CFR 173.51, 173.53, and/or 173.88?																																																
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* Toxicity Characteristic Leaching Procedure

LABORATORY IDENTIFICATION

Laboratory: PPG ENV Lab LK Charles	Test Parameters Analyzed and Date
Analyst(s): Gil Ford	Sodium 7/15/88
Tommy Vizena	CLHC, Water, Ash, Heat Value, Cl 7/12/88

cc: File
Anne Corbello

File v

SL 046393

WASTE ANALYSIS REPORT

Environmental Laboratory
PPG Industries, Inc., Lake Charles, LA WTS-003

Sample - WTU Surge Pond South east quadrant
Location of Sample - SE quadrant 4 sampling points 1,2,5,6 *
Sample Collector - McClelland Engineers
Sample Method/Device - Crane extended over Pond, sediment dredger / Pond grid
Date of Sampling - 7/18/88 0630-1130
Date All Analyses Completed - 8/24/88 Report Submitted by: F. Anne Corbello
8/27/88

ANALYSIS RESULTS

Test Parameters		Standard	Lab Log Sample Identification Number 773			
Ignitability () - N/A		140 F min	773			
Corrosivity () - N/A	pH	2 - 12.5	82			
	inch/yr	0.250 max	2.4			
Reactivity () - N/A						
EP-Testosterone (mg/L) TOTAL () - N/A Metals	As	5.0 max	1.07			
	Ba	100.0 max	21.2			
	Cd	1.0 max	<0.47			
	Cr	5.0 max	59.2			
	Pb	5.0 max	2.29			
	Hg	0.2 max	8.79			
	Se	1.0 max	<0.056			
	Ag	5.0 max	<1.12			
	Nickel		21.0			
	Copper		19.1			
	Antimony		<3.37			
	Beryllium		<0.56			
Other Parameters (if needed) () - N/A ND: None Detected	CHLORINATED HYDROCARBONS (sum) wt %					
	Chloroethane	(VC)		PCB	23 ppm	
	Chloroethane	(EC)	0.05	Viscosity	12,300-1620 cps	
	Dichloroethane	(MC12)		Heat Value	7100.1 BTU/lb	
	1,1-Dichloroethane	(VDC)		Chlorine	17.57 %	
	1,1-Dichloroethane	(DCR)	ND	Water	39.53 %	
	1,2-Dichloroethane	(cis/trans)		Density	1.283 g/ml	
	Trichloroethane	(CHC13)	0.81	Ash	24.02 %	
	1,2-Dichloroethane	(EDC)	7.13			
	1,1,1-Trichloroethane	(MC)				
	Tetrachloroethane	(CC14)	0.37			
	Trichloroethane	(Trichlor)	0.83			
	1,1,2-Trichloroethane	(TCE)	0.58			
	1,1,1,2-Tetrachloroethane (unsym)		0.21			
	1,1,2,2-Tetrachloroethane (sym)		0.57			
	Tetrachloroethane	(Perchlor)	4.38			
	Pentachloroethane	(Penta)	0.46			
	Hexachloroethane	(Hexa)	0.49			
	Hexachlorobutadiene	(HCBD)	1.32			
	UNKNOWN		4.80			
	TOTAL CLC		22.07			

* Reference LAB Log Book II p. 61 (Pond grid)

SL 046394

LL 773

TEST PROCEDURE

Parameter	Method Used																																																
Ignitability ☐ N/A	☒ Pensky-Martens Closed Cup Tester ASTM Standard D-93-79 ☐ Setaflash Closed Cup Tester ASTM Standard D-3278-78 ☐ Other (specify)																																																
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Cd	6010	Metals	3050	Ash	LD2561																																												
Cr	6010	Flash Point	1010	Heat Valve	LD2562 B																																												
Pb	7420			Chlorine	LD2562 D																																												
Hg	7470			CLHC	LD2562 A																																												
Se	7741			Viscosity	Viscometer																																												

* Toxicity Characteristic Leaching Procedure

LABORATORY IDENTIFICATION

Laboratory: <u>PPGEN Lab & Core Lab</u>	Test Parameters Analyzed and Date
Analyst(s): <u>Robert Morris, Core</u>	<u>Metals 8/12/88</u>
<u>Grizelle Brunett</u>	<u>Viscosity 7/22/88</u>
<u>Tommy Vizena</u>	<u>Water, Ash, density, Heat Valve, Cl, CLHC, pH 7/21/88</u>
<u>Robert Pertuit</u>	<u>PCB 7/19/88</u>
<u>F. Anne Corbello</u>	<u>Flash Point 8/24/88</u>

cc: File

Anne Corb llo

Larry Joiner

F. Anne Corbello (2)

SL 046395

WASTE ANALYSIS REPORT

Environmental Laboratory
PPG Industries, Inc., Lake Charles, LA

WTS-003

Sample

- WTU Surge Pond South west quadrant

Location of Sample

- SW quadrant 4 sampling points 3,4,7,8 *

Sample Collector

- McClelland Engineers

Sample Method/Device

- Crane extended over Pond, sediment dredger / Pond grid

Date of Sampling

- 7/18/88 0630-1130

Date All Analyses Completed - 8/24/88

Report Submitted by: F. Anne Corbello
8/27/88

ANALYSIS RESULTS

Test Parameters		Standard	Lab Log Sample Identification Number	
			774	LL 774
Ignitability () - N/A		140 F min	82	
Corrosivity () - N/A	pH	2 - 12.5	2.3	
	inch/yr	0.250 max		
Reactivity () - N/A				
SP-Toxicity (mg/L) () - N/A TOTAL Metals	As	5.0 max	0.54	
	Ba	100.0 max	37.1	
	Cd	1.0 max	<0.54	
	Cr	5.0 max	40.3	
	Pb	5.0 max	6.01	
	Hg	0.2 max	11.2	
	Se	1.0 max	<0.098	
	Ag	5.0 max	<1.96	
	Nickel		26.6	
	Copper		38.9	
	Antimony		<5.89	
	Beryllium		<0.98	
Other Parameters (if needed) () - N/A	CHLORINATED HYDROCARBONS (mg/L)			
	Chloroethane	(VCT)		PCB 31 ppm
	Chloroethane	(EC)	0.08	
	Dichloromethane	(Mc12)		Viscosity 14,500-4750 cps
	1,1-Dichloroethane	(VDC)		
	1,1-Dichloroethane	(DC)	0.27	Heat Value 919.5 BTU/lb
	1,2-Dichloroethane	(cis/trans)		
	Trichloromethane	(CHCl3)	0.79	Chlorine 22.31 %
	1,2-Dichloroethane	(EDC)	7.19	
	1,1,1-Trichloroethane	(MC)		Water 45.94 %
	Tetrachloromethane	(CCl4)	0.41	
	Trichloroethane	(Trichlor)	1.83	Density 1.272 g/ml
	1,1,2-Trichloroethane	(TC)	1.17	
	1,1,1,2-Tetrachloroethane (unsym)		0.42	Ash 11.8 %
	1,1,2,2-Tetrachloroethane (sym)		1.30	
	Tetrachloroethane	(Perchlor)	7.19	
	Pentachloroethane	(Penta)	0.65	
	Hexachloroethane	(Hexa)	0.103	
	Hexachlorobutadiene	(HCBD)	0.98	
	para-Dichlorobenzene		0.02	
	UNKNOWN		4.84	
	TOTAL CLHC	Wt. %	27.78	

* Reference Pond grid Lab Log Book II p161

SL 046396

46774

TEST PROCEDURE

Parameter	Method Used
Ignitability ☐ N/A	☒ Pensky-Martens Closed Cup Tester ASTM Standard D-93-79 ☐ Seraflash Closed Cup Tester ASTM Standard D-3278-78 ☐ Other (specify)
Corrosivity (pH) ☐ N/A	☒ SW-846 Method 9040 pH Measurement ☐ Other (specify)
Corrosivity (inch/yr) ☐ N/A	☐ National Association of Corrosion Engineers Standard TM-01-69 ☐ Other (specify)
Reactivity ☒ N/A (One affirmative answer will classify waste reactive)	1) Normally unstable without detonating? 2) Reacts violently with water? 3) Forms potentially explosive mixture with water? 4) Cyanide or sulfide bearing waste which can generate toxic gases, vapor or fumes under pH conditions between 2 and 12.5? 5) Capable of detonation or explosive reaction if subjected to strong initiating source or if heated under confinement? 6) Readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure? 7) Forbidden Class A, or Class B explosive as defined in 49 CFR 173.51, 173.53, and/or 173.88?

	Parameter	SW 846 Method	Parameter	SW 846 Method	Parameter	PG Method Used
EP Toxicity SW-846 (Method 1310) ☐ N/A TCLP* ☐ N/A	As	706L	Ag	7760	PCB	LD 25621
	Ba	6010	CLHC	5030	Water	LD 25626
	Cd	6010	Metals	3050	Ash	LD 25621
	Cr	6010	Flash Point	1010	Heat Value	LD 25623
	Pb	7420			Chlorine	LD 25620
	Hg	7470			CLHC	LD 2562A
	Se	7741			Viscosity	Viscometer

* Toxicity Characteristic Leaching Procedure

LABORATORY IDENTIFICATION	
Laboratory: PPG Env. Lab - Core LAB	Test Parameters Analyzed and Date
Analyst(s): Robert Morris, Core	Metals 8/12/88
Grizelle Brunett	Viscosity 7/22/88
Tommy Vizen	Water, Ash, density, Heat Value, Cl, CLHC, pH 7/21/88
Robert Perlvit	PCB 7/19/88
F. Anne Corbello	Flash Point 8/24/88

cc: File
 Anne Corb 110
 Larry Joiner
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SL 046397

WASTE ANALYSIS REPORT

Environmental Laboratory
PPG Industries, Inc., Lake Charles, LA

Sample - WTU Surge Pond North East quadrant
Location of Sample - NE quadrant 4 sampling points 9, 10, 13, 14 *
Sample Collector - McClland Engineers
Sample Method/Device - Crane extended over Pond, sediment dredger / Pond-grid
Date of Sampling - 7/18/88 0630-1130
Date All Analyses Completed - 8/24/88 Report Submitted by: F. Anne Corbello
8/27/88

ANALYSIS RESULTS

Test Parameters		Standard	Lab Log Sample Identification Number 775			
Ignitability () - N/A		140 F min	775			
Corrosivity () - N/A	pH	2 - 12.5	8.2			
	inch/yr	0.250 max	2.8			
Reactivity (✓) - N/A						
SP-Toxicity (mg/L) () - N/A Total Metals	As	5.0 max	1.09			
	Ba	100.0 max	25.9			
	Cd	1.0 max	<0.47			
	Cr	5.0 max	62.8			
	Pb	5.0 max	3.50			
	Hg	0.2 max	10.68			
	Se	1.0 max	<0.086			
	Ag	5.0 max	<1.72			
	Nickel		26.2			
	Copper		46.9			
	Antimony		25.15			
	Beryllium		<0.86			
Other Parameters (if needed) () - N/A ND: None Detected	CHLORINATED HYDROCARBONS (sum dist %)					
	Chloroethane	(VC)			PCB 19 ppm	
	Chloroethane	(EC)	0.03			
	Dichloromethane	(MC12)			viscosity 6080-5420 cps	
	1,1-Dichloroethane	(VDC)				
	1,1-Dichloroethane	(DCR)	ND		Heat value 578.6 BTU/lb	
	1,2-Dichloroethane	(cis/trans)				
	Trichloromethane	(CC13)	0.52		Chlorine 13.84%	
	1,2-Dichloroethane	(EDC)	4.95			
	1,1,1-Trichloroethane	(MC)			Water 12.12 %	
	Tetrachloromethane	(CC14)	0.18			
	Trichloroethane	(Trichlor)	0.70		Density 1.267 g/ml	
	1,1,2-Trichloroethane	(TCR)	0.50			
	1,1,1,2-Tetrachloroethane	(unsym)	0.20		Ash 23.88 %	
	1,1,2,2-Tetrachloroethane	(sym)	0.46			
	Tetrachloroethane	(Perchlor)	3.45			
	Pentachloroethane	(Penta)	0.39			
	Hexachloroethane	(Hexa)	0.38			
	Hexachlorobutadiene	(HCBD)	1.11			
	UNKNOWN		4.39			
	TOTAL C12C	Wt %	17.25			

*Reference Pond grid Lab Log Book II p. 61

SL 046391

LL775

TEST PROCEDURE						
Parameter	Method Used					
Ignitability ☐ N/A	☒ Pensky-Martens Closed Cup Tester ASTM Standard D-93-79 ☐ Setaflash Closed Cup Tester ASTM Standard D-3278-78 ☐ Other (specify)					
Corrosivity (pH) ☐ N/A	☒ SW-846 Method 9040 pH Measurement ☐ Other (specify)					
Corrosivity (inch/yr) ☐ N/A	☐ National Association of Corrosion Engineers Standard TM-01-69 ☐ Other (specify)					
Reactivity ☒ N/A (One affirmative answer will classify waste reactive)	1) Normally unstable without detonating? 2) Reacts violently with water? 3) Forms potentially explosive mixture with water? 4) Cyanide or sulfide bearing waste which can generate toxic gases, vapor or fumes under pH conditions between 2 and 12.5? 5) Capable of detonation or explosive reaction if subjected to strong initiating source or if heated under confinement? 6) Readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure? 7) Forbidden Class A, or Class B explosive as defined in 49 CFR 173.51, 173.53, and/or 173.88?					
	Parameter	SW 846 Method	Parameter	SW 846 Method	Parameter	Method Used
EP Toxicity SW-846 (Method 1310) ☒ N/A TCLP* ☒ N/A	As	7061	Ag	7760	PCB	LD2571
	Ba	6010	CLHC	5030	Water	LD2566
	Cd	6010	Metals	3050	Ash	LD2561
	Cr	6010	Flash Point	1010	Heat Value	LD2562B
	Pb	7420			Chlorine	LD2562D
	Hg	7470			CLHC	LD2562A
	Se	7741			Viscosity	Viscometer

* Toxicity Characteristic Leaching Procedure

LABORATORY IDENTIFICATION	
Laboratory: <u>PPG Env. Lab + Core Lab</u>	Test Parameters Analyzed and Date
Analyst(s): <u>Robert Morris, Core</u>	<u>Metals 8/12/88</u>
<u>Grizelle Brunett</u>	<u>Viscosity 7/22/88</u>
<u>Tommy Vazera</u>	<u>Water, Ash, density, Heat Value, Cl, CLHC, pH 7/21/88</u>
<u>Robert Pertuit</u>	<u>PCB 7/19/88</u>
<u>Anne Corbello</u>	<u>Flash Point 8/24/88</u>

cc: File
 Anne Corb llo
 Larry Joiner
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WASTE ANALYSIS REPORT

Environmental Laboratory
PPG Industries, Inc., Lake Charles, LA WTS-003

Sample - WTU Surge Pond North West quadrant
Location of Sample - NW quadrant 4 sampling points 11,12,15,16 *
Sample Collector - McCelland Engineers
Sample Method/Device - Crane extended over pond, sediment dredger / Pond grid
Date of Sampling - 7/18/88 0630-1130
Date All Analyses Completed - 8/24/88 Report Submitted by: F. Anne Corbell
8/27/88

ANALYSIS RESULTS

Test Parameters		Standard	Lab Log Sample Identification Number	
Ignitability () - N/A		140 F min	7716	7716
Corrosivity () - N/A	pH	2 - 12.5	8.2	
	inch/yr	0.250 max	2.5	
Reactivity (✓) - N/A				
EP Toxicity (mg/L) () - N/A Total Metals	As	5.0 max	0.82	
	Ba	100.0 max	14.0	
	Cd	1.0 max	<0.51	
	Cy	3.0 max	5.7	
	Fe	5.0 max	5.68	
	Hg	0.2 max	13.62	
	Se	1.0 max	<0.093	
	Ag	5.0 max	<1.86	
	Nickel		25.2	
	Copper		19.3	
Other Parameters (if needed) () - N/A	Antimony		<5.57	
	Beryllium		<0.93	
	CHLORINATED HYDROCARBONS (unsys) wt %			
	Chloroethane (VC)			PCB 30 ppm
	Chloroethane (EC)		0.04	
	Dichloromethane (MC12)			Viscosity 20,000-4400 cps
	1,1-Dichloroethane (VDC)			
	1,1-Dichloroethane (DC1)		0.13	Heat Value 1694.6 BTU/lb
	1,2-Dichloroethane (cis/trans)			
	Trichloroethane (CH13)		0.47	Chlorine 16.89 %
	1,2-Dichloroethane (EDC)		5.53	
	1,1,1-Trichloroethane (MC)			Water 16.94 %
	Tetrachloroethane (CC14)		0.32	
	Trichloroethane (Trichlor)		1.05	Density 1.285 g/ml
	1,1,2-Trichloroethane (TCE)		0.72	
	1,1,1,2-Tetrachloroethane (unsys)		0.37	Ash 19.4 %
	1,1,2,2-Tetrachloroethane (sys)		0.77	
	Tetrachloroethane (Perchlor)		4.03	
	Pentachloroethane (Penta)		0.57	
	Hexachloroethane (Hexa)		0.46	
	Hexachlorobutadiene (HCBD)		1.24	
	UNKNOWN		5.30	
	TOTAL CLC		wt % 21.01	

* Reference Pond grid Lab Log Book II p.61

LL 776

TEST PROCEDURE

Parameter	Method Used
Ignitability ☐ N/A	☒ Pensky-Martens Closed Cup Tester ASTM Standard D-93-79 ☐ Setaflash Closed Cup Tester ASTM Standard D-3278-78 ☐ Other (specify)
Corrosivity (pH) ☐ N/A	☒ SW-846 Method 9040 pH Measurement ☐ Other (specify)
Corrosivity (inch/yr) ☒ N/A	☐ National Association of Corrosion Engineers Standard TM-01-69 ☐ Other (specify)
Reactivity ☒ N/A (One affirmative answer will classify waste reactive)	1) Normally unstable without detonating? 2) Reacts violently with water? 3) Forms potentially explosive mixture with water? 4) Cyanide or sulfide bearing waste which can generate coxic gases, vapor or fumes under pH conditions between 2 and 12.5? 5) Capable of detonation or explosive reaction if subjected to strong initiating source or if heated under confinement? 6) Readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure? 7) Forbidden Class A, or Class B explosive as defined in 49 CFR 173.51, 173.53, and/or 173.88?

	Parameter	SW 846 Method	Parameter	SW 846 Method	Parameter	Method Used
EF Toxicity SW-846 (Method 1310) ☒ N/A	As	7061	Ag	7760	PcB	LD25.21
	Ba	6010	CLHC	5030	Water	LD25.66
	Cd	6010	Metals	3050	Ash	LD25.61
	Cr	6010	Flash Point	1010	Heat Value	LD25.42B
	Pb	7420			Chlorine	LD25.42.D
TCLP* ☒ N/A	Hg	7470			CLHC	LD25.42.A
	Se	7741			Viscosity	Viscometer

* Toxicity Characteristic Leaching Procedure

LABORATORY IDENTIFICATION	
Laboratory: <u>PPG ENV Lab & Core Lab</u>	Test Parameters Analyzed and Date
Analyst(s): <u>Robert Morris, Core</u>	<u>Metals 8/12/88</u>
<u>Grizelle Brunett</u>	<u>Viscosity 7/22/88</u>
<u>Tommy Vizona</u>	<u>Water, Ash, density, Heat Value, Cl, CLHC, pH 7/21/88</u>
<u>Robert Perlvit</u>	<u>PcB 7/19/88</u>
<u>Anne Corbello</u>	<u>Flash Point 8/24/88</u>

cc: f
 Anne Corbello
 Larry Joiner
 ✓ File WTS 003 (2)

SL 046401