2d/co.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

Office of Solid and Hazardous Waste Management
Special Waste Disposal Approval

Certification No. 11185

The following State Permitted Sanitary Landfill

Randolph Farms, Inc. OPP No. 68-1
R.R. 1, Box 76
Modoc, Indiana 47358

is authorized by the Indiana Department of Environmental Management, Office of Solid and Hazardous Waste Management, to dispose of:

4 cubic yards of grinder sludge
4 cubic yards of oil skimmer sludge
80 cubic yards of floor scrubber sludge

from the following generator:

Universal Tool and Stamping Company, Inc.
Main and Commerce Streets
P.O. Box 100
Butler, IN 46721

This approval shall expire on December 31, 1992.
Special conditions that apply to this approval are indicated on the reverse side.

Bruce H Palin for

12/12/91

Timothy J. Method
Assistant Commissioner
Solid and Hazardous Waste Management

Date

An Equal Opportunity Employer
Printed on Recycled Paper

General Conditions That Apply To All Special Waste Approvals:

1. The generator and/or hauler shall provide the landfill with advanced notification of intended disposal.
2. If nuisance or pollution conditions are created, immediate corrective action shall be taken by the operator.
3. Waste material accepted under this approval shall be included on the Special Waste Monthly Report to be submitted to this office monthly.
4. This approval will be revoked if the landfill fails to maintain compliance with 329 IAC 2.
5. Any change in the waste stream or characteristics shall be reported in writing to the IDEM.
6. This waste shall not contain free liquids.

Special Conditions That Are Required For Disposal Of This Waste Will Be Indicated By The Reviewer's Initials:

____ 1. This waste shall not present a fire or explosion hazard.
____ 2. At least one end of the container shall be completely opened so that the waste may be readily identified.
____ 3. Specific conditions concerning asbestos are attached.

12-10-91	12/11/91	12/12/91
Reviewer/Date	Section Chief/Date	Branch Chief/Date

cc: Randolph County Health Department
Facility Inspection Section Chief - South
Mr. Andrew G. Fox, Universal Tool and Stamping

Special Projects Certification Worksheet

Generator Universal Tool & Stamping Date 12-9-91
Address Butler Certification No. 11185
Waste grinder sludge, oil skimmer sludge, floor scrubber sludge Evaluator B. Lorenz
Disposal Site Randolph Farms

Comments: (Provide the necessary information to document your review of the waste. Record all contacts and resources consulted).

reviewed analyses - look O.K. - numbers are low on
- free liquids in scrubber sludge
12-9 telephoned Andy Fox

free liquids in scrubber sludge
- material was tested before they add + absorbant called FIXSORB to it - they initially tested material for Rosemary Cantwell who requested it be tested before adding absorbant
- will run test on sludge w/ absorbant + send it in.

11185

UNIVERSAL
TOOL & STAMPING CO. INC.

NOV 27 2 15 PM '91

OFFICE OF SOLID
AND HAZARDOUS
WASTE MGMT
DEM

November 25, 1991

Mr Greg Lorenz
Office of Solid and Hazardous Waste Management
Indiana Department of Environmental Management
105 South Meridian Street
P. O. Box 6015
Indianapolis, Indiana 46206-6015

SUBJECT: Special Waste Certification Application

Dear Mr. Lorenz:

Enclosed, please find our Special Waste Certification Applications for the following waste streams: Grinder Sludge, Oil Skimmer Sludge, and Floor Scrubber Sludge. Also, please find a copy of our TCLP results and supporting data.

If you have any questions, please feel free to contact me at (219)-868-2147.

Sincerely,

UNIVERSAL TOOL & STAMPING CO., INC.

Andrew G Fox

Andrew G. Fox

P.O. BOX 100 • BUTLER, INDIANA 46721-0100 • (219) 868-2147

Special Waste Certification Application

Indiana Department of
Environmental Management
Office of Solid and Hazardous Waste Management
105 South Meridian Street
Indianapolis, Indiana 46206
Telephone: 317/232-4473

For Office Use Only
Case No. 11185
Reviewer

Generator Information

Generator Mailing Address	Generator Facility Location
Name Universal Tool & Stamping Co.,Inc.	Name Universal Tool & Stamping Co.,Inc
Address P. O. Box 100	Address Main and Commerce Streets
Butler / IN / 46721 (City) (State) (Zip)	Butler / IN / 46721 (City) (State) (Zip)
County DeKalb	County DeKalb
Technical Contact and Telephone # Andrew Fox 219/868-2147	Contact and Telephone # Andrew Fox 219/868-2147

Waste Information

Waste Name: Grinder Sludge

Brief description of the process generating the waste: Wet sand grinder produces a sludge in the process of grinding a steel block.

Anticipated quantity (cubic yards, drums, other): 4 cubic yards

Disposal Frequency (weekly, monthly, annually, one time, etc.): annually

Type of waste containers (drums, bulk, rolloffs, etc.): roll offs

Proposed disposal site: Randolph Farms, Randolph County, Modoc, Indiana

Generator Signature

I hereby certify that the information in this application is true and accurate to the best of my knowledge, and that this waste is not a hazardous waste as defined in 329 IAC 3.

Andrew G Fox / Andrew G. Fox / 11/20/91

Signature (type or print name) Date

Title Manager of Environmental Affairs

12/90

Contractor Information

Applicant (if other than generator)	Proposed Disposal Site
Name	Name Randolph Farms Opp No. 68-1
Address	Address R. R. #1
	Box 76
/ /	Modoc / IN / 47358
(City) (State) (Zip)	(City) (State) (Zip)
County	County Randolph
Technical Contact and Telephone #	Contact and Telephone # Tonya Leach 317/853-5714

Sampling and Laboratory Information

Laboratory	Sample Collector
Name Pollution Control Systems	Name Rick Monroe
Address State Road 3 @ CR 550S	Address P.O. Box 100
	Universal Tool & Stamping Co., Inc.
LaOtto / IN / 46763	Butler / IN / 46721
(City) (State) (Zip)	(City) (State) (Zip)
Technical Contact and Telephone # Sandy Mort 219/637-3137	Contact and Telephone # Andrew Fox 219/868-2147

Renewal Information

Is this application a(n): ☒ New Application? ☐ Renewal? ☐ Amendment?

If a renewal, what is the date of the last lab analysis? _____

Have there been any changes in the process, volumes, or raw materials since the last certification? Yes___ No___ If yes, attach a brief explanation.

Are you aware of any other facts or circumstances which have, or could have, altered the physical characteristics or chemical composition of the waste? Yes___ No___ . If yes, provide a brief explanation.

(Attach a separate page for each analysis)

SAMPLE No._____

Analytical Data

Waste Characteristics: (attach MSD Sheets if available)

Physical state: ___Solid X Semi-solid ___Liquid ___Powder ___Other

Percent solids 54 %

Fire, explosion, or spontaneous ignition hazard? Yes___ No X

Does this waste contain: Free liquids?___ PCB's?___ Asbestos?___ Solvents?___

Odor? None X Mild___ Strong ___ Describe:

Representative Sampling Information

Date sample was collected: 10/11/91

Was a sampling plan used? Yes___ No X If so, attach a copy.

Is the sample representative of the waste? YES

Sample type: X grab ___composite

Analysis: (attach laboratory sheets and support data)

Is the waste a listed hazardous waste as defined in 329 IAC 3? Yes___ No___

Ignitability (flash point) (D001) (_____ °F) (_____ °C)

Corrosivity (pH)(D002) 8.6

Reactivity (D003) Total(CN_____ppm S_____ppm)

Reactive(CN < 12 ppm S < 27 ppm)

Chemical*		Total mg/kg	EP TOX mg/l	TCLP mg/l	Reg Limit mg/l
Arsenic	D004			0.014	5.0
Barium	D005			0.360	100.0
Cadmium	D006			0.020	1.0
Chromium	D007			0.340	5.0
Lead	D008			< 0.260	5.0
Mercury	D009			< 0.070	0.2
Selenium	D010			< 0.067	1.0
Silver	D011			0.060	5.0
Endrin **	D012				0.02
Lindane **	D013				0.4
Methoxychlor **	D014				10.0
Toxaphene **	D015				0.5
2,4 D **	D016				10.0
2,4,5 TP (Silvex)**	D017				1.0

*Provide either the EP Tox or TCLP results as appropriate in mg/L.
Total values in mg/L are acceptable if they are below the RCRA limits.

** If there is a reason believe that these pesticides are present, then the analytical data is required.

Special Waste Certification Application (p4 of 4)

(Attach a separate page for each analysis) Sample No._____

TCLP Organic Chemical Constituents*				
Chemical		Total (mg/kg)	TCLP (mg/l)	Regulatory Limit (mg/l)
Benzene	D018		< 0.025	0.5
Carbon Tetrachloride	D019		< 0.025	0.5
Chlordane	D020			0.03
Chlorobenzene	D021		< 0.025	100.0
Chloroform	D022		< 0.025	6.0
O-Cresol	D023		< 0.010	200.0
M-Cresol	D024		0.013	200.0
P-Cresol	D025		0.013	200.0
Cresol	D026			200.0
1,4 - Dichlorobenzene	D027		< 0.025	7.5
1,2 - Dichloroethane	D028		< 0.025	0.5
1,1 - Dichloroethylene	D029		< 0.025	0.7
2,4 - Dinitrotoluene	D030		< 0.010	0.13
Heptachlor(and its epoxide)	D031			0.008
Hexachlorobenzene	D032		< 0.010	0.13
Hexachlorobutadiene	D033		< 0.010	0.5
Hexachloroethane	D034		< 0.010	3.0
Methyl Ethyl Ketone	D035		< 0.250	200.0
Nitrobenzene	D036		< 0.010	2.0
Pentachlorophenol	D037		< 0.050	100.0
Pyridine	D038		< 0.010	5.0
Tetrachloroethylene	D039		< 0.025	0.7
Trichloroethylene	D040		< 0.025	0.5
2,4,5 - Trichlorophenol	D041		< 0.010	400.0
2,4,6 - Trichlorophenol	D042		< 0.010	2.0
Vinyl Chloride	D043		< 0.050	0.2
Optional Constituents*				
Chlorides				
Copper				
Phenols				
PCB				
Zinc				

* If there is any reason to believe that these chemicals are present, then the analytical data is required.

12/90

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

METALS

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
Arsenic	D004	7440-38-2	5.0	0.140
Barium	D005	7440-39-3	100.0	0.360
Cadmium	D006	7440-43-9	1.0	0.020
Chromium	D007	7440-47-3	5.0	0.340
Lead	D008	7439-92-1	5.0	< 0.260
Mercury	D009	7439-97-6	0.2	< 0.070
Selenium	D010	7782-49-2	1.0	< 0.067
Silver	D011	7440-22-4	5.0	0.060

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

VOLATILES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
Benzene	D018	71-43-2	0.5	< 0.025
Carbon Tetra-chloride	D019	56-23-5	0.5	< 0.025
Chlorobenzene	D021	108-90-7	100.0	< 0.025
Chloroform	D022	67-66-3	6.0	< 0.025
1,2-Dichloro-ethane	D028	107-06-2	0.5	< 0.025
1,1-Dichloro-ethylene	D029	75-35-4	0.7	< 0.025
2-Butanone	D035	78-93-3	200.0	< 0.250
Tetrachloro-ethylene	D039	127-18-4	0.7	< 0.025
Trichloro-ethylene	D040	79-01-6	0.5	< 0.025
Vinyl Chloride	D043	75-01-4	0.2	< 0.050

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

ORGANOCHLORINE PESTICIDES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
Chlordane	D020	57-74-9	0.03	
Endrin	D012	72-20-8	0.02	
Heptachlor	D031	76-44-8	0.008	
Lindane	D013	58-89-9	0.04	
Methoxychlor	D014	72-43-5	10.0	
Toxaphene	D015	8001-35-2	0.5	

PHENOXYHERBICIDES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
2,4-D	D016	94-75-7	10.0	
2,4,5-TP (Silvex)	D017	94-72-1	1.0	

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

BASE/NEUTRAL EXTRACTABLES				
CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT (mg/l)
1,4-Dichloro-benzene	D027	106-46-7	7.5	< 0.025
2,4-Dinitro-toluene	D030	121-14-2	0.13	< 0.010
Hexachloro-benzene	D032	118-74-1	0.13	< 0.010
Hexachloro-butadiene	D033	87-68-3	0.5	< 0.010
Hexachloro-ethane	D034	67-72-1	3.0	< 0.010
Nitrobenzene	D036	98-95-3	2.0	< 0.010
Pyridine	D038	110-86-1	5.0	< 0.010

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

ACID EXTRACTABLES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT (mg/l)
o-Cresol	D023	95-48-7	200.0	< 0.010
m-Cresol	D024	108-39-4	200.0	0.013
p-Cresol	D025	106-44-5	200.0	0.013
Cresol	D026		200.0	
Pentachloro-phenol	D037	87-86-5	100.0	< 0.050
2,4,5-Tri-chlorophenol	D041	95-95-4	400.0	< 0.010
2,4,6-Tri-chlorophenol	D042	88-06-2	2.0	< 0.010

Mr. Andrew G. Fox
Universal Tool & Stamping Co., Inc.
P.O. Box 100
Commerce and Main
Butler, Indiana 46721

Mail to Client

LABORATORY REPORT

Report Date: 11/14/91
Project Number: 91-3614/UTOLS4
Date Received: 10/11/91
Time Received: 12:00

Client:
Universal Tool & Stamping Co., Inc.

Sample ID: Grinder Sludge, As Recieved. Sample Type: Grab (PCS Sample Number 0115-0375)
Collected: 10/23/91 14:20 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
Solid Waste pH, in Water, pH Units	8.6	B. Frecker	10/21/91	10:55	10% Dilution, Electrometric	9	110.0
Ignitability	NEGATIVE	B. Frecker	10/21/91	15:25	Manual	5	1010
Reactive Cyanide, mg/kg as HCN	<12	L. Case	10/16/91	10:00	N Purge, Acid Treat., Wet Abs.	5	7.3.3.2
Reactive Sulfide, mg/kg as H2S	<27	L. Case	10/16/91	10:00	N Purge, Acid Treat, Wet Abs.	5	7.3.4.1
Paint Filter Liquids Test, mls/100 mls	NEGATIVE	L. Case	10/29/91	13:30	Free Liquids @ 5 Minutes	5	9095
Percent Total Solids, g/100 g	54	B. Frecker	10/18/91	09:20	Gravimetric, 103-105 Degrees C	1	209F

Sample ID: Grinder Sludge, TC Extract. Sample Type: Grab (PCS Sample Number 0116-0375)
Collected: 10/23/91 14:20 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
Arsenic, TC Extractable, mg/L	<0.14	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Arsenic, Internal Standard, TC Extractable, % Recovery	100	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Barium, TC Extractable, mg/L	0.40	M. Graham	01/02/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Barium, Internal Standard, TC Extractable, % Recovery	110	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Cadmium, TC Extractable, mg/L	0.02	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050

Continued on next page...

Sample ID: Grinder Sludge, TC Extract. Sample Type: Grab (PCS Sample Number 0116-0375)
Collected: 10/23/91 14:20 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
					TC Leachate Extraction	5	1311
Cadimum, Internal Standard, TC Extractable, % Recovery	112	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Total Chromium, TC Extractable, mg/L	0.27	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
T. Chromium, Internal Std., TC Extractable, % Recovery	80	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Lead, TC Extractable, mg/L	<0.30	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Lead, Internal Standard, TC Extractable, % Recovery	113	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Mercury, TC Extractable, mg/L	<0.05	L. Case	10/31/91	08:00	Cold Vapor Atomic Absorption	1	320A
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Mercury, Internal Standard, TC Extractable, % Recovery	73.0	L. Case	11/01/91	07:00	Cold Vapor Atomic Absorption	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Selenium, TC Extractable, mg/L	<0.040	M. Graham	11/04/91	12:00	Atomic Absorp. Graph. Furnace	1	270.2
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Selenium, Internal Std., TC Extractable, % Recovery	59.7	M. Graham	11/04/91	12:00	Atomic Abs., Graphite Furnace	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Silver, TC Extractable, mg/L	0.06	M. Graham	10/29/91	10:00	ICP	4	200.7
					TC Leachate Extraction	5	1311
					Sludge/Soil Digestion	5	3050
Silver, Internal Standard, TC Extractable, % Recovery	79.2	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5

Continued on next page...

LABORATORY REPORT

Project Number: 91-3614/UTOLS4

Sample ID: Grinder Sludge, TC Extract. Sample Type: Grab (PCS Sample Number 0116-0375)
Collected: 10/23/91 14:20 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
TCLP Extraction	PERFORMED	P. Ransbottom	10/27/91	14:00			
BNA Extraction	PERFORMED	N. Bednarz	10/30/91	10:00			
Base, Neutral/Acids, TC Extractable, ug/L	FOLLOWING	J. Suggs	11/05/91	20:45	Solvent Extrn, GC/Mass Spec	5	8270
					TC Leachate Extraction	5	1311
BNA Matrix Spike, TC Extractable, % Recovery	FOLLOWING	J. Suggs	11/05/91	21:39	Extraction, GC/Mass Spec	5	8270
					TC Leachate Extraction	5	1311

Sample ID: Grinder Sludge, ZHE Extract. Sample Type: Grab (PCS Sample Number 0117-0375)
Collected: 10/23/91 14:20 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
Zero Headspace Extraction	PERFORMED	P. Ransbottom	10/21/91	17:00	for TCLP VOC Analyses		
Volatile Organic Compounds, ZHE Extractable, ug/L	FOLLOWING	J. Van Markwyk	10/24/91	02:58	Purge & Trap GC/Mass Spec	5	8240
					TC Zero Headspace Extraction	5	1311
VOC Matrix Spike, ZHE Extractable, % Recovery	FOLLOWING	J. Van Markwyk	10/31/91	02:04	Purge & Trap, GC/Mass Spec	5	8240
					TC Zero Headspace Extraction	5	1311

(1) Standard Methods for the Examination of Water and Wastewater, 16th Edition 1985, APHA, AWWA, WPCF, American Public Health Association, 1015 Fifteenth Street NW, Washington, DC 20005.

(4) Methods for Chemical Analysis of Water and Wastes, USEPA, Environmental monitoring and Support Laboratory, Cincinnati, Ohio 45268, EPA-600/7-79-0-20, Revised March 1983.

(5) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA, Office of Solid Waste and Emergency Respose, Washington DC 20460, SW-846 Third Edition, November 1986.

(9) Pollution Control Systems, Incorporated, Method developed and evaluated by PCS Laboratory Staff.

Reviewed and Approved by:

Sandra L Mort

TCLP Metals Correction Data

Pollution Control Systems Inc.

Sample ID: Grinder Sludge, 10/23/91, TC Extract
Sample No.: 0116-0375

Project: 91-3614/UTOLS4

Metal	SAMPLE DATA : Concentration in TC Extract, mg/L	Internal Standard Recovery, %	RECOVERY CORRECTED CONCENTRATION, mg/L	REGULATORY LEVEL: TC Extract Maximum Concentration Levels, mg/L
Arsenic	<0.14	100	<0.14	5.0
Barium	0.4	110	0.36	100.0
Cadmium	0.02	112	0.02	1.0
Total Chromium	0.27	80	0.34	5.0
Lead	<0.30	113	<0.26	5.0
Mercury	<0.05	73.0	<0.07	0.2
Selenium	<0.040	59.7	<0.067	1.0
Silver	0.06	79.2	0.08	5.0

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: UTOOL Grinder Sludge
ZHE Extraction Date: 10/21/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1023A/1023A3001014.d
Name Info: 0117
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 24 91 02:58:52 AM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L	Corrected For Recovery
vinyl chloride	50	75-01-4	N.D.	N.D.
1,1-dichloroethene	25	75-35-4	N.D.	N.D.
chloroform	25	67-66-3	N.D.	N.D.
MEK	250	78-93-3	N.D.	N.D.
carbon tetrachloride	25	56-23-5	N.D.	N.D.
benzene	25	71-43-2	N.D.	N.D.
1,2-dichloroethane	25	107-06-2	N.D.	N.D.
trichloroethene	25	79-01-6	N.D.	N.D.
tetrachloroethene	25	127-18-4	N.D.	N.D.
chlorobenzene	25	108-90-7	N.D.	N.D.
1,4-dichlorobenzene	25	106-46-7	N.D.	N.D.

Note: D.L. = Detection Limit

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: UTOOL Grinder Sludge
ZHE Extraction Date: 10/21/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1023A/1023A3001014.d
Name Info: 0117
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 24 91 02:58:52 AM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

bromochloromethane	13460796	percent of standard	53
1,4-difluorobenzene	56059533	percent of standard	50
chlorobenzene-d5	38066840	percent of standard	51

Surrogates	EPA QC LIMITS	% Recovery
1,2-dichloroethane-d4	(76 - 114)	76
toluene-d8	(88 - 110)	90
4-bromofluorobenzene	(86 - 115)	97

RF File: /chem/Pam_hp.i/rf/1023A
Date/Time RF File Updated: Oct 24 11:09
Date/Time Quantitated: Oct 24 11:37

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike UTOOL Grinder Sludge
Zhe Extraction Date: 10/21/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /chem/Pam_hp.i/voa/1030A/1030A3201016.d
Name Info: 0117MS
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 31 91 02:04:50 AM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Spike Concentration ug/L	Spike Recovery %
vinyl chloride	50	75-01-4	99	50
1,1-dichloroethene	25	75-35-4	173	87
chloroform	25	67-66-3	200	100
MEK	250	78-93-3	240	120
carbon tetrachloride	25	56-23-5	222	111
benzene	25	71-43-2	203	102
1,2-dichloroethane	25	107-06-2	126	63
trichloroethene	25	79-01-6	210	105
tetrachloroethene	25	127-18-4	216	108
chlorobenzene	25	108-90-7	212	106
1,4-dichlorobenzene	25	106-46-7	218	109

Note: D.L. = Detection Limit
Spiked at 200ug/L

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike UTOOL Grinder Sludge
Zhe Extraction Date: 10/21/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /chem/Pam_hp.i/voa/1030A/1030A3201016.d
Name Info: 0117MS
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 31 91 02:04:50 AM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

bromochloromethane	10129153	percent of standard	75
1,4-difluorobenzene	35880961	percent of standard	69
chlorobenzene-d5	27803628	percent of standard	68

Surrogates	EPA QC LIMITS	% Recovery
1,2-dichloroethane-d4	(76 - 114)	91
toluene-d8	(88 - 110)	97
4-bromofluorobenzene	(86 - 115)	100

RF File: /chem/Pam_hp.i/rf/1030A
Date/Time RF File Updated: Nov 1 10:32
Date/Time Quantitated: Nov 01 11:09

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Laboratory Blank

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /chem/Pam_hp.i/voa/1030A/1030A2301007.d
Name Info: Laboratory Blank
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Wed Oct 30 91 07:35:34 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L
vinyl chloride	50	75-01-4	N.D.
1,1-dichloroethene	25	75-35-4	N.D.
chloroform	25	67-66-3	N.D.
MEK	250	78-93-3	N.D.
carbon tetrachloride	25	56-23-5	N.D.
benzene	25	71-43-2	N.D.
1,2-dichloroethane	25	107-06-2	N.D.
trichloroethene	25	79-01-6	N.D.
tetrachloroethene	25	127-18-4	N.D.
chlorobenzene	25	108-90-7	N.D.
1,4-dichlorobenzene	25	106-46-7	N.D.

Note: D.L. = Detection Limit

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Laboratory Blank

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /chem/Pam_hp.i/voa/1030A/1030A2301007.d
Name Info: Laboratory Blank
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Wed Oct 30 91 07:35:34 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

bromochloromethane	12718984	percent of standard	94
1,4-difluorobenzene	51795579	percent of standard	100
chlorobenzene-d5	40369593	percent of standard	99

Surrogates	EPA QC LIMITS	% Recovery
1,2-dichloroethane-d4	(76 - 114)	93
toluene-d8	(88 - 110)	96
4-bromofluorobenzene	(86 - 115)	98

RF File: /chem/Pam_hp.i/rf/1030A
Date/Time RF File Updated: Nov 1 10:32
Date/Time Quantitated: Nov 01 13:19

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Laboratory Blank

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1023A/1023A2301007.d
Name Info: Laboratory Blank
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Wed Oct 23 91 10:04:19 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L
vinyl chloride	50	75-01-4	N.D.
1,1-dichloroethene	25	75-35-4	N.D.
chloroform	25	67-66-3	N.D.
MEK	250	78-93-3	N.D.
carbon tetrachloride	25	56-23-5	N.D.
benzene	25	71-43-2	N.D.
1,2-dichloroethane	25	107-06-2	N.D.
trichloroethene	25	79-01-6	N.D.
tetrachloroethene	25	127-18-4	N.D.
chlorobenzene	25	108-90-7	N.D.
1,4-dichlorobenzene	25	106-46-7	N.D.

Note: D.L. = Detection Limit

)LLUTION CONTROL SYSTEMS, IN
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Laboratory Blank

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1023A/1023A2301007.d
Name Info: Laboratory Blank
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Wed Oct 23 91 10:04:19 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

bromochloromethane	21618213	percent of standard	84
1,4-difluorobenzene	93654169	percent of standard	84
chlorobenzene-d5	66289826	percent of standard	88

Surrogates	EPA QC LIMITS	% Recovery
1,2-dichloroethane-d4	(76 - 114)	91
toluene-d8	(88 - 110)	99
4-bromofluorobenzene	(86 - 115)	87

RF File: /chem/Pam_hp.i/rf/1023A
Date/Time RF File Updated: Oct 24 11:09
Date/Time Quantitated: Oct 24 11:23

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Grinder Sludge
Extraction Date: TCLP = 10/27/91 BNA = 10/30/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B0701007.d
Name Info: 116
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 08:45:46 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L	Corrected For Recovery
pyridine	10	110-86-1	N.D.	N.D.
hexachloroethane	10	67-72-1	N.D.	N.D.
nitrobenzene	10	98-95-3	N.D.	N.D.
hexachlorobutadiene	10	87-68-3	N.D.	N.D.
2,4-dinitrotoluene	10	121-14-2	N.D.	N.D.
hexachlorobenzene	10	118-74-1	N.D.	N.D.
ACIDS				
2-methylphenol (o-cresol)	10	95-48-7	N.D.	N.D.
3-methylphenol(m-cresol)	10	108-39-4	and	
4-methylphenol(p-cresol)	10	106-44-5	11	13
2,4,6-trichlorophenol	10	88-06-2	N.D.	N.D.
2,4,5-trichlorophenol	10	95-95-4	N.D.	N.D.
pentachlorophenol	50	87-86-5	N.D.	N.D.

Note: D.L. = Detection Limit

LLUTION CONTROL SYSTEMS, IN
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Grinder Sludge
Extraction Date: TCLP = 10/27/91 BNA = 10/30/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B0701007.d
Name Info: 116
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 08:45:46 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

1,4-dichlorobenzene-d4 (I.S.)	6307083	percent of standard	114
naphthalene-d8 (I.S.)	21016891	percent of standard	112
acenapthene-d10 (I.S.)	10470124	percent of standard	110
phenanthrene-d10 (I.S.)	16366052	percent of standard	126
chrysene-d12 (I.S.)	10299484	percent of standard	182
perylene-d12 (I.S.)	4426458	percent of standard	131

Surrogates	EPA QC LIMITS	% Recovery
nitrobenzene-d5 (surr.)	(35 - 114)	9 !
2-fluorobiphenyl (surr.)	(43 - 116)	82
p-terphenyl-d14 (surr.)	(33 - 141)	72
2-fluorophenol surr	(21 - 100)	58
phenol-d6 (surr.)	(10 - 94)	86
2,4,6-tribromophenol (surr.)	(10 - 123)	83

! = Matrix effect, see also matrix spike for this sample.

RF File: /chem/hp/rf/1105B.recal
Date/Time RF File Updated: Nov 8 15:45
Date/Time Quantitated: Nov 08 16:04

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike, Grinder Sludge
Extraction Date: TCLP = 10/27/91 BNA = 10/30/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B0801008.d
Name Info: 116 MS
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 09:39:43 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Spike Concentration ug/L	Spike Recovery %
pyridine	10	110-86-1	67	34
hexachloroethane	10	67-72-1	30	15
nitrobenzene	10	98-95-3	22	11
hexachlorobutadiene	10	87-68-3	112	56
2,4-dinitrotoluene	10	121-14-2	5.3	3
hexachlorobenzene	10	118-74-1	144	72

ACIDS

2-methylphenol (o-cresol)	10	95-48-7	140	70
3-methylphenol(m-cresol)	10	108-39-4	and	
4-methylphenol(p-cresol)	10	106-44-5	337	84
2,4,6-trichlorophenol	10	88-06-2	198	99
2,4,5-trichlorophenol	10	95-95-4	229	115
pentachlorophenol	50	87-86-5	157	79

Note: D.L. = Detection Limit
Spiked at 200ug/L

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike, Grinder Sludge
Extraction Date: TCLP = 10/27/91 BNA = 10/30/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B0801008.d
Name Info: 116 MS
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 09:39:43 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)			
1,4-dichlorobenzene-d4 (I.S.)	6596748	percent of standard	112
naphthalene-d8 (I.S.)	22102243	percent of standard	118
acenapthene-d10 (I.S.)	7686855	percent of standard	80
phenanthrene-d10 (I.S.)	16870174	percent of standard	130
chrysene-d12 (I.S.)	10972148	percent of standard	194
perylene-d12 (I.S.)	6101554	percent of standard	180

Surrogates	EPA QC LIMITS	% Recovery
nitrobenzene-d5 (surr.)	(35 - 114)	35
2-fluorobiphenyl (surr.)	(43 - 116)	111
p-terphenyl-d14 (surr.)	(33 - 141)	64
2-fluorophenol surr	(21 - 100)	55
phenol-d6 (surr.)	(10 - 94)	78
2,4,6-tribromophenol (surr.)	(10 - 123)	83

! = A combination of low recovery of nitrobenzene-d5 and 2,4-dinitrotoluene confirms matrix effect of low recovery of nitrobenzene-d5 in sample.

RF File: /chem/hp/rf/1105B.recal
Date/Time RF File Updated: Nov 8 15:45
Date/Time Quantitated: Nov 08 16:17

POLLUTION CONTROL SYSTEMS, INC
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Lab Water Blank
Extraction Date: 10/23/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B0401004.d
Name Info: 10/23 blank
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 05:58:06 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L
pyridine	10	110-86-1	N.D.
hexachloroethane	10	67-72-1	N.D.
nitrobenzene	10	98-95-3	N.D.
hexachlorobutadiene	10	87-68-3	N.D.
2,4-dinitrotoluene	10	121-14-2	N.D.
hexachlorobenzene	10	118-74-1	N.D.
ACIDS			
2-methylphenol (o-cresol)	10	95-48-7	N.D.
3-methylphenol(m-cresol)	10	108-39-4 and	
4-methylphenol(p-cresol)	10	106-44-5	N.D.
2,4,6-trichlorophenol	10	88-06-2	N.D.
2,4,5-trichlorophenol	10	95-95-4	N.D.
pentachlorophenol	50	87-86-5	N.D.

Note: D.L. = Detection Limit

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Lab Water Blank
Extraction Date: 10/23/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B0401004.d
Name Info: 10/23 blank
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 05:58:06 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

1,4-dichlorobenzene-d4 (I.S.)	7247205	percent of standard	131
naphthalene-d8 (I.S.)	22650096	percent of standard	121
acenapthene-d10 (I.S.)	11112975	percent of standard	116
phenanthrene-d10 (I.S.)	15759765	percent of standard	122
chrysene-d12 (I.S.)	8311454	percent of standard	147
perylene-d12 (I.S.)	6333871	percent of standard	187

Surrogates	EPA QC LIMITS	% Recovery
nitrobenzene-d5 (surr.)	(35 - 114)	67
2-fluorobiphenyl (surr.)	(43 - 116)	67
p-terphenyl-d14 (surr.)	(33 - 141)	77
2-fluorophenol surr	(21 - 100)	62
phenol-d6 (surr.)	(10 - 94)	66
2,4,6-tribromophenol (surr.)	(10 - 123)	89

RF File: /chem/hp/rf/1105B.recal
Date/Time RF File Updated: Nov 5 16:56
Date/Time Quantitated: Nov 08 15:26

Special Waste Certification Application

Indiana Department of
Environmental Management
Office of Solid and Hazardous Waste Management
105 South Meridian Street
Indianapolis, Indiana 46206
Telephone: 317/232-4473

For Office Use Only

Case No. _____

Reviewer _____

Generator Information

Generator Mailing Address	Generator Facility Location
Name Universal Tool & Stamping Co.,Inc.	Name Universal Tool & Stamping Co.,Inc.
Address P. O. Box 100	Address Main & Commerce Streets
Butler / IN / 46721 (City) (State) (Zip)	Butler / IN / 46721 (City) (State) (Zip)
County DeKalb	County DeKalb
Technical Contact and Telephone # Andrew Fox 219/868-2147	Contact and Telephone # Andrew Fox 219/868-2147

Waste Information

Waste Name: Oil Skimmer Sludge

Brief description of the process generating the waste: An oil skimmer is used to skim oil into filter bags off of process tanks in the treatment house and the factory.

Anticipated quantity (cubic yards, drums, other): 4 cubic yards

Disposal Frequency (weekly, monthly, annually, one time, etc.): annually

Type of waste containers (drums, bulk, rolloffs, etc.): roll offs

Proposed disposal site: Randolph Farms, Randolph County, Modoc, Indiana

Generator Signature

I hereby certify that the information in this application is true and accurate to the best of my knowledge, and that this waste is not a hazardous waste as defined in 329 IAC 3.

Andrew G. Fox / Andrew G. Fox / 11/20/91

Signature (type or print name) Date

Title Manager of Environmental Affairs

12/90

Contractor Information

Applicant (if other than generator)	Proposed Disposal Site
Name	Name Randolph Farms Opp No. 68-1
Address	Address R. R. #1
	Box 76
/ /	Modoc / IN / 47358
(City) (State) (Zip)	(City) (State) (Zip)
County	County Randolph
Technical Contact and Telephone #	Contact and Telephone # Tonya Leach 317/853-5714

Sampling and Laboratory Information

Laboratory	Sample Collector
Name Pollution Control Systems	Name Rick Monroe
Address State Road 3 @ CR550S	Address P. O. Box 100
	Universal Tool & Stamping Co.
LaOtte / IN / 46763	Butler / IN / 46721
(City) (State) (Zip)	(City) (State) (Zip)
Technical Contact and Telephone # Sandy Mort 219/637-3137	Contact and Telephone # Andrew Fox 219/868-2147

Renewal Information

Is this application a(n): ■ New Application? ☐ Renewal? ☐ Amendment?

If a renewal, what is the date of the last lab analysis? _____

Have there been any changes in the process, volumes, or raw materials since the last certification? Yes___ No___ If yes, attach a brief explanation.

Are you aware of any other facts or circumstances which have, or could have, altered the physical characteristics or chemical composition of the waste? Yes___ No___ . If yes, provide a brief explanation.

(Attach a separate page for each analysis)

SAMPLE No.

Analytical Data

Waste Characteristics: (attach MSD Sheets if available)

Physical state: ___Solid X Semi-solid ___Liquid ___Powder ___Other

Percent solids 22 %

Fire, explosion, or spontaneous ignition hazard? Yes___ No X

Does this waste contain: Free liquids?___ PCB's?___ Asbestos?___ Solvents?___

Odor? None X Mild___ Strong ___ Describe:

Representative Sampling Information

Date sample was collected: 10/11/91

Was a sampling plan used? Yes___ No X If so, attach a copy.

Is the sample representative of the waste? YES

Sample type: X grab ___composite

Analysis: (attach laboratory sheets and support data)

Is the waste a listed hazardous waste as defined in 329 IAC 3? Yes___ No X

Ignitability (flash point) (D001) (_____ °F) (_____ °C)

Corrosivity (pH)(D002) 8.1

Reactivity (D003) Total(CN_____ppm S_____ppm)

Reactive(CN < 13 ppm S < 30 ppm)

Chemical*		Total mg/kg	EP TOX mg/l	TCLP mg/l	Reg Limit mg/l
Arsenic	D004			< 0.140	5.0
Barium	D005			0.330	100.0
Cadmium	D006			< 0.006	1.0
Chromium	D007			0.030	5.0
Lead	D008			< 0.260	5.0
Mercury	D009			< 0.080	0.2
Selenium	D010			< 0.053	1.0
Silver	D011			0.010	5.0
Endrin **	D012				0.02
Lindane **	D013				0.4
Methoxychlor **	D014				10.0
Toxaphene **	D015				0.5
2,4 D **	D016				10.0
2,4,5 TP (Silvex)**	D017				1.0

*Provide either the EP Tox or TCLP results as appropriate in mg/L.
Total values in mg/L are acceptable if they are below the RCRA limits.

** If there is a reason believe that these pesticides are present, then the analytical data is required.

Special Waste Certification Application (p4 of 4)

(Attach a separate p[illegible] for each analysis) Sample No._____

TCLP Organic Chemical Constituents*				
Chemical		Total (mg/kg)	TCLP (mg/l)	Regulatory Limit (mg/l)
Benzene	D018		< 0.025	0.5
Carbon Tetrachloride	D019		< 0.025	0.5
Chlordane	D020			0.03
Chlorobenzene	D021		< 0.025	100.0
Chloroform	D022		< 0.025	6.0
O-Cresol	D023		< 0.012	200.0
M-Cresol	D024		0.045	200.0
P-Cresol	D025		0.045	200.0
Cresol	D026			200.0
1,4 - Dichlorobenzene	D027		< 0.025	7.5
1,2 - Dichloroethane	D028		< 0.025	0.5
1,1 - Dichloroethylene	D029		< 0.025	0.7
2,4 - Dinitrotoluene	D030		< 0.012	0.13
Heptachlor(and its epoxide)	D031			0.008
Hexachlorobenzene	D032		< 0.012	0.13
Hexachlorobutadiene	D033		< 0.012	0.5
Hexachloroethane	D034		< 0.012	3.0
Methyl Ethyl Ketone	D035		< 0.250	200.0
Nitrobenzene	D036		< 0.012	2.0
Pentachlorophenol	D037		< 0.058	100.0
Pyridine	D038		< 0.012	5.0
Tetrachloroethylene	D039		< 0.025	0.7
Trichloroethylene	D040		< 0.025	0.5
2,4,5 - Trichlorophenol	D041		< 0.012	400.0
2,4,6 - Trichlorophenol	D042		< 0.012	2.0
Vinyl Chloride	D043		< 0.050	0.2
Optional Constituents*				
Chlorides				
Copper				
Phenols				
PCB				
Zinc				

* If there is any reason to believe that these chemicals are present, then the analytical data is required.

12/90

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

METALS

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
Arsenic	D004	7440-38-2	5.0	< 0.140
Barium	D005	7440-39-3	100.0	0.330
Cadmium	D006	7440-43-9	1.0	< 0.006
Chromium	D007	7440-47-3	5.0	0.030
Lead	D008	7439-92-1	5.0	< 0.260
Mercury	D009	7439-97-6	0.2	< 0.080
Selenium	D010	7782-49-2	1.0	< 0.053
Silver	D011	7440-22-4	5.0	0.010

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

VOLATILES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
Benzene	D018	71-43-2	0.5	< 0.025
Carbon Tetra-chloride	D019	56-23-5	0.5	< 0.025
Chlorobenzene	D021	108-90-7	100.0	< 0.025
Chloroform	D022	67-66-3	6.0	< 0.025
1,2-Dichloro-ethane	D028	107-06-2	0.5	< 0.025
1,1-Dichloro-ethylene	D029	75-35-4	0.7	< 0.025
2-Butanone	D035	78-93-3	200.0	< 0.250
Tetrachloro-ethylene	D039	127-18-4	0.7	< 0.025
Trichloro-ethylene	D040	79-01-6	0.5	< 0.025
Vinyl Chloride	D043	75-01-4	0.2	< 0.050

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

ORGANOCHLORINE PESTICIDES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
Chlordane	D020	57-74-9	0.03	
Endrin	D012	72-20-8	0.02	
Heptachlor	D031	76-44-8	0.008	
Lindane	D013	58-89-9	0.04	
Methoxychlor	D014	72-43-5	10.0	
Toxaphene	D015	8001-35-2	0.5	

PHENOXYHERBICIDES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
2,4-D	D016	94-75-7	10.0	
2,4,5-TP (Silvex)	D017	94-72-1	1.0	

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

BASE/NEUTRAL EXTRACTABLES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT (mg/l)
1,4-Dichloro-benzene	D027	106-46-7	7.5	< 0.025
2,4-Dinitro-toluene	D030	121-14-2	0.13	< 0.012
Hexachloro-benzene	D032	118-74-1	0.13	< 0.012
Hexachloro-butadiene	D033	87-68-3	0.5	< 0.012
Hexachloro-ethane	D034	67-72-1	3.0	< 0.012
Nitrobenzene	D036	98-95-3	2.0	< 0.012
Pyridine	D038	110-86-1	5.0	< 0.012

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

ACID EXTRACTABLES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT (mg/l)
o-Cresol	D023	95-48-7	200.0	< 0.012
m-Cresol	D024	108-39-4	200.0	0.045
p-Cresol	D025	106-44-5	200.0	0.045
Cresol	D026		200.0	
Pentachloro-phenol	D037	87-86-5	100.0	< 0.058
2,4,5-Tri-chlorophenol	D041	95-95-4	400.0	< 0.012
2,4,6-Tri-chlorophenol	D042	88-06-2	2.0	< 0.012

Mr. Andrew G. Fox
Universal Tool & Stamping Co., Inc.
P.O. Box 100
Commerce and Main
Butler, Indiana 46721

Mail to Client

LABORATORY REPORT

Report Date: 11/17/91
Project Number: 91-3614/UTOLS4
Date Received: 10/11/91
Time Received: 12:00

Client:
Universal Tool & Stamping Co., Inc.

Sample ID: Oil Skimmer Sludge, As Recieved. Sample Type: Grab (PCS Sample Number 0109-0371)
Collected: 10/23/91 14:05 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
Solid Waste pH, in Water, pH Units	8.1	B. Frecker	10/21/91	10:55	10% Dilution, Electrometric	9	110.0
Ignitability	NEGATIVE	B. Frecker	10/21/91	15:25	Manual	5	1010
Reactive Cyanide, mg/kg as HCN	<13	L. Case	10/16/91	10:00	N Purge, Acid Treat., Wet Abs.	5	7.3.3.2
Reactive Sulfide, mg/kg as H2S	<30	L. Case	10/16/91	10:00	N Purge, Acid Treat, Wet Abs.	5	7.3.4.1
Paint Filter Liquids Test, mls/100 mls	NEGATIVE	L. Case	10/29/91	13:30	Free Liquids @ 5 Minutes	5	9095
Percent Total Solids, g/100 g	22	B. Frecker	10/18/91	09:20	Gravimetric, 103-105 Degrees C	1	209F

Sample ID: Oil Skimmer Sludge, TC Extract. Sample Type: Grab (PCS Sample Number 0110-0371)
Collected: 10/23/91 14:05 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
Arsenic, TC Extractable, mg/L	<0.14	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Arsenic, Internal Standard, TC Extractable, % Recovery	102	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Barium, TC Extractable, mg/L	0.36	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Barium, Internal Standard, TC Extractable, % Recovery	110	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Cadmium, TC Extractable, mg/L	<0.006	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050

Continued on next page...

Sample ID: Oil Skimmer Sludge, TC Extract. Sample Type: Grab (PCS Sample Number 0110-0371)
Collected: 10/23/91 14:05 by Client

Parameter	Result	Analyst	Analysis Date Time	Procedure	Ref	Citation
				TC Leachate Extraction	5	1311
Cadimum, Internal Standard, TC Extractable, % Recovery	107	M. Graham	10/29/91 10:00	ICP	4	Metals 8.5
				Sludge/Soil Digestion	5	3050
				TC Leachate Extraction	5	1311
Total Chromium, TC Extractable, mg/L	0.03	M. Graham	10/29/91 10:00	ICP	4	200.7
				Sludge/Soil Digestion	5	3050
				TC Leachate Extraction	5	1311
T. Chromium, Internal Std., TC Extractable, % Recovery	104	M. Graham	10/29/91 10:00	ICP	4	Metals 8.5
				Sludge/Soil Digestion	5	3050
				TC Leachate Extraction	5	1311
Lead, TC Extractable, mg/L	<0.30	M. Graham	10/29/91 10:00	ICP	4	200.7
				Sludge/Soil Digestion	5	3050
				TC Leachate Extraction	5	1311
Lead, Internal Standard, TC Extractable, % Recovery	116	M. Graham	10/29/91 10:00	ICP	4	Metals 8.5
				Sludge/Soil Digestion	5	3050
				TC Leachate Extraction	5	1311
Mercury, TC Extractable, mg/L	<0.05	L. Case	10/31/91 08:00	Cold Vapor Atomic Absorption	1	320A
				Sludge/Soil Digestion	5	3050
				TC Leachate Extraction	5	1311
Mercury, Internal Standard, TC Extractable, % Recovery	61.5	L. Case	11/01/91 07:00	Cold Vapor Atomic Absorption	4	Metals 8.5
				Sludge/Soil Digestion	5	3050
				TC Leachate Extraction	5	1311
Selenium, TC Extractable, mg/L	<0.040	M. Graham	11/04/91 12:00	Atomic Absorp. Graph. Furnace	1	270.2
				Sludge/Soil Digestion	5	3050
				TC Leachate Extraction	5	1311
Selenium, Internal Std., TC Extractable, % Recovery	76.0	M. Graham	11/04/91 12:00	Atomic Abs., Graphite Furnace	4	Metals 8.5
				Sludge/Soil Digestion	5	3050
				TC Leachate Extraction	5	1311
Silver, TC Extractable, mg/L	0.07	M. Graham	10/29/91 10:00	ICP	4	200.7
				Sludge/Soil Digestion	5	3050
				TC Leachate Extraction	5	1311
Silver, Internal Standard, TC Extractable, % Recovery	73.8	M. Graham	10/29/91 10:00	ICP	4	Metals 8.5

Continued on next page...

Sample ID: Oil Skimmer Sludge, TC Extract. Sample Type: Grab (PCS Sample Number 0110-0371)
Collected: 10/23/91 14:05 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
TCLP Extraction	PERFORMED	V. Pelz	10/24/91	13:55			
BNA Extraction	PERFORMED	N. Bednarz	10/28/91	10:00			
Base, Neutral/Acids, TC Extractable, ug/L	FOLLOWING	J. Suggs	11/13/91	16:26	Solvent Extrn, GC/Mass Spec	5	8270
					TC Leachate Extraction	5	1311
BNA Matrix Spike, TC Extractable, % Recovery	FOLLOWING	J. Suggs	11/13/91	17:09	Extraction, GC/Mass Spec	5	8270
					TC Leachate Extraction	5	1311

Sample ID: Oil Skimmer Sludge, ZHE Extract. Sample Type: Grab (PCS Sample Number 0111-0371)
Collected: 10/23/91 14:05 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
Zero Headspace Extraction	PERFORMED	P. Ransbottom	10/24/91	13:50	for TCLP VOC Analyses		
Volatile Organic Compounds, ZHE Extractable, ug/L	FOLLOWING	J. Van Markwyk	11/01/91	24:32	Purge & Trap GC/Mass Spec	5	8240
					TC Zero Headspace Extraction	5	1311
VOC Matrix Spike, ZHE Extractable, % Recovery	FOLLOWING	J. Van Markwyk	11/01/91	01:15	Purge & Trap, GC/Mass Spec	5	8240
					TC Zero Headspace Extraction	5	1311

(1) Standard Methods for the Examination of Water and Wastewater, 16th Edition 1985, APHA, AWWA, WPCF, American Public Health Association, 1015 Fifteenth Street NW, Washington, DC 20005.

(4) Methods for Chemical Analysis of Water and Wastes, USEPA, Environmental monitoring and Support Laboratory, Cincinnati, Ohio 45268, EPA-600/7-79-0-20, Revised March 1983.

(5) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA, Office of Solid Waste and Emergency Respose, Washington DC 20460, SW-846 Third Edition, November 1986.

(9) Pollution Control Systems, Incorporated, Method developed and evaluated by PCS Laboratory Staff.

Reviewed and Approved by:

Sandra F Mort

TCLP Metals Correction Data

Pollution Control Systems Inc.

Sample ID: Oil Skimmer Sludge, 10/23/91, TC Extract
Sample No.: 0110-0371

Project: 91-3614/UTOLS4

Metal	SAMPLE DATA : Concentration in TC Extract, mg/L	Internal Standard Recovery, %	RECOVERY CORRECTED CONCENTRATION, mg/L	REGULATORY LEVEL: TC Extract Maximum Concentration Levels, mg/L
Arsenic	<0.14	102	<0.14	5.0
Barium	0.36	110	0.33	100.0
Cadmium	<0.006	107	<0.006	1.0
Total Chromium	0.03	104	0.03	5.0
Lead	<0.30	116	<0.26	5.0
Mercury	<0.05	61.5	<0.08	0.2
Selenium	<0.040	76.0	<0.053	1.0
Silver	0.07	73.8	0.10	5.0

POLLUTION CONTROL SYSTEMS, INC
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Laboratory Blank

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A2301007.d
Name Info: Laboratory Blank
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 31 91 03:54:05 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L
vinyl chloride	50	75-01-4	N.D.
1,1-dichloroethene	25	75-35-4	N.D.
chloroform	25	67-66-3	N.D.
MEK	250	78-93-3	N.D.
carbon tetrachloride	25	56-23-5	N.D.
benzene	25	71-43-2	N.D.
1,2-dichloroethane	25	107-06-2	N.D.
trichloroethene	25	79-01-6	N.D.
tetrachloroethene	25	127-18-4	N.D.
chlorobenzene	25	108-90-7	N.D.
1,4-dichlorobenzene	25	106-46-7	N.D.

Note: D.L. = Detection Limit

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Laboratory Blank

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A2301007.d
Name Info: Laboratory Blank
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 31 91 03:54:05 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

bromochloromethane	4936185	percent of standard	87
1,4-difluorobenzene	18751758	percent of standard	107
chlorobenzene-d5	12493047	percent of standard	90

Surrogates	EPA QC LIMITS	% Recovery
1,2-dichloroethane-d4	(76 - 114)	103
toluene-d8	(88 - 110)	110
4-bromofluorobenzene	(86 - 115)	94

RF File: /chem/Pam_hp.i/rf/1031A
Date/Time RF File Updated: Nov 1 15:30
Date/Time Quantitated: Nov 05 12:06

POLLUTION CONTROL SYSTEMS, INC
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Oil Skimmer Slugde
Zhe Extraction Date: 10/24/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A3501019.d
Name Info: 0111
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Fri Nov 01 91 12:32:51 AM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L	Corrected For Recovery
vinyl chloride	50	75-01-4	N.D.	N.D.
1,1-dichloroethene	25	75-35-4	N.D.	N.D.
chloroform	25	67-66-3	N.D.	N.D.
MEK	250	78-93-3	N.D.	N.D.
carbon tetrachloride	25	56-23-5	N.D.	N.D.
benzene	25	71-43-2	N.D.	N.D.
1,2-dichloroethane	25	107-06-2	N.D.	N.D.
trichloroethene	25	79-01-6	N.D.	N.D.
tetrachloroethene	25	127-18-4	N.D.	N.D.
chlorobenzene	25	108-90-7	N.D.	N.D.
1,4-dichlorobenzene	25	106-46-7	N.D.	N.D.

Note: D.L. = Detection Limit

LLUTION CONTROL SYSTEMS, IN
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Oil Skimmer Slugde
Zhe Extraction Date: 10/24/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A3501019.d
Name Info: 0111
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Fri Nov 01 91 12:32:51 AM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

bromochloromethane	6150310	percent of standard	108
1,4-difluorobenzene	19954672	percent of standard	114
chlorobenzene-d5	14962888	percent of standard	107

Surrogates	EPA QC LIMITS	% Recovery
1,2-dichloroethane-d4	(76 - 114)	88
toluene-d8	(88 - 110)	105
4-bromofluorobenzene	(86 - 115)	98

RF File: /chem/Pam_hp.i/rf/1031A
Date/Time RF File Updated: Nov 1 15:30
Date/Time Quantitated: Nov 04 15:36

POLLUTION CONTROL SYSTEMS, INC
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike Oil Skimmer Sludge
Zhe Extraction Date: 10/24/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A3601020.d
Name Info: 0111MS
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Fri Nov 01 91 01:15:34 AM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Spike Concentration ug/L	Spike Recovery %
vinyl chloride	50	75-01-4	93	47
1,1-dichloroethene	25	75-35-4	158	79
chloroform	25	67-66-3	179	90
MEK	250	78-93-3	150	75
carbon tetrachloride	25	56-23-5	206	103
benzene	25	71-43-2	195	98
1,2-dichloroethane	25	107-06-2	130	65
trichloroethene	25	79-01-6	180	90
tetrachloroethene	25	127-18-4	260	130
chlorobenzene	25	108-90-7	192	96
1,4-dichlorobenzene	25	106-46-7	162	81

Note: D.L. = Detection Limit
Spiked at 200ug/L

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike Oil Skimmer Sludge
Zhe Extraction Date: 10/24/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A3601020.d
Name Info: 0111MS
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Fri Nov 01 91 01:15:34 AM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

bromochloromethane	5349193	percent of standard	94
1,4-difluorobenzene	19337552	percent of standard	110
chlorobenzene-d5	14435684	percent of standard	103

Surrogates	EPA QC LIMITS	% Recovery
1,2-dichloroethane-d4	(76 - 114)	103
toluene-d8	(88 - 110)	107
4-bromofluorobenzene	(86 - 115)	96

RF File: /chem/Pam_hp.i/rf/1031A
Date/Time RF File Updated: Nov 1 15:30
Date/Time Quantitated: Nov 04 15:31

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Oil Skimmer Sludge
Extraction Date: TCLP = 10/24/91 BNA = 10/28/91
Base, Neutral, Acid Extractables

Sample Type: water

Multiplier: 1.1630

Data file: /chem/hp/bna/1113B/1113B0401004.d
Name Info: 110
Misc Info:
Operator : J. Suggs

Analysis Date: Wed Nov 13 91 04:26:21 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L	Corrected For Recovery
pyridine	12	110-86-1	N.D.	N.D.
hexachloroethane	12	67-72-1	N.D.	N.D.
nitrobenzene	12	98-95-3	N.D.	N.D.
hexachlorobutadiene	12	87-68-3	N.D.	N.D.
2,4-dinitrotoluene	12	121-14-2	N.D.	N.D.
hexachlorobenzene	12	118-74-1	N.D.	N.D.
ACIDS				
2-methylphenol (o-cresol)	12	95-48-7	N.D.	N.D.
3-methylphenol(m-cresol)	12	108-39-4	and	
4-methylphenol(p-cresol)	12	106-44-5	20	45
2,4,6-trichlorophenol	12	88-06-2	N.D.	N.D.
2,4,5-trichlorophenol	12	95-95-4	N.D.	N.D.
pentachlorophenol	58	87-86-5	N.D.	N.D.

Note: D.L. = Detection Limit

)LLUTION CONTROL SYSTEMS, IN
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Oil Skimmer Sludge
Extraction Date: TCLP = 10/24/91 BNA = 10/28/91
Base, Neutral, Acid Extractables

Sample Type: water

Multiplier: 1.1630

Data file: /chem/hp/bna/1113B/1113B0401004.d
Name Info: 110
Misc Info:
Operator : J. Suggs

Analysis Date: Wed Nov 13 91 04:26:21 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

1,4-dichlorobenzene-d4 (I.S.)	10576267	percent of standard	208	!
naphthalene-d8 (I.S.)	38364381	percent of standard	186	
acenapthene-d10 (I.S.)	23417356	percent of standard	182	
phenanthrene-d10 (I.S.)	43510152	percent of standard	181	
chrysene-d12 (I.S.)	40908797	percent of standard	168	
perylene-d12 (I.S.)	33572395	percent of standard	132	

Surrogates	EPA QC LIMITS	% Recovery
nitrobenzene-d5 (surr.)	(35 - 114)	47
2-fluorobiphenyl (surr.)	(43 - 116)	66
p-terphenyl-d14 (surr.)	(33 - 141)	68
2-fluorophenol surr	(21 - 100)	55
phenol-d6 (surr.)	(10 - 94)	45
2,4,6-tribromophenol (surr.)	(10 - 123)	64

! = Matrix effect, see also matrix spike for this compound.

RF File: /chem/hp/rf/1113B
Date/Time RF File Updated: Nov 14 13:06
Date/Time Quantitated: Nov 14 13:18

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike, Oil Skimmer Sludge
Extraction Date: TCLP = 10/24/91 BNA = 10/28/91
Base, Neutral, Acid Extractables

Sample Type: water

Multiplier: 1.1630

Data file: /chem/hp/bna/1113B/1113B0501005.d
Name Info: 110 MS
Misc Info:
Operator : J. Suggs

Analysis Date: Wed Nov 13 91 05:09:47 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Spike Concentration ug/L	Spike Recovery %
pyridine	12	110-86-1	43	22
hexachloroethane	12	67-72-1	76	38
nitrobenzene	12	98-95-3	120	60
hexachlorobutadiene	12	87-68-3	100	50
2,4-dinitrotoluene	12	121-14-2	116	58
hexachlorobenzene	12	118-74-1	92	46
ACIDS				
2-methylphenol (o-cresol)	12	95-48-7	96	48
3-methylphenol(m-cresol)	12	108-39-4	and	
4-methylphenol(p-cresol)	12	106-44-5	199	45
2,4,6-trichlorophenol	12	88-06-2	137	69
2,4,5-trichlorophenol	12	95-95-4	165	83
pentachlorophenol	58	87-86-5	178	89

Note: D.L. = Detection Limit
Spiked at 200ug/L

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike, Oil Skimmer Sludge
Extraction Date: TCLP = 10/24/91 BNA = 10/28/91
Base, Neutral, Acid Extractables

Sample Type: water

Multiplier: 1.1630

Data file: /chem/hp/bna/1113B/1113B0501005.d
Name Info: 110 MS
Misc Info:
Operator : J. Suggs

Analysis Date: Wed Nov 13 91 05:09:47 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

1,4-dichlorobenzene-d4 (I.S.)	11770199	percent of standard	232	!
naphthalene-d8 (I.S.)	39514598	percent of standard	192	
acenapthene-d10 (I.S.)	23524825	percent of standard	183	
phenanthrene-d10 (I.S.)	42604233	percent of standard	178	
chrysene-d12 (I.S.)	40264011	percent of standard	166	
perylene-d12 (I.S.)	33364989	percent of standard	131	

Surrogates	EPA QC LIMITS	% Recovery
nitrobenzene-d5 (surr.)	(35 - 114)	40
2-fluorobiphenyl (surr.)	(43 - 116)	64
p-terphenyl-d14 (surr.)	(33 - 141)	67
2-fluorophenol surr	(21 - 100)	50
phenol-d6 (surr.)	(10 - 94)	37
2,4,6-tribromophenol (surr.)	(10 - 123)	56

! = Matrix Effect

RF File: /chem/hp/rf/1113B
Date/Time RF File Updated: Nov 14 13:06
Date/Time Quantitated: Nov 14 13:23

Special Waste Certification Application

Indiana Department of
Environmental Management
Office of Solid and Hazardous Waste Management
105 South Meridian Street
Indianapolis, Indiana 46206
Telephone: 317/232-4473

For Office Use Only

Case No. _____

Reviewer _____

Generator Information

Generator Mailing Address	Generator Facility Location
Name Universal Tool & Stamping Co., Inc.	Name Universal Tool & Stamping Co., Inc.
Address P.O.Box 100	Address Main & Commerce Streets
Butler / IN / 46721	Butler, / IN / 46721
(City) (State) (Zip)	(City) (State) (Zip)
County DeKalb	County DeKalb
Technical Contact and Telephone # Andrew Fox 219/868-2147	Contact and Telephone # Andrew Fox 219/868-2147

Waste Information

Waste Name: Floor Scrubber Sludge

Brief description of the process generating the waste: Scrubber machine produces a sludge due to cleaning factory floor.

Anticipated quantity (cubic yards, drums, other): 40 cubic yards

Disposal Frequency (weekly, monthly, annually, one time, etc.): bi-annually

Type of waste containers (drums, bulk, rolloffs, etc.): roll offs

Proposed disposal site: Randolph Farms, Randolph County, Modoc, IN

Generator Signature

I hereby certify that the information in this application is true and accurate to the best of my knowledge, and that this waste is not a hazardous waste as defined in 329 IAC 3.

Andrew G Fox / Andrew G. Fox / 11/20/91

Signature (type or print name) Date

Title Manager of Environmental Affairs

12/90

Contractor Information

Applicant (if other than generator)	Proposed Disposal Site
Name	Name Randolph Farms Opp No.
Address	Address RR #1
	Box 76
/ /	Modoc / IN / 47358
(City) (State) (Zip)	(City) (State) (Zip)
County	County Randolph
Technical Contact and Telephone #	Contact and Telephone # Tonya Leach 317/853-5714

Sampling and Laboratory Information

Laboratory	Sample Collector
Name Pollution Control Systems	Name Rick Monroe
Address State Road 3 at CR550S	Address P. O. Box 100
	Universal Tool & Stamping Co., Inc.
LaOtto / IN / 46793	Butler / IN / 46721
(City) (State) (Zip)	(City) (State) (Zip)
Technical Contact and Telephone # Sandy Mort 219/637-3137	Contact and Telephone # Andrew Fox 219/868-2147

Renewal Information

Is this application a(n): ■ New Application? ☐ Renewal? ☐ Amendment?

If a renewal, what is the date of the last lab analysis? _____

Have there been any changes in the process, volumes, or raw materials since the last certification? Yes___ No X__ If yes, attach a brief explanation.

Are you aware of any other facts or circumstances which have, or could have, altered the physical characteristics or chemical composition of the waste? Yes___ No X . If yes, provide a brief explanation.

(Attach a separate page for each analysis)

SAMPLE No.

Analytical Data

Waste Characteristics: (attach MSD Sheets if available)

Physical state: ___Solid X Semi-solid ___Liquid ___Powder ___Other

Percent solids 73 %

Fire, explosion, or spontaneous ignition hazard? Yes___ No X

Does this waste contain: Free liquids?___ PCB's?___ Asbestos?___ Solvents?___

Odor? None X Mild___ Strong ___ Describe:

Representative Sampling Information

Date sample was collected: 10/11/91

Was a sampling plan used? Yes___ No X If so, attach a copy.

Is the sample representative of the waste? YES

Sample type: X grab ___composite

Analysis: (attach laboratory sheets and support data)

Is the waste a listed hazardous waste as defined in 329 IAC 3? Yes___ No X

Ignitability (flash point) (D001) (_____ °F) (_____ °C)

Corrosivity (pH)(D002) 9.2

Reactivity (D003) Total(CN_____ppm S_____ppm)

Reactive(CN < 12 ppm S < 28 ppm)

Chemical*		Total mg/kg	EP TOX mg/l	TCLP mg/l	Reg Limit mg/l
Arsenic	D004			< 0.140	5.0
Barium	D005			0.070	100.0
Cadmium	D006			< 0.006	1.0
Chromium	D007			0.030	5.0
Lead	D008			< 0.270	5.0
Mercury	D009			< 0.060	0.2
Selenium	D010			< 0.048	1.0
Silver	D011			< 0.030	5.0
Endrin **	D012				0.02
Lindane **	D013				0.4
Methoxychlor **	D014				10.0
Toxaphene **	D015				0.5
2,4 D **	D016				10.0
2,4,5 TP (Silvex)**	D017				1.0

*Provide either the EP Tox or TCLP results as appropriate in mg/L.
Total values in mg/L are acceptable if they are below the RCRA limits.

** If there is a reason believe that these pesticides are present, then the analytical data is required.

Special Waste Certification Application (p4 of 4)

(Attach a separate page for each analysis) Sample No._____

TCLP Organic Chemical Constituents*				
Chemical		Total (mg/kg)	TCLP (mg/l)	Regulatory Limit (mg/l)
Benzene	D018		< 0.025	0.5
Carbon Tetrachloride	D019		< 0.025	0.5
Chlordane	D020			0.03
Chlorobenzene	D021		< 0.025	100.0
Chloroform	D022		< 0.025	6.0
O-Cresol	D023		0.018	200.0
M-Cresol	D024		0.013	200.0
P-Cresol	D025		0.013	200.0
Cresol	D026			200.0
1,4 - Dichlorobenzene	D027		< 0.025	7.5
1,2 - Dichloroethane	D028		< 0.025	0.5
1,1 - Dichloroethylene	D029		< 0.025	0.7
2,4 - Dinitrotoluene	D030		< 0.010	0.13
Heptachlor(and its epoxide)	D031			0.008
Hexachlorobenzene	D032		< 0.010	0.13
Hexachlorobutadiene	D033		< 0.010	0.5
Hexachloroethane	D034		< 0.010	3.0
Methyl Ethyl Ketone	D035		< 0.250	200.0
Nitrobenzene	D036		< 0.010	2.0
Pentachlorophenol	D037		< 0.050	100.0
Pyridine	D038		< 0.010	5.0
Tetrachloroethylene	D039		< 0.025	0.7
Trichloroethylene	D040		< 0.025	0.5
2,4,5 - Trichlorophenol	D041		< 0.010	400.0
2,4,6 - Trichlorophenol	D042		< 0.010	2.0
Vinyl Chloride	D043		< 0.050	0.2
Optional Constituents*				
Chlorides				
Copper				
Phenols				
PCB				
Zinc				

* If there is any reason to believe that these chemicals are present, then the analytical data is required.

12/90

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

METALS

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
Arsenic	D004	7440-38-2	5.0	< 0.140
Barium	D005	7440-39-3	100.0	0.070
Cadmium	D006	7440-43-9	1.0	< 0.006
Chromium	D007	7440-47-3	5.0	0.030
Lead	D008	7439-92-1	5.0	< 0.270
Mercury	D009	7439-97-6	0.2	< 0.060
Selenium	D010	7782-49-2	1.0	< 0.048
Silver	D011	7440-22-4	5.0	0.030

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

VOLATILES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
Benzene	D018	71-43-2	0.5	< 0.025
Carbon Tetra-chloride	D019	56-23-5	0.5	< 0.025
Chlorobenzene	D021	108-90-7	100.0	< 0.025
Chloroform	D022	67-66-3	6.0	< 0.025
1,2-Dichloro-ethane	D028	107-06-2	0.5	< 0.025
1,1-Dichloro-ethylene	D029	75-35-4	0.7	< 0.025
2-Butanone	D035	78-93-3	200.0	< 0.250
Tetrachloro-ethylene	D039	127-18-4	0.7	< 0.025
Trichloro-ethylene	D040	79-01-6	0.5	< 0.025
Vinyl Chloride	D043	75-01-4	0.2	< 0.050

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

ORGANOCHLORINE PESTICIDES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
Chlordane	D020	57-74-9	0.03	
Endrin	D012	72-20-8	0.02	
Heptachlor	D031	76-44-8	0.008	
Lindane	D013	58-89-9	0.04	
Methoxychlor	D014	72-43-5	10.0	
Toxaphene	D015	8001-35-2	0.5	

PHENOXYHERBICIDES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT(mg/l)
2,4-D	D016	94-75-7	10.0	
2,4,5-TP (Silvex)	D017	94-72-1	1.0	

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

BASE/NEUTRAL EXTRACTABLES				
CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT (mg/l)
1,4-Dichloro-benzene	D027	106-46-7	7.5	< 0.025
2,4-Dinitro-toluene	D030	121-14-2	0.13	< 0.010
Hexachloro-benzene	D032	118-74-1	0.13	< 0.010
Hexachloro-butadiene	D033	87-68-3	0.5	< 0.010
Hexachloro-ethane	D034	67-72-1	3.0	< 0.010
Nitrobenzene	D036	98-95-3	2.0	< 0.010
Pyridine	D038	110-86-1	5.0	< 0.010

SUMMARY OF TOXICITY CHARACTERISTIC CONSTITUENTS 40 CFR 261
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE

ACID EXTRACTABLES

CONSTITUENT	EPA HW NO.	CASE NO.	REGULATORY LEVEL (mg/l)	RESULT (mg/l)
o-Cresol	D023	95-48-7	200.0	0.018
m-Cresol	D024	108-39-4	200.0	0.130
p-Cresol	D025	106-44-5	200.0	0.130
Cresol	D026		200.0	
Pentachloro-phenol	D037	87-86-5	100.0	< 0.050
2,4,5-Tri-chlorophenol	D041	95-95-4	400.0	< 0.010
2,4,6-Tri-chlorophenol	D042	88-06-2	2.0	< 0.010

Mr. Andrew G. Fox
Universal Tool & Stamping Co., Inc.
P.O. Box 100
Commerce and Main
Butler, Indiana 46721

Mail to Client

LABORATORY REPORT

Report Date: 11/13/91
Project Number: 91-3614/UTOLS4
Date Received: 10/11/91
Time Received: 12:00

Client:
Universal Tool & Stamping Co., Inc.

Sample ID: Scrubber Sludge, As Recieved. Sample Type: Grab (PCS Sample Number 0112-0373)
Collected: 10/23/91 14:20 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
Solid Waste pH, in Water, pH Units	9.2	B. Frecker	10/21/91	10:55	10% Dilution, Electrometric	9	110.0
Ignitability	NEGATIVE	B. Frecker	10/21/91	15:25	Manual	5	1010
Reactive Cyanide, mg/kg as HCN	<12	L. Case	10/16/91	10:00	N Purge, Acid Treat., Wet Abs.	5	7.3.3.2
Reactive Sulfide, mg/kg as H2S	<28	L. Case	10/16/91	10:00	N Purge, Acid Treat, Wet Abs.	5	7.3.4.1
Paint Filter Liquids Test, mls/100 mls	POSITIVE	L. Case	10/29/91	13:30	Free Liquids @ 5 Minutes	5	9095
Percent Total Solids, g/100 g	73	B. Frecker	10/18/91	09:20	Gravimetric, 103-105 Degrees C	1	209F

Sample ID: Scrubber Sludge, TC Extract. Sample Type: Grab (PCS Sample Number 0113-0373)
Collected: 10/23/91 14:20 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
Arsenic, TC Extractable, mg/L	<0.14	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Arsenic, Internal Standard, TC Extractable, % Recovery	103	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Barium, TC Extractable, mg/L	0.07	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Barium, Internal Standard, Total, TC Extractable, % Recovery	102	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Cadmium, TC Extractable, mg/L	<0.006	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050

Continued on next page...

Sample ID: Scrubber Sludge, TC Extract. Sample Type: Grab (PCS Sample Number 0113-0373)
Collected: 10/23/91 14:20 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
					TC Leachate Extraction	5	1311
Cadimum, Internal Standard, TC Extractable, % Recovery	108	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Total Chromium, TC Extractable, mg/L	0.03	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
T. Chromium, Internal Std., TC Extractable, % Recovery	102	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Lead, TC Extractable, mg/L	<0.30	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Lead, Internal Standard, TC Extractable, % Recovery	112	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Mercury, TC Extractable, mg/L	<0.05	L. Case	10/31/91	08:00	Cold Vapor Atomic Absorption	1	320A
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Mercury, Internal Standard, TC Extractable, % Recovery	89.5	L. Case	11/01/91	07:00	Cold Vapor Atomic Absorption	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Selenium, TC Extractable, mg/L	<0.040	M. Graham	11/04/91	12:00	Atomic Absorp. Graph. Furnace	1	270.2
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Selenium, Internal Std., TC Extractable, % Recovery	84.1	M. Graham	11/04/91	12:00	Atomic Abs., Graphite Furnace	4	Metals 8.5
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Silver, TC Extractable, mg/L	<0.02	M. Graham	10/29/91	10:00	ICP	4	200.7
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
Silver, Internal Standard, TC Extractable, % Recovery	77.2	M. Graham	10/29/91	10:00	ICP	4	Metals 8.5

Continued on next page...

Sample ID: Scrubber Sludge, TC Extract. Sample Type: Grab (PCS Sample Number 0113-0373)
Collected: 10/23/91 14:20 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
					Sludge/Soil Digestion	5	3050
					TC Leachate Extraction	5	1311
TCLP Extraction	PERFORMED	P. Ransbottom	10/24/91	13:50			
BNA Extraction	PERFORMED	N. Bednarz	10/30/91	10:00			
Base, Neutral/Acids, TC Extractable, ug/L	FOLLOWING	J. Suggs	11/05/91	22:32	Solvent Extrn, GC/Mass Spec	5	8270
					TC Leachate Extraction	5	1311
BNA Matrix Spike, TC Extractable, % Recovery	FOLLOWING	J. Suggs	11/05/91	23:27	Extraction, GC/Mass Spec	5	8270
					TC Leachate Extraction	5	1311

Sample ID: Scrubber Sludge, ZHE Extract. Sample Type: Grab (PCS Sample Number 0114-0373)
Collected: 10/23/91 14:20 by Client

Parameter	Result	Analyst	Analysis Date	Analysis Time	Procedure	Ref	Citation
Zero Headspace Extraction	PERFORMED	P. Ransbottom	10/24/91	13:50	for TCLP VOC Analyses		
Volatile Organic Compounds, ZHE Extractable, ug/L	FOLLOWING	J. Van Markwyk	10/31/91	23:06	Purge & Trap GC/Mass Spec	5	8240
					TC Zero Headspace Extraction	5	1311
VOC Matrix Spike, ZHE Extractable, % Recovery	FOLLOWING	J. Van Markwyk	10/31/91	23:49	Purge & Trap, GC/Mass Spec	5	8240
					TC Zero Headspace Extraction	5	1311

(1) Standard Methods for the Examination of Water and Wastewater, 16th Edition 1985, APHA, AWWA, WPCF, American Public Health Association, 1015 Fifteenth Street NW, Washington, DC 20005.

(4) Methods for Chemical Analysis of Water and Wastes, USEPA, Environmental monitoring and Support Laboratory, Cincinnati, Ohio 45268, EPA-600/7-79-0-20, Revised March 1983.

(5) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA, Office of Solid Waste and Emergency Respose, Washington DC 20460, SW-846 Third Edition, November 1986.

(9) Pollution Control Systems, Incorporated, Method developed and evaluated by PCS Laboratory Staff.

Reviewed and Approved by:

Sandra L Mort

TCLP Metals Correction Data

Pollution Control Systems Inc.

Sample ID: Scrubber Sludge, 10/23/91, TC Extract
Sample No.: 0113-0373

Project: 91-3614/UTOLS4

Metal	SAMPLE DATA : Concentration in TC Extract, mg/L	Internal Standard Recovery, %	RECOVERY CORRECTED CONCENTRATION, mg/L	REGULATORY LEVEL: TC Extract Maximum Concentration Levels, mg/L
Arsenic	<0.14	103	<0.14	5.0
Barium	0.07	102	0.07	100.0
Cadmium	<0.006	108	<0.006	1.0
Total Chromium	0.03	102	0.03	5.0
Lead	<0.30	112	<0.27	5.0
Mercury	<0.05	89.5	<0.06	0.2
Selenium	<0.040	84.1	<0.048	1.0
Silver	<0.02	77.2	<0.03	5.0

POLLUTION CONTROL SYSTEMS, INC
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Scrubber Sludge
Zhe Extraction Date: 10/24/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A3301017.d
Name Info: 0114
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 31 91 11:06:27 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L	Corrected For Recovery
vinyl chloride	50	75-01-4	N.D.	N.D.
1,1-dichloroethene	25	75-35-4	N.D.	N.D.
chloroform	25	67-66-3	N.D.	N.D.
MEK	250	78-93-3	N.D.	N.D.
carbon tetrachloride	25	56-23-5	N.D.	N.D.
benzene	25	71-43-2	N.D.	N.D.
1,2-dichloroethane	25	107-06-2	N.D.	N.D.
trichloroethene	25	79-01-6	N.D.	N.D.
tetrachloroethene	25	127-18-4	N.D.	N.D.
chlorobenzene	25	108-90-7	N.D.	N.D.
1,4-dichlorobenzene	25	106-46-7	N.D.	N.D.

Note: D.L. = Detection Limit

LLUTION CONTROL SYSTEMS, IN
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Scrubber Sludge
Zhe Extraction Date: 10/24/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A3301017.d
Name Info: 0114
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 31 91 11:06:27 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

bromochloromethane	5744989	percent of standard	101
1,4-difluorobenzene	20455866	percent of standard	117
chlorobenzene-d5	15400988	percent of standard	110

Surrogates	EPA QC LIMITS	% Recovery
1,2-dichloroethane-d4	(76 - 114)	96
toluene-d8	(88 - 110)	107
4-bromofluorobenzene	(86 - 115)	98

RF File: /chem/Pam_hp.i/rf/1031A
Date/Time RF File Updated: Nov 1 15:30
Date/Time Quantitated: Nov 04 15:38

POLLUTION CONTROL SYSTEMS, INC
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike Scrubber Sludge
Zhe Extraction Date : 10/24/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A3401018.d
Name Info: 0114MS
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 31 91 11:49:27 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Spike Concentration ug/L	Spike Recovery %
vinyl chloride	50	75-01-4	91	46
1,1-dichloroethene	25	75-35-4	154	77
chloroform	25	67-66-3	171	86
MEK	250	78-93-3	160	80
carbon tetrachloride	25	56-23-5	196	98
benzene	25	71-43-2	185	93
1,2-dichloroethane	25	107-06-2	118	59
trichloroethene	25	79-01-6	183	92
tetrachloroethene	25	127-18-4	263	132
chlorobenzene	25	108-90-7	192	96
1,4-dichlorobenzene	25	106-46-7	168	84

Note: D.L. = Detection Limit
Spiked at 200ug/L

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike Scrubber Sludge
Zhe Extraction Date : 10/24/91

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A3401018.d
Name Info: 0114MS
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 31 91 11:49:27 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

bromochloromethane	5803086	percent of standard	102
1,4-difluorobenzene	19805033	percent of standard	113
chlorobenzene-d5	14964712	percent of standard	107

Surrogates	EPA QC LIMITS	% Recovery
1,2-dichloroethane-d4	(76 - 114)	94
toluene-d8	(88 - 110)	104
4-bromofluorobenzene	(86 - 115)	99

RF File: /chem/Pam_hp.i/rf/1031A
Date/Time RF File Updated: Nov 1 15:30
Date/Time Quantitated: Nov 04 15:43

POLLUTION CONTROL SYSTEMS, INC
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Laboratory Blank

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A2301007.d
Name Info: Laboratory Blank
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 31 91 03:54:05 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L
vinyl chloride	50	75-01-4	N.D.
1,1-dichloroethene	25	75-35-4	N.D.
chloroform	25	67-66-3	N.D.
MEK	250	78-93-3	N.D.
carbon tetrachloride	25	56-23-5	N.D.
benzene	25	71-43-2	N.D.
1,2-dichloroethane	25	107-06-2	N.D.
trichloroethene	25	79-01-6	N.D.
tetrachloroethene	25	127-18-4	N.D.
chlorobenzene	25	108-90-7	N.D.
1,4-dichlorobenzene	25	106-46-7	N.D.

Note: D.L. = Detection Limit

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Laboratory Blank

Volatile Organic Compounds

Sample Type: water

Multiplier: 5.0000

Data file: /PCS2/voa/1031A/1031A2301007.d
Name Info: Laboratory Blank
Misc Info:
Operator : J. Van Markwyk

Analysis Date: Thu Oct 31 91 03:54:05 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

bromochloromethane	4936185	percent of standard	87
1,4-difluorobenzene	18751758	percent of standard	107
chlorobenzene-d5	12493047	percent of standard	90

Surrogates	EPA QC LIMITS	% Recovery
1,2-dichloroethane-d4	(76 - 114)	103
toluene-d8	(88 - 110)	110
4-bromofluorobenzene	(86 - 115)	94

RF File: /chem/Pam_hp.i/rf/1031A
Date/Time RF File Updated: Nov 1 15:30
Date/Time Quantitated: Nov 05 12:06

[illegible] CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Scrubber [illegible]
Extraction Date: TCLP - 10/24/91 BNA - 10/30/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B0901009.d
Name Info: 113
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 10:32:52 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Concentration ug/L	Corrected For Recovery
pyridine	10	110-86-1	N.D.	N.D.
hexachloroethane	10	67-72-1	N.D.	N.D.
nitrobenzene	10	98-95-3	N.D.	N.D.
hexachlorobutadiene	10	87-68-3	N.D.	N.D.
2,4-dinitrotoluene	10	121-14-2	N.D.	N.D.
hexachlorobenzene	10	118-74-1	N.D.	N.D.

ACIDS

2-methylphenol (o-cresol)	10	95-48-7	15	18
3-methylphenol(m-cresol)	10	108-39-4	and	
4-methylphenol(p-cresol)	10	106-44-5	160	130
2,4,6-trichlorophenol	10	88-06-2	N.D.	N.D.
2,4,5-trichlorophenol	10	95-95-4	N.D.	N.D.
pentachlorophenol	50	87-86-5	N.D.	N.D.

Note: D.L. = Detection Limit

QUALITY CONTROL SYSTEM, I
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Scrubber Sludge
Extraction Date: TCLP = 10/24/91 BNA = 10/30/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B0901009.d
Name Info: 113
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 10:32:52 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

1,4-dichlorobenzene-d4 (I.S.)	6576836	percent of standard	119
naphthalene-d8 (I.S.)	27110780	percent of standard	149
acenapthene-d10 (I.S.)	10728317	percent of standard	112
phenanthrene-d10 (I.S.)	16814943	percent of standard	130
chrysene-d12 (I.S.)	9990076	percent of standard	176
perylene-d12 (I.S.)	4454457	percent of standard	131

Surrogates	EPA QC LIMITS	% Recovery
nitrobenzene-d5 (surr.)	(35 - 114)	88
2-fluorobiphenyl (surr.)	(43 - 116)	87
p-terphenyl-d14 (surr.)	(33 - 141)	77
2-fluorophenol surr	(21 - 100)	83
phenol-d6 (surr.)	(10 - 94)	69
2,4,6-tribromophenol (surr.)	(10 - 123)	87

RF File: /chem/hp/rf/1105B.recal
Date/Time RF File Updated: Nov 8 15:45
Date/Time Quantitated: Nov 08 16:49

[illegible] POWER SYSTEM, [illegible]
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike, Scrubber Sludge
Extraction Date: TCLP = 1[illegible]/24/91 BNA = 10/30/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B1001010.d
Name Info: 113 MS
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 11:27:09 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #	Spike Concentration ug/L	Spike Recovery %
pyridine	10	110-86-1	27	14
hexachloroethane	10	67-72-1	57	29
nitrobenzene	10	98-95-3	153	77
hexachlorobutadiene	10	87-68-3	98	49
2,4-dinitrotoluene	10	121-14-2	101	51
hexachlorobenzene	10	118-74-1	141	71
ACIDS				
2-methylphenol (o-cresol)	10	95-48-7	168	84
3-methylphenol(m-cresol)	1[illegible]	108-39-4	and	
4-methylphenol(p-cresol)	10	106-44-5	492	123
2,4,6-trichlorophenol	10	88-06-2	173	87
2,4,5-trichlorophenol	10	95-95-4	160	80
pentachlorophenol	50	87-86-5	159	80

Note: D.L. = Detection Limit
Spiked at 200ug/L

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Matrix Spike, Scrubber Sludge
Extraction Date: TCLP = 10/24/91 BNA = 10/30/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B1001010.d
Name Info: 113 MS
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 11:27:09 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

1,4-dichlorobenzene-d4 (I.S.)	7037576	percent of standard	127
naphthalene-d8 (I.S.)	28964615	percent of standard	154
acenapthene-d10 (I.S.)	11635756	percent of standard	122
phenanthrene-d10 (I.S.)	16828095	percent of standard	130
chrysene-d12 (I.S.)	9762518	percent of standard	172
perylene-d12 (I.S.)	4036896	percent of standard	119

Surrogates	EPA QC LIMITS	% Recovery
nitrobenzene-d5 (surr.)	(35 - 114)	81
2-fluorobiphenyl (surr.)	(43 - 116)	83
p-terphenyl-d14 (surr.)	(33 - 141)	73
2-fluorophenol surr	(21 - 100)	78
phenol-d6 (surr.)	(10 - 94)	63
2,4,6-tribromophenol (surr.)	(10 - 123)	81

RF File: /chem/hp/rf/1105B.recal
Date/Time RF File Updated: Nov 8 15:45
Date/Time Quantitated: Nov 08 17:15

POLLUTION CONTROL SYSTEMS, INC
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Lab Water Blank
Extraction Date: 10/23/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B0401004.d
Name Info: 10/23 blank
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 05:58:06 PM
Instrment: HP5970

Compound	D.L. ug/L	CAS #		Concentration ug/L
pyridine	10	110-86-1		N.D.
hexachloroethane	10	67-72-1		N.D.
nitrobenzene	10	98-95-3		N.D.
hexachlorobutadiene	10	87-68-3		N.D.
2,4-dinitrotoluene	10	121-14-2		N.D.
hexachlorobenzene	10	118-74-1		N.D.
ACIDS				
2-methylphenol (o-cresol)	10	95-48-7		N.D.
3-methylphenol(m-cresol)	10	108-39-4	and	
4-methylphenol(p-cresol)	10	106-44-5		N.D.
2,4,6-trichlorophenol	10	88-06-2		N.D.
2,4,5-trichlorophenol	10	95-95-4		N.D.
pentachlorophenol	50	87-86-5		N.D.

Note: D.L. = Detection Limit

POLLUTION CONTROL SYSTEMS, INC.
ORGANIC SECTION
LABORATORY REPORT

Sample ID: Lab Water Blank
Extraction Date: 10/23/91
Base, Neutral, Acid Extractables

Sample Type: water

Data file: /chem/hp/bna/1105B/1105B0401004.d
Name Info: 10/23 blank
Misc Info:
Operator : J. Suggs

Analysis Date: Tue Nov 05 91 05:58:06 PM
Instrment: HP5970

LABORATORY QC

Internal standards (EPA QC LIMITS: 50 - 200 %)

1,4-dichlorobenzene-d4 (I.S.)	7247205	percent of standard	131
naphthalene-d8 (I.S.)	22650096	percent of standard	121
acenapthene-d10 (I.S.)	11112975	percent of standard	116
phenanthrene-d10 (I.S.)	15759765	percent of standard	122
chrysene-d12 (I.S.)	8311454	percent of standard	147
perylene-d12 (I.S.)	6333871	percent of standard	187

Surrogates	EPA QC LIMITS	% Recovery
nitrobenzene-d5 (surr.)	(35 - 114)	67
2-fluorobiphenyl (surr.)	(43 - 116)	67
p-terphenyl-d14 (surr.)	(33 - 141)	77
2-fluorophenol surr	(21 - 100)	62
phenol-d6 (surr.)	(10 - 94)	66
2,4,6-tribromophenol (surr.)	(10 - 123)	89

RF File: /chem/hp/rf/1105B.recal
Date/Time RF File Updated: Nov 5 16:56
Date/Time Quantitated: Nov 08 15:26