US ERA ARCHIVE DOCUMENT

PCB CLOSURE PLAN

TRANS-CYCLE INDUSTRIES OF OHIO, LLC

Prepared For:

TRANS-CYCLE INDUSTRIES OF OHIO, LLC 150 IRA BEAN PARKWAY RICHWOOD, OHIO 43344 EPA ID: OHW000205856

DATE REVISED: November 18, 2017

Prepared By:
Evergreen Services & Consulting, Inc.
111 Annette Way NE
Milledgeville, Georgia 31061

TRANS-CYCLE INDUSTRIES OF OHIO, LLC TABLE OF CONTENTS

SECTION NO.	SECTION TITLE		PAGE NO.	
	CERTIFICATION		li	
1.0	INTRODUCTION		1-4	
1.1	Introduction		1	
1.2	Final Closure Activities		1	
1.3	Land Uses		2	
1.4	Adjoining and Surrounding Property Use	25	2-3	
1.5	Underground Storage Tanks		3	
1.6	Traffic Patterns		3	
1.7	Security Systems		3	
1.8	Legal Description		4	
1.9	Closed PCB and Hazardous Waste Units		4	
1.10	Other Wastes Handled by the Facility		4	
2.0	ENVIRONMENTAL CONDITIONS		4-5	
2.1	Proximity to Surface Waters		4	
2.2	Proximity to Private/Public Drinking Sou	rces	4-5	
2.3	Groundwater		5	
2.4	Surface Water Runoff Flow Pattern		5	
3.0	FACILITY DESIGN & LOCATION		5-7	
3.1	Facility Layout & Design		5-6	
3.2	Facility Operations		6	
3.3	Bulk Storage		6	
3.4	Loading & Unloading		7	
3.5	100 Year Flood Plain		7	
4.0	INVENTORY, REMOVAL, AND DISPOSAL	. OF PCB REGULATED MATERIAL	7-10	
4.1	Maximum Regulated Inventory		7	
4.2	Management of PCB Inventory		7	
4.3	Disposal of PCB Inventory		8	
4.4	Disposal of Material Handling & Other N	Disposal of Material Handling & Other Movable Equipment		
4.5	Transportation & Disposal of PCB Regula		9	
4.6	Roadways, Parking Areas, & Loading Do	cks	9	
4.7	Verification of Decontamination and Cle	anup	10	
4.8	Post-Closure Plan		10	
4.9	Notice In Deed		10	
4.10	Expected Year of Closure		10	
5.0	CERTIFICATION OF CLOSURE		10	
6.0	SAFETY PROCEDURES FOR DECONTAMI	NATION PERSONNEL	11	
7.0		ALS GENERATED DURING CLOSURE ACTIVITIES	11	
8.0	CLOSURE COSTS ESTIMATE		12	
9.0	CLOSURE SCHEDULE		13	
EXHIBIT A	Legal Description			
		& APPENDIX	•	
Figure 1 Site	Vicinity	Figure 5 Property Drain Map		
	Property Map	Figure 6 Epoxy Specification Sheet		
Figure 3 Traffic Flow Figure 7 Joint Filler Compound Specification She		eet		
Figure 4 Facility Layout Appendix A 3rd Party Closure Costs				

CERTIFICATION

Under civil and criminal penalties of law for the making or submission of false and fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify, as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete.

Frank Jackson, President

NOTARY

State of Ohio Union County

FRANK JACKSOM, Pres., appeared before me, the undersigned officer, on the <u>29</u> day of <u>August</u>, 2017, known to me to be the person described in the foregoing certification and acknowledged that he executed the same in the capacity therein stated and for the purposes therein contained and that the statements contained therein are true and correct.

IN WITNESS WHEREOF, I HEREUNTO SET MY HAND AND OFFICIAL SEAL.

Notary Public

My Commission expires: <u>Tune</u> 18, 2021

III My

Terry A Wallace
Notary Public
State of Ohio
ly Commission Expires
June 18,

PCB CLOSURE PLAN

SECTION 1.0 INTRODUCTION

1.1 Introduction

This Closure Plan has been developed for Trans-Cycle Industries, of Ohio, LLC (TCI) located at 150 Ira Bean Parkway, Richwood, Union County, Ohio 43344. This Closure Plan has been prepared in accordance with the requirements of 40 CFR Part 761.65(d) and (e). This plan identifies all steps that will be necessary to close the facility at any point during its operating life. This plan covers the closure of the regulated portion of the facility and disposal of the PCB Inventory.

TCI will maintain an on-site copy of the approved Closure Plan at the facility office until the certification of closure has been submitted to and accepted by the U.S. Environmental Protection Agency (EPA). The EPA Regional Administrator will be notified at least 60 days prior to the date TCI expects to begin final closure. Initiation of closure activities will commence within 30 days of the receipt of the last regulated items at the facility. The closure date for the facility is estimated to be 2047 A.D. This date will be dependent on the demand for TCI's services. Upon completion of closure, TCI will submit a certification by its owner and by an independent registered environmental professional that the facility has been closed in accordance with the specifications in the approved Closure Plan.

1.2 Final Closure Activities

All regulated material will be removed from the facility as outlined in Section 4 and all necessary equipment, structures, wastes, soils, and/or other materials contaminated with regulated levels of PCBs will be decontaminated and/or disposed of according to their regulatory levels during closure activities. The PCB levels to be achieved for final closure are as follows: (1) \leq 1 ppm for high occupancy areas; and (2) \leq 25 ppm for low occupancy areas; (3) \leq 10 µg/100 cm² for non-porous surface areas. (4) \leq 10 µg/100 cm² for porous surfaces.

1.3 Land Uses

The subject property consists of an 8.65-acre parcel located at 150 Ira Bean Parkway in Richwood, Ohio. A 50,692-square foot warehouse-type building is situated on the subject property. Site vicinity (Figure 1) and site property maps (Figure 2) are included.

The subject property is surrounded by land consisting of multiple uses. The parcel is bounded to the west by a vacant commercial building, and also by a small residential subdivision along Kells Lane. It is bounded to the south by Ira Bean Parkway, then by a farmed field. The subject property is bounded to the east by another farmed field. To the north, the subject property is bounded by Tawa Road, and across the street by a farmed field. Land usage in the vicinity of the subject property is mixed including commercial businesses (Zoned B-1), residential (Zoned R-1), and agriculture. The Village of Richwood zoning designations are indicated below:

- B-1: service business district involving sales, service, and repair establishments requiring highway access and large tracts of land
- R-1: low density residential
- Agriculture: used for farming & agricultural purposes including but not limited to crops and livestock.

1.4 Adjoining and Surrounding Property Uses

The following was indicated during a review of environmental regulatory agency listings:

- No NPL sites were identified within the standard ASTM search distance of one mile.
- No facilities were identified in the EDR map findings summary as RCRA hazardous waste notifiers within or close to the standard ASTM search distance of one mile.
- There have been two (2) UST/groundwater incidents/releases identified between ½ and 1 mile as indicated below:
 - Certified Oil (Tier 2 Pending/Ohio BUSTR Database), 25 E Blagrove, Richwood,
 Ohio
 - Richwood Mini Mart (No further action/Ohio BUSTR database), 3 E Bomford St.
 Richwood, Ohio
- No SEMS (formerly CERCLIS facilities) were identified within or close to the standard ASTM search distance of ½ mile in the EDR map findings summary.

- No currently permitted solid waste management facilities were identified within ½ mile of the subject property on the database of permitted solid waste facilities.
- No facilities were identified within standard ASTM search distances from the subject property on the State Hazardous Waste Sites or the Hazardous Substances Disposal Sites databases.
- The subject property, identified as MAI Thermal and Acoustical Management (previous owner/operator), is listed on three minor databases: US AIRS, ECHO, and FINDS.
 - The AIRS database indicates that the facility had an air emissions permit from the State of Ohio EPA.
 - The FINDS database is an "indicator" database which generally points to another database which in this case would be the AIRS database for MAI's air emissions permit.
 - The ECHO database is a U. S. Environmental Protection Agency (EPA) database which contains compliance records of permitted facilities. MAI's compliance record is not an issue for this application since all of MAI's operating equipment has been removed from the premises, and there is no current process that requires any air permitting. MAI's compliance record is not applicable to this application either.

1.5 Underground Storage Tanks

There are 2 locations located between ½ and 1 mile of the facility that have registered underground storage tanks as indicated below:

- Certified Oil, 25 E Blagrove, Richwood, Ohio
- Richwood Mini-Mart, 3 E Bomford St. Richwood, Ohio

1.6 Traffic Patterns

Figure 3 shows traffic patterns around the facility.

1.7 Security Systems

TCI is a gated, fenced facility with controlled access 24/7/365. Unauthorized ingress and egress will be prohibited. A security system is installed at the facility and will remain operational at the facility until Closure is completed, certified, and accepted by the EPA.

1.8 Legal Description

A legal description of the property is included as Exhibit A.

1.9 Closed PCB or Hazardous Waste Management Units

There are no closed PCB or hazardous waste management units in the vicinity of TCI.

1.10 Other Wastes Handled by the Facility

There are no other wastes handled by the facility other than non-PCB (< 50 ppm PCBs).

SECTION 2.0 ENVIRONMENTAL CONDITIONS

There are no environmental conditions that would make the facility an unreasonable risk to human health or the environment.

2.1 Proximity to Surface Waters

There are no surface water bodies on the property with only a roadway drainage ditch along the northern property boundary adjacent to Tawa Road.

2.2 Proximity to Private or Public Drinking Sources

A well is located on-site near the southwest corner of the building. The facility is connected to the Village of Richwood community public water system. The Village of Richwood water system operates 2 wells that pump approximately 162,000 gallons of water per day from a dolomite aquifer (water-rich zone) specifically the "Newburg Zone," which is a highly fractured portion of the Silurian Greenfield Formation (Roadcap and Bair, 1990). The dolomite bedrock is covered by 8 to 10 feet of low-permeability material overlying 20 to 30 feet of sand and gravel, which provides minimal protection from contamination. Depth to water in the aquifer is 10 to 15 feet below the ground surface. Soils in the area are silty loams which are moderately well-drained, meaning that much of the rainfall and snowmelt will infiltrate into the soil, instead of running off or ponding. The topography of the area is relatively flat. Ground water is replenished by the gradual flow of water underground from higher to lower elevations and by precipitation that infiltrates through the soil. At the Village of Richwood wellfield, ground water flows

generally toward the east, based on a water table elevation map completed by Roadcap and Bair (1990). There are 25 known private wells within 1 mile of the facility.

2.3 Groundwater

The geology in the area of the tract is dominated by rocks of the Silurian era (Geologic Map of Ohio, State of Ohio Geological Survey). Rocks encountered in this area would generally consist of sedimentary rocks such as dolomite, anhydrite, gypsum, salt, and shale. The hydrogeological system in the area of the subject property includes both the surficial sediments and underlying bedrock. Groundwater in sediments is present in pores between individual sediment grains. In bedrock, groundwater is present predominantly in horizontal and sub-horizontal unloading fractures, and in near, vertical stress fractures. Groundwater depths are variable and generally approach ground surface near streams and rivers. Based on the historical groundwater flow characteristics in the area, groundwater flow typically mirrors surface topography. Groundwater flow on the subject property would be west to east. There are no facilities located upgradient that could be considered potential sources of subsurface soil and groundwater environmental contamination on the property.

2.4 Surface Water Runoff Flow Pattern

The flow pattern in the front parking lot would flow towards the drain next to Ira Bean Parkway and the remaining drains only cater to the immediate 10 feet surrounding based on angle of property. The entire lot is flat. The flow pattern for the two drains in the tanker access area are in a flat area and would only drain from the immediate area. The remaining drains on the right side, behind the loading docks, angle toward the building and the drain at the outside base of the loading doors would receive the most runoff. All water drains flow to the water pond located at the entrance to Ira Bean Parkway. The Facility Drain Map is provided as Figure 5.

SECTION 3.0 FACILITY DESIGN & LOCATION

3.1 Facility Layout & Description

The facility (Figure 4) consists of a building covering a total area of 50,692 ft². Area 1, the PCB Commercial Storage Area, is 25,828 ft²; Area 2 represents 22,304 ft²; and the remaining ~2,560 ft² is office space, employee locker room, and bathrooms. The facility includes jib cranes, a gantry crane, three loading docks, and 3 drive through doors (2 useable).

The roofed area of the facility is designed to prevent rain or other precipitation from contacting any PCB regulated items. Area 1 contains a 6-inch continuous curb. The curb is provided with rollover areas to allow passage of rolling equipment as necessary. The floor in Area 1 is epoxy coated. It does not contain drain valves, floor drains, sewer lines, or other openings that would permit liquids to flow from the curbed area. The expansion joints will be filled with joint compound and then sealed with epoxy. The epoxy will be inspected every 30 days for degradation and will be re-applied in accordance with manufacturer specifications. Specification sheets for the epoxy and joint filler compound are provided as Figures 6 and 7.

The containment capacity of Area 1 is 112,282 gallons. The conveyors shown in Figure 4 are on 6-inch metal supports (located along their lengths). In the event of a spill, the displacement by these supports will be negligible. Additionally, some assumed PCB Articles may remain on the conveyors until analysis is received to determine their PCB contamination levels. Based on these 2 factors, displacement was not calculated for the conveyors. Displacement has been determined for all other Area 1 standing equipment shown in Figure 4.

3.2 Facility Operations

TCI provides utilities and major industries with equipment decommissioning, dismantling, and recycling services for non-PCB (< 50 ppm PCBs) articles. Any regulated PCB items, as defined by 40 CFR §761.3, will be stored in Area 1 until shipped to EPA approved disposal facilities.

3.3 Bulk Storage

The facility will utilize 4 bulk storage tanks for non-PCB (< 50 ppm PCBs) fluids totaling 65,900 gallons:

- Tank 4 = 19,400 gal
- o Tank 3 = 15,500 gal
- o Tank 2 = 15,500 gal
- o Tank 1 = 15,500 gal

All tanks are designed, constructed, and operated in accordance with the Occupational Safety and Health Standards at 29 CFR §1910.106. The tanks are equipped with vents, drains, manways, and fittings. The tanks will contain non-PCB fluids (< 50 ppm) and, thus, are not a part of this Closure Plan.

3.4 Loading & Unloading

All loading and unloading of regulated PCB materials takes place either inside the facility or at the loading docks.

3.5 100 Year Flood Plain

According to FEMA Flood (FIRM) Maps (Panel 166 of 500/Map #39159C0166D), the site is not located in a 100-year flood plain.

SECTION 4.0 INVENTORY, REMOVAL, AND DISPOSAL OF PCB REGULATED MATERIAL

4.1 Maximum Regulated Inventory

The maximum estimated inventory of regulated PCB material is set forth in the table below:

Category	Regulatory Levels	Quantity		
PCB-contaminated Articles with	> 50 - < 500 ppm	100,000 P		
fluid	<u>≥</u> 30 - < 300 ppm	containing 4,000 G fluid		
PCB-contaminated Articles drained	<u>></u> 50 - < 500 ppm	10,000 P		
Assumed PCB Articles with fluid	> 500 ppm	425,000 P containing		
Assumed FCB Articles with fluid	≥ 300 ppm	24,000 G fluid		
PCB Articles with fluids	> 500 ppm	40,000 P containing		
T CD Articles with fluids	<u>></u> 300 ppm	2,000 G fluid		
PCB Articles drained	<u>></u> 500 ppm	10,000 P		
PCB-contaminated fluid	<u>></u> 50 - < 500 ppm	4500 G		
PCB debris/solids	<u>></u> 50 ppm	80,000 P		

LEGEND: P = pounds; G = Gallons

4.2 Management of PCB Inventory

TCI will operate at all times in compliance with the PCB Spill Clean-Up Policy at 40 CFR 761, Subpart G, and any and all spills or releases of regulated materials will be cleaned up immediately. All processing of regulated materials takes place indoors; thus, it is not anticipated that there will be any outstanding environmental conditions at the time of closure This section provides a detailed description of the activities to be implemented in completing closure at the TCI facility. These activities are detailed below in their anticipated sequence of implementation.

4.3 Disposal of PCB Inventory

PCB and PCB Contaminated Articles will be drained prior to transportation to the landfill. The equipment, fluids, and debris will be disposed of in accordance with 40 CFR 761.60 as indicated Table 1 below. All regulated material (≥ 50 ppm PCBs) will be managed off-site at 3rd party facilities in accordance with the disposal requirements at 40 CFR 761.60. TCI will utilize DOT approved roll-off containers and trailers for transportation of all regulated wastes. Transportation to EPA approved disposal facilities will be accomplished with DOT/EPA permitted PCB waste haulers. The table below indicates the approved EPA disposal facilities and disposal methods for the regulated material.

Regulated Material	Quantity	Designated Disposal Facility	Disposal
			Method
≥ 50 PCB fluids	34,500 G	Environmental Protection Services, Inc. 3 Industrial Park Drive Wheeling, WV 26003 EPA ID No.: WVD988770673	De-chlorination
≥ 50 ppm PCB Articles drained	179,250 P	Environmental Protection Services, Inc. 4 Industrial Park Drive Wheeling, WV 26003 EPA ID No.: WVD988770673	Recycling
PCB solids/debris	80,000 P	Waste Management 36964 Highway 17 North Emelle, AL 35459 EPA ID No.: ALD000622464	Landfill

4.4 Decontamination of Material Handling Equipment and Other Movable Equipment

The following equipment will be decontaminated in accordance with 40 CFR 761.79(c)(1) and (c)(2):

- skid steer with bucket
- 2-ton gantry crane (hook only)
- 6k forklift
- 12k forklift
- 22k forklift
- conveyors
- various hand tools

Water & detergent will be used for decontamination and disposed of as PCB fluids following decontamination. Records documenting the self-implementing procedures will be appended to the final Closure Report to meet the record requirements of 40 CFR 761.79(f)(2).

4.5 Decontamination of Interior Areas of Facility

As TCI will strictly adhere to the cleanup and confirmatory sampling requirements of the PCB Spill Clean-Up policy throughout its operations, it is not anticipated that the floors and walls where regulated PCBs are handled at the facility will be contaminated $\geq 10 \mu g/100 cm^2$. These areas will, however, be double washed/rinsed in accordance with 40 CFR 761.123 prior to sampling. Detergent will be used for these purposes and disposed of as PCB fluids following decontamination. All interior areas of Area 1, to include floors and walls, will be decontaminated as follows:

- The floors in Area 1 will be scrubbed using a floor scrubber with water & detergent. The walls in Area 1 will be scrubbed with stiff, bristle brushes. The areas will then be vacuumed dry to remove any residue.
- The wash/rinse fluids will be reused until they reach 50 ppm PCBs and will be disposed of as PCB fluids.

The areas will be sampled in accordance with the requirements of 40 CFR 761 Subpart G, the guidance document entitled "Verification of PCB Spill Cleanup by Sampling and Analysis," and the sampling scheme set forth in "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup." Verification of decontamination is indicated by all tests resulting in the following: $\leq 10 \, \mu g/100 \, \text{cm}^2$.

If any wipe test results are greater than the allowed level, that area will be re-cleaned 55 feet in all directions from the sample locations. A second group of samples in the area will be collected and analyzed. Cleaning and re-analysis will continue until results confirm the required cleanup levels.

4.6 Roadways, Parking Areas, and Loading Docks

TCI strictly adheres to the Spill Cleanup Policy in accordance with 40 CFR 761 Subpart G during all facility operations. For this reason, PCB spills are unlikely to occur outside the facility and un-cleaned spill areas are unlikely to exist. However, to ensure contaminated areas outside the facility do not exist, at the time of closure, outdoor areas will be sampled and analyzed in accordance with 40 CFR 761 Subpart G, the guidance document entitled "Verification of PCB Spill Cleanup by Sampling and Analysis," and the sampling scheme set forth in "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup."

4.7 Verification of Decontamination & Clean Up

As previously stated, during closure cleanup and decontamination will be verified according to the guidance document entitled "Verification of PCB Spill Cleanup by Sampling and Analysis," and the sampling scheme set forth in "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup." Following the guidance in these documents, sample areas, quantities, and sample types will be as follows:

Location	# of Samples	Composite Samples	Sample Type
Area I (PCB Storage Area)	280	0	Wipe
Area II	23	0	Wipe
Administration/Office Area	2	0	Wipe
Loading Docks	15		Core
Roadways (asphalt)	18		Grab
Roadways & Parking (dirt/gravel)	90	9	Grab
Quality Control (10%)	43	0	Wipe/Concrete/Grab
TOTAL SAMPLES TAKEN	471	9	
TOTAL SAMPLES TO BE ANALYZED	390		336 (Wipe) 17 (Core) 37 (Grab)

4.8 Post-Closure Plan

Post-closure care will not be needed for this facility because all regulated material will be transported offsite for EPA approved disposal. Thus, there will be no need for further action at the facility following completion and certification as a result of closure activities.

4.9 Notice in Deed

Determination as to whether a deed restriction will be required will be dependent on the cleanup levels achieved during closure. It is not anticipated that a deed restriction will be required.

4.10 Expected Year of Closure

The expected year of closure is the year 2047 A.D.

SECTION 5.0 CERTIFICATION OF CLOSURE

This closure activity shall be attested, reported and certified by an independent, registered Environmental Professional.

SECTION 6.0 SAFETY PROCEDURES FOR DECONTAMINATION PERSONNEL

All persons participating in decontamination for closure will be adequately trained for the preceding activities. Safety equipment will include but not be limited to the following:

- Disposable protective coveralls
- Boots and Gloves
- Respirators, if necessary with the appropriate cartridge filters

SECTION 7.0 DISPOSITION OF REGULATED PCB MATERIALS GENERATED DURING CLOSURE ACTIVITIES

The regulated wastes will be transported to the EPA approved disposal facilities indicated below utilizing DOT/EPA permitted PCB waste haulers.

Waste Description	Quantity	Disposal Facility	Disposal
			Method
Contaminated Detergent/Solvent to	500 G	Veolia ES Technical Solutions, LLC	Incineration
clean floors, equipment, etc.		7665 Highway 87	
		Port Arthur, TX 77642	
		EPA ID No.: TXD000838896	
PCB Solids Generated from the	1,700 P	Waste Management	Landfill
following activities:		36964 Highway 17 North	
 1,000 P of contaminated solids 		Emelle, AL 35459	
used to decontaminate		EPA ID No.: ALD000622464	
equipment, floors, etc.			
 200 P of porous direct contact 			
equipment			
 500 P of miscellaneous PPE, 			
sampling equipment, brooms,			
shovels, etc. generated during			
closure activities			

SECTION 8 CLOSURE COST ESTIMATE

The Closure Costs Estimate has been developed to ensure that adequate funds along with a viable financial instrument will be available to pay for costs in the event that TCI is unable to complete closure. A summary of the estimated costs of employing a third

ltem	Description	Quantity	Unit	Unit Rate	Amount
1	Removal of Inventory (Labor):	210	MH	\$55	\$11,550
	Loading trucks - 36 MH				
	Sample Collection – 30 MH				
	Clean/Decontamination of Walls, Ceilings, & Equipment - 120 MH				
	Crush drums using skid steer/forklift - 4 MH				
	Cleaning of Floors = 20 MH				
2	Equipment Rental for loading of inventory (5 days/1 week)	1	W	\$ 2,480.00	\$ 2,480.00
3	Fuel for Equipment loading Inventory	30	G	\$ 2.50	\$ 75.00
4	DOT/UN Drums for used detergent/water	10	EA	\$ 24.86	\$ 248.60
5	Transportation of PCB & PCB Contaminated Articles & Drums to EPS, WV	16	L	\$3,050.00	\$48,800
6	Disposal of PCB-contaminated Articles to EPS, Wheeling, WV	110,000	Р	\$0.10	\$11,000
7	Disposal of PCB Articles to EPS, Wheeling, WV	465,000	Р	\$0.60	\$279,000
8	Disposal of PCB Articles (drained) to EPS, Wheeling, WV	10,000	Р	\$0.35	\$3,500
9	Disposal of PCB-contaminated fluid in drums to EPS, Wheeling, WV	90	D	\$75.00	\$6,750
10	Transportation of PCB debris/solids to WM, Emelle, AL	2.5	L	\$2,900	\$7,250
11	Disposal of PCB debris/solids to WM, Emelle, AL (80,000 lbs)	40	T	\$105.00	\$4,200
12	Transportation of PCB debris/solids from cleanup to WM, Emelle, AL	Incl 7 above			
13	Disposal of PCB debris/solids from cleanup by WM, Emelle, AL (1700 lbs)	0.85	T	\$105	\$89
14	Transportation of detergent/water from cleanup to Veolia, TX (500 G)	0.1	LTL	\$ 4,790.00	\$479
15	Disposal of detergent/water from cleanup to Veolia, TX (500 G)	4150	Р		\$2,000
16	Detergent/Solvent for decontamination				\$500
17	Personal Protective Equipment for on-site cleanup personnel				\$1,000
18	Sample Analysis (Wipe)	336	S	\$55	\$18,480
19	Sample Analysis (Grab)	37	S	\$75	\$2,775
20	Sample Analysis (Core)	17	S	\$75	\$1,275
21	Engineering Oversight & Supervision				\$5,000
				SUBTOTAL	\$406,452
22	Certification of Closure (10%)				\$40,645
23	Contingency (10%)				\$40,645
				TOTAL	\$487,742

LEGEND: M - Manhours; W = Week; EA = Each; G = Gallons; L = Full truckloads; LTL - Less than a truckload; P = Pounds; T = Tons; S = Samples

SECTION 9.0 CLOSURE SCHEDULE

Event	Days
Notification given to EPA of closure (60 days prior to start)	0
Last Regulated Material received at the facility	30
 Closure Activities Begin Removal of PCB Inventory Decontamination of Tanks & Removal of Tank Liner Cleaning of Floors, Walls, and Ceilings Sampling & Analysis Re-cleaning & re-sampling, if indicated Final Analysis Received 	60 74 104 125 146 176
Closure Activities Complete	197
Closure Certification	260
Final Certification and Report Submitted to EPA	290

EXHIBIT A LEGAL DESCRIPTION

POGGEMEYER DESIGN GROUP, INC. 1168 NORTH MAIN STREET BOWLING GREEN, OHIO 43402 (419) 352-7537

MAIL aukinul@poogemever.com

LEGAL DESCRIPTION OF 8.6588 ACRES FOR THE VILLAGE OF RICHWOOD

THE FOLLOWING DESCRIBED TRACT OF LAND SITUATED IN THE STATE OF OHIO, COUNTY OF UNION, TOWNSHIP OF CLAIBOURNE, V.M.S. #8293, VILLAGE OF RICHWOOD AND BEING PART OF A 22.954 ACRE TRACT DESCRIBED IN OFFICIAL RECORD 256, PAGE 109, SAID TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING FOR REFERENCE AT A CAPPED 3/8 INCH IRON PIN FOUND AT THE NORTHEAST CORNER OF LOT #2 OF RICHWOOD ACRES SUBDIVISION AS RECORDED IN PLAT BOOK 4, PAGE 162 (SLIDE 55 B), AT AN ANGLE POINT IN THE SOUTH RIGHT-OF-WAY LINE OF TAWA ROAD (50 FEET WIDE) AND THE WEST LINE OF THE 22.954 ACRE TRACT;

THENCE NORTH 00DEG 12MIN 27SEC WEST, 5.00 FEET, FOLLOWING THE WEST LINE OF SAID 22.954 ACRE TRACT, TO A FOUND IRON PIN AT AN ANGLE POINT IN THE SOUTH RIGHT-OF-WAY LINE OF TAWA ROAD (50 FEET WIDE) TO THE NORTH LINE OF SAID 22.954 ACRE TRACT;

THENCE NORTH 89DEG 44MIN 57SEC EAST, 80.88 FEET, FOLLOWING THE SOUTH RIGHT-OF-WAY LINE OF TAWA ROAD (50 FEET WIDE) AND NORTH LINE OF SAID 22.954 ACRE TRACT, TO A FOUND IRON PIN IN THE WEST LINE OF SAID 22.954 ACRE TRACT;

THENCE NORTH 01DEG 13MIN 14SEC WEST, 25.00 FEET FOLLOWING THE WEST LINE OF SAID 22.954 ACRE TRACT TO A FOUND NAIL ON THE CENTERLINE OF SAID TAWA ROAD (50 FEET WIDE);

THENCE NORTH 89DEG 44MIN 57SEC EAST, FOLLOWING THE CENTERLINE OF SAID TAWA ROAD (50 FEET WIDE) AND THE NORTH LINE OF SAID 22.954 ACRE TRACT A DISTANCE OF 523.95 FEET (523.96 FEET RECORD)TO A FOUND NAIL MARKING THE NORTHEAST CORNER OF SAID 22.954 ACRE TRACT;

BETHELL, TEMPLE RECORDER, PROVIDED, OHIO

2004 APR -5 AM 10: 11 36.00

m532 M879

03/17/2004 WED 13:02 [TX/RX NO 6454] 2004

FIGURES

Figure 1	Site Vicinity
Figure 2	Site Property Map
Figure 3	Traffic Flow
Figure 4	Facility Layout
Figure 5	Property Drain Map
Figure 6	Epoxy Specification Sheet
Figure 7	Joint Filler Compound Specification Shee

FIGURE 1 SITE VICINITY

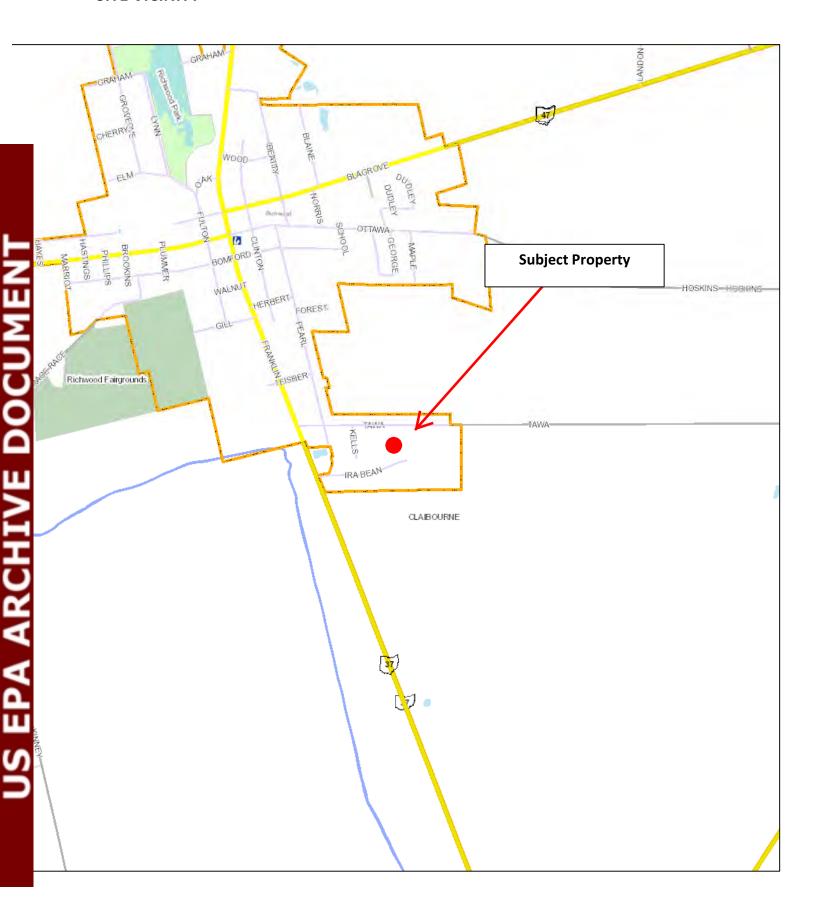


FIGURE 2
SITE PROPERTY MAP

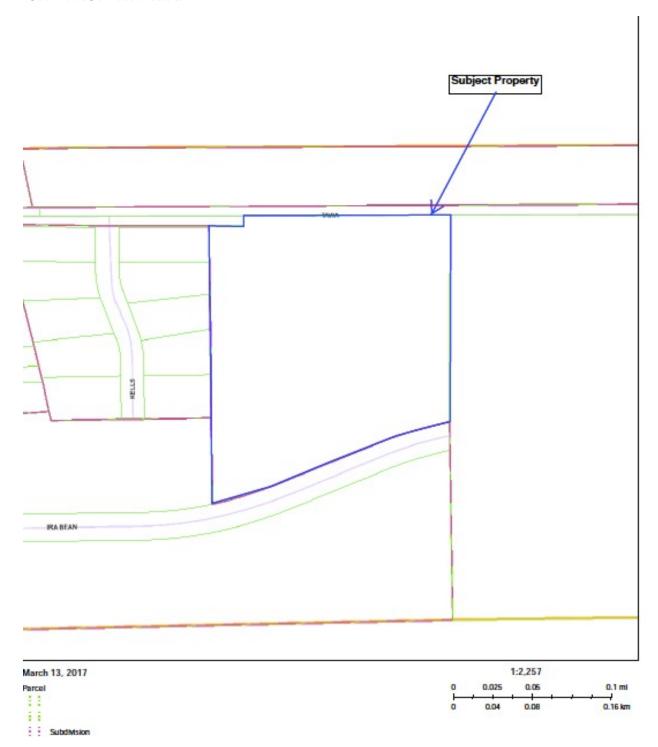


FIGURE 3 TRAFFIC PATTERNS

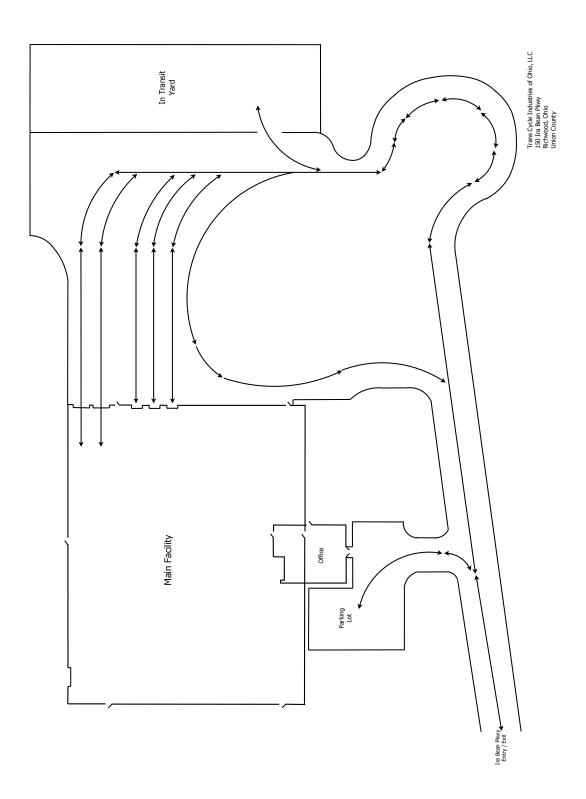


FIGURE 4 FACILITY LAYOUT

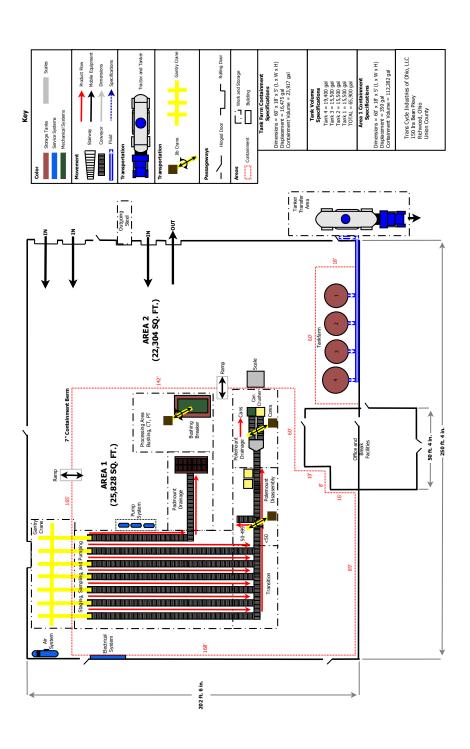


FIGURE 5
PROPERTY DRAIN MAP

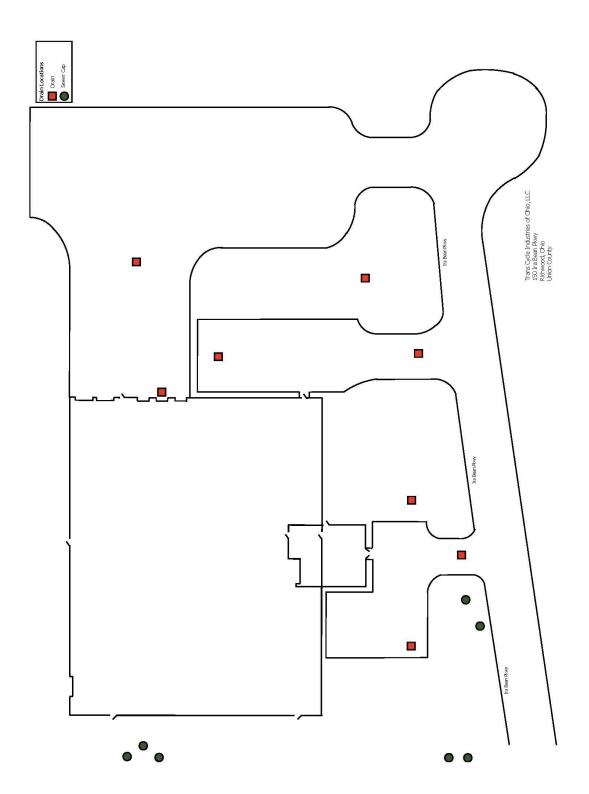


FIGURE 6 EPOXY SPECIFICATION SHEET



TECHNICAL DATA SHEET

Epoxy Base Coat

PRODUCT

The Concrete Protector Basecoat is a two component 94% (+/- 1%) solids epoxy colored coating designed for applications where a high solids primer is needed before applying high solids or 100% solids topcoats for build coats over concrete.

STANDARD COLORS: Dark Tan, Black, Medium Gray.

OTHER COLORS ALSO AVAILABLE: White, Light Tan, Brown, Blue, Dark gray, Green.

Other colors are available upon request.

CURE SCHEDULE (70°)

POT LIFE (1.5 GAL Volume)

30-50 minutes

TACK FREE (DRY TO TOUCH)

6-10 hours

1)

RECOAT OR TOPCOAT

11-14 hours 11-18 hours

FULL CURE 28 days

COVERAGE

Recommended for a high build basecoat on concrete or masonry.

Product is suitable in many chemical exposure environments.

COVERAGE PER GALLON:

125-250 square feet per gallon

@ 6-12 mils

Typical coverage before broadcasting media on prepped concrete:

oped 175 sq ft per gal rete:

Typical coverage on prepped concrete for TCP 123 system:

200 sq ft per gal

MIX RATIO: 2 Parts A to 1 Part B by volume

RECOMMENDED FILM

THICKNESS: 5-13 mils

PACKAGING INFORMATION:

1.5, 3, and 7.5 gallon kits. Special sizes available: 15 gallon and 150 gallon kits

PHYSICAL PROPERTIES

FLEXURAL STRENGTH: 8,050 psi @ ASTM D790 COMPRESSIVE STRENGTH: 8,400 psi @ ASTM D695

TENSILE STRENGTH: 6,900 psi @ ASTM D638

ADHESION: 435 psi @ elcometer (concrete failure, no delaminating)

VISCOSITY: Mixed= 550-900 cps (typical, most colors)

ABRASION RESISTANCE: 1000 gram total load and 500 cycles = 44 mg loss

ULTIMATE ELONGATION: 2.5%

HARDNESS: Shore D= 80

VOLATILE ORGANIC CONTENT: Part A= .141#/gallon, part B= 2.109#/gallon Mixed= .79#/gallon

SHELF LIFE: 1 year in unopened containers

CHEMICAL RESISTANCE

REAGENT	RATING
MEK	A
METHANOL	A
70% SULFURIC ACID	A
1,1,1 TRICHLOROETHANE	В
SKYDROL	В
5% ACETIC ACID	В
SKYDROL	В
BUTANOL	C
XYLENE	С
ETHYL ALCOHOL	С
10% SULFURIC ACID	С
50% SODIUM HYDROXIDE	D
10% SODIUM HYDROZIDE	D
ETHYL ALCOHOL 10% SULFURIC ACID 50% SODIUM HYDROXIDE	C C D

RATING KEY: A - NOT RECOMMENDED, B - 2 HOUR TERM SPLASH SPILL, C - 8 HOUR TERM SPLASH SPILL, D - 72 HOUR IMMERSION, E - LONG TERM IMMERSION. NOTE: EXTENSIVE CHEMICAL RESISTANCE INFORMATION IS AVAILABLE THROUGH YOUR SALES REPRESENTATIVE.

EPOXY BASE COAT

LIMITATIONS

For best results, apply with 3/8" nap roller.

Substrate temperature must be 5°F above dew point.

All new concrete must be cured for at least 30 days prior to application.

Color stability or gloss may be affected by environmental conditions such as high humidity or chemical exposure.

Epoxy Base Coat is not UV color stable but has fairly good color stability, topcoat recommended but optional.

Physical properties are typical values and not specifications.

Curing is inhibited with temperature below 60 degrees

Colors may vary from batch to batch.

INSTRUCTIONS

PRODUCT MIXING: This product has a mix ratio of 2 Parts A to 1 Part B. Standard kits are in pre-measured and should be mixed as supplied in the kit. Kits must not be broken down unless proper premixing is done. After the two parts are combined, mix well with slow speed, mixing until the material is thoroughly mixed and streak free. After mixing, "box" from the mixing bucket into another bucket (the "job" bucket) and remix. The material in the Job Bucket is now ready to be applied on the substrate. Do not leave in bucket. Epoxy is meant to be poured completely out of the BUCKET AND ON TO THE FLOOR. Improper mixing may result in product failure.

PRODUCT INSTALLATION: Wearing spiked shoes, coat the floor with a 1/8" notched squeegee and back roll by utilizing a 3/8" nap roller. Typical coverage rates are 200 sq ft per gallon when doing the 123 system and 175 sq ft per gallon when doing a broadcast floor (coverage varies).

SURFACE PREPARATION: Refer to the TCP Training manual and the ICRI standards for proper surface preparation.

CLEANUP: Use xvlol

FLOOR CLEANING: Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

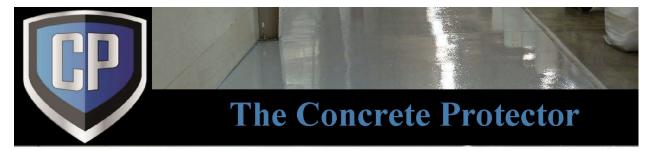
RESTRICTIONS: Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR

The Concrete Protector (Division of Incredible Products, LLC), warrant that all products are assembled under rigorous quality assurance specifications and that all information supplied is exact. All information supplied is not to be taken as a warranty, but for you to conduct your own test to determine if the given product is suitable for your distinct purpose. The following list of properties should not be interpreted as specifications. CONVEYED OR SUGGESTED, NO WARRANTY IS BUILT UPON ANY DISCOVERED RESULTS OR INFORMATION YOU WILL DETAIN DURING USE. CONVEYED OR SUGGESTED NO WARRANTY IS BUILT THAT THE GIVEN PRODUCT SHALL BE MARKETABLE OR THAT THE GIVEN PRODUCT WILL BE HIT FOR ANY DISTINCT PURPOSE. NO WARRANT IS BUILT UPON SAID INFORMATION OR THAT THE GIVEN PRODUCT WILL NOT INFRINGE UPON ANY PATENT. The Concrete Protector is lability is and will only be limited to the net selling price of our products or, at our discretion, the replacement of our products. Upon delivery of our products, your acceptance means that you accept all terms of this warranty even if other documents and or purchase orders astray from the terms of this warranty, No representative, on our behalf, is permitted to make any representation, warranty, or assume liability with any sale of our products. OUR PRODUCTS CONTAIN CHEMICALS THAT CAN CASE SERIOUS PHYSICAL INJURY, BEFORE THE USE OF OUR PRODUCTS, READ ALL MATERIAL AND FOLLOW ALL LISTED PRECAUTIONS TO AVOID ANY BODILY HARM

EPOXY BASE COAT

FIGURE 7 JOINT FILLER COMPOUND SPECIFICATION SHEET



Imperial Systems Protector Flex Joint Fill

100% solids flexible epoxy joint filler

PRODUCT DESCRIPTION: Imperial Systems Protector Flex Joint Fill is a 2-component, 100% solids, 100% reactive epoxy that has been formulated to fill joints or saw cuts and remain flexible even after cure. Protector Flex Joint Fill meets ASTM specification C920, Type M, Grade P that has approximately 85% elongation and meets all USDA guidelines for use in federally inspected facilities.

Recommended use: Protector Flex Joint Fill is a unique flexible epoxy that can be used to fill or seal cracks, saw cuts, or joints in a concrete substrate. Protector Flex is available in clear and can be 'field' pigmented using CPE colorants.

SOLIDS CONTENT %: 100% solids (ASTM D-2697)

VOLATILE ORGANIC CONTENT: 2 g/l (EPA method 24)

STANDARD COLORS: Available in clear and can be pigmented using colorants

COVERAGE PER GALLON: Coverage is a function of joint width and depth.

PACKAGING INFORMATION: 2 gallon and 10 gallon units

MIX RATIO: 1 to 1(resin to hardener)

SHELF LIFE: 1 year in unopened container

VISCOSITY: mixed=800-1200 cps typical

HARDNESS: 30-40 Shore D

CURE SCHEDULE: (75°)

Recoat or topcoat......6-8 hours

Light foot traffic...12-18 hours

Full cure (heavy traffic)......24+ hours

APPLICATION TEMPERATURE:

50-85 degrees F

LIMITATIONS AND FOR BEST RESULTS:

- Do not thin this product
- · Do not apply when humidity exceeds 70% indoors.
- Do not allow to puddle during application.
- Allow each coat to dry to 'tack-free' or clear prior to re-coat.
- When re-coating, always apply the next coat within 24 hours of completing the previous coat.

INSTRUCTIONS (Protector Flex Joint Fill)

- 1) **PRODUCT STORAGE:** Do not allow product to freeze. All Imperial Systems products should be properly stored above the floor on pallets or shelves and in an area that has a constant minimum temperature of 50 F.
- 2) SURFACE PREPARATION: Always apply Imperial Systems products to a clean/sound substrate that is free of laitance, grease, oils, debris, and curing compounds. Concrete substrates should be cured for a minimum of 28 days prior to application of product. Whenever possible, remove existing coatings and/or flooring systems completely. If complete removal is unavoidable always perform tests to determine adhesion and compatibility to the existing substrate. Surface preparation by means of a shot-blasting machine is the best and recommended method for attaining the desired profile. If the substrate is not properly prepared and the appropriate profile is not achieved, failure of the product to adhere to the substrate may occur.
- 3) **PRODUCT APPLICATION**: Apply using bottle or pour small diameter plastic container. Imperial Systems product test data is based on environmental temperatures of 75°F. Viscosity and working time are always affected by temperatures above or below that mark. When applying product-ALWAYS CONSIDER THE AMBIENT, SURFACE, AND PRODUCT TEMPERATURE AT THE TIME AND PLACE OF INSTALLATION.
- 4) **DISPOSAL:** Product containers will contain product residue and must be disposed of properly. Label warnings must be observed at all times. All containers must be disposed in accordance with federal, state and local regulations.
- 5) CLEANUP: Application tools and equipment can be cleaned with soap and water immediately after use or with solvent once the product has begun to cure.
- 6) FLOOR CLEANING: Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.
- 7) **RESTRICTIONS**: Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Listed physical properties are typical and should not be construed as specifications. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT. We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.

APPENDIX A 3RD PARTY CLOSURE COSTS

PHONE (205) 744-8440 FAX (205) 744-5151

September 1, 2017

Trans-Cycle Industries of Ohio, LLC 150 Ira Bean Parkway Richwood, OH 43344

Attn: Mr. Frank Jackson,

Re: Closure transportation quotes for TCI Ohio

Richwood to Emelle – PCB Dump/Flat Richwood to Wheeling – PCB Tanker/Flat Richwood to PTA – PCB Tanker/Flat \$2900.00 + fsch \$3050.00 + fsch \$4790.00 + fsch

Todd White Operations Manager Robbie D. Wood, Inc.



August 28, 2017

TCI of Alabama Mr. George Jackson 101 Parkway East Pell City, AL 35125

Dear Mr. Jackson:

In the event of the closure of the TCI of Alabama facility in Pell City, AL, Environmental Protection Services (EPS) would accept PCB and PCB-Contaminated transformers and regulators our facility in Wheeling, WV. EPS can also accept PCB-Contaminated mineral oil in drums. TCI of Alabama will be responsible to arrange the transportation of the material to the EPS facility. The pricing for the disposal of this material is as follows:

Transformers and Regulators < 500 ppm PCB (Full or Empty): \$0.10 per pound Transformers and Regulators \geq 500 ppm PCB (Empty): \$0.35 per pound Transformers and Regulators \geq 500 ppm PCB (Full): \$0.60 per pound

55-Gallon Drums of Mineral Oil Dielectric Fluid (50 – 499 ppm PCB): \$75.00 per drum

EPS will issue TCI of Alabama a Certificate of Disposal in accordance with 40 CFR 761.218 (b) once the material has been processed. Please let me know if you have any questions.

Respectfully,

Brad Joseph Uvice President



Waste Management Emelle Technical Service Center 36964 Alabama Highway 17 Emelle, Alabama 35459 Phone: (800) 963-4776

8/14/17 George Jackson TCI of Alabama 101 Parkway East Pell City, AL 35125 Phone: (205) 338-9997

Email: gjackson@tcialabama.com

Waste Management is pleased to provide this proposal for the disposal of the below referenced material. Based on the information provided, the following summarizes our quotation.

Waste Location: Pell City, AL

<u>Disposal Facility:</u> Waste Management

Emelle Treatment Facility 36964 Alabama Highway 17

Emelle, AL 35459

Waste Description: PCB Transformers

<u>Disposal Method:</u> Direct Landfill

Disposal Price:

<500ppm PCB Transformers Empty \$.21/Pound - \$150.00/Unit Minimum >500ppm PCB Transformers Empty \$.35/Pound - \$150.00/Unit Minimum

PCB Solids / Debris \$77.00/Ton

Alabama State Tax: \$11.00/Ton

<u>Disposal/Environmental Surcharge Fee:</u> % Rate Varies (Currently 19.21%)

Wastewater Management Fee: 4.75%

ADEM Fee: \$360.00/Profile - ADEM

Waste Approval Fee: \$50.00/Profile - Initial Approval

Pending profile review & approval

Note: Quoted price is an estimate only, based upon the information available at the present time. Final extended rate may vary, dependent upon actual waste characteristics, contamination levels, and treatability. Stabilization pricing is based on a standard stabilization recipe. Post-Treatment analysis will be required on the first bulk load prior to the scheduling of the remaining loads of material.

Transportation Price:

***Please see attachment for other fees / surcharges that may be applicable ***



08/30/2017

Frank Jackson Trans-Cycle Industries of Ohio, LLC 150 Ira Bean Parkway Richwood, OH 43344

Quote No.: A4008302017-01 Customer No.: 513415 Generator No.: TBD

Subject: Disposal Pricing for TCI of Ohio LLC

Veolia is pleased to present the following price quotation for your review and acceptance. This estimate is based on information provided by **TCI of Alabama LLC.** All pricing is dependent upon final approval. Veolia will assist with profiling, and will provide all necessary documentation for shipping. All materials must be manifested directly to Veolia ES Technical Solutions LLC-Port Arthur TX for receipt & disposal.

Applicable disposal pricing is noted below:

PTA Approval Code	PTA Process Code	Disposal Cost	Disposal Minimum
PTABV2871	BF	\$0.0765/lb	\$2000.00 per shipment
PTAAI6597	BLL	\$0.17/lb	\$2000.00 per shipment

Pricing is contingent upon receipt of signed Veolia WIPs for the Richwood OH site. Billing for loads will be sent to Pell City AL service center. All applicable disposal taxes will be billed at standard rates. Load scheduling into Port Arthur will be coordinated by our Veolia-College Park GA service team.

Veolia reserves the right to modify this quotation upon written notice at any time after original thirty (30) days from date of issuance. Please sign as indicated below to signify acceptance of this pricing and return to Customers.Gulfcoast@veolia.com or Fax (281) 427-5367.

Thank you for the opportunity to submit this proposal. Please call me at **678 231 7710** if you have any questions. We look forward to working with you. Thank you for your confidence in VES and our environmental philosophies.

Sincerely,

Albert T Williams Account Manager 678 231 7710 Albert.Williams@veolia.com Please CC: Janet Kellum Customer Service Representative 404-675-3206 – Office Janet.Kellum@Veolia.com

Veolia North America 1800 Hwy 146 South Baytown. TX 77520 Tel. +1 281 427 4099 fax +1 281 427 5367

www.veolianorthamerica.com



111 East 5th Street, Box A Mound Valley, KS 67354 620-328-3222 (voice) 620-328-2033 (facsimile)

Analytical Services Quotation

Trans-Cycle Industries of Ohio, LLC Bid Modification Date: 8/28/2017

Attn: Frank Jackson

 150 Ira Bean Parkway
 Bid Expires:
 10/12/2017

 Richwood, OH 43344
 Prices Expire:
 12/31/2016

Phone: (205) 338-9997

Project: Facility Closure

				Unit	Sub
Matrix	Parameters	Method	QTY	Price	Total
Soil	PCBs	EPA 3550/8020	1	\$75.00	\$75.00
Wipe	PCBs	EPA 8701 M70, 3550	1	\$55.00	\$55.00

Price includes: Standard 10-business day TAT

Electronic reporting of results. Reporting by Noon on day due.

TATs are business-days, not including holidays observed by Meridian Labs.

For additional information, please contact Trinity Labs at 620-328-3222

MERIDIAN ANALYTICAL LABS, LLC

Duane P. Koszalka Vice President 620-328-3222