

**Lockheed Martin Corporation**  
**6801 Rockledge Drive MP: CCT-246**  
**Bethesda, MD 20817**  
**Telephone 301-548-2209**



June 8, 2018

Mr. James R. Carroll  
Program Administrator  
Land Restoration Program  
Land Management Administration  
Maryland Department of the Environment  
1800 Washington Boulevard, Suite 625  
Baltimore, Maryland 21230

Ms. Ruth Prince, PhD Toxicologist  
3LC10, Office of Remediation  
Land and Chemicals Division  
U.S. Environmental Protection Agency Region III  
1650 Arch St.  
Philadelphia, Pennsylvania 19103-2029

Subject: Block E MH-9 Storm Drain Cleaning Report  
Middle River Complex, Middle River, Maryland

Dear Mr. Carroll/Ms. Prince,

In accordance with Lockheed Martin's March 3, 2017 submittal entitled *Protecting the Middle River Complex Sediment Remedy from PCBs in Storm Drains*, additional monitoring of accumulated sediment in the new manhole just upstream of Outfall 008 (designated MH-1A), and monitoring of inlets IL-1, IL-2, IL-3 (alternately identified as MH-10), and MH-9 was conducted in October 2017. The *Block E Storm Drain Monitoring Report: PCB Sediment Sampling of Storm Drain Systems for Outfalls 006 and 008*, dated February 13, 2018, documented results of that monitoring, and indicated that accumulated polychlorinated biphenyl (PCB)-impacted sediment in manhole MH-9 required cleanout. This letter report documents the cleaning of storm drain manhole MH-9, as completed by Tetra Tech, Inc (Tetra Tech) in April 2018.

### **Storm Drain Cleaning**

#### *Mobilization*

Tetra Tech mobilized all personnel, equipment, material, services, and supplies required to clean MH-9 to Block E on April 11, 2018. Before starting field operations, appropriate Tetra Tech and subcontractor personnel reviewed the Tetra Tech site-specific health and safety plan (HASP).

#### *Storm Drain Cleaning*

On April 11, 2018, Tetra Tech oversaw subcontractor (Elite Environmental, LLC) cleanout of manhole MH-9; which entailed removal of water, sediment, and debris from the manhole and placing the removed material into drums. After cleaning was complete, Clean Harbors removed the drums and transported them to their facility in La Poite, Texas (see the section detailing investigation-derived waste below).

The construction of MH-9 is unique from other manhole, as its outflow pipe is at a higher elevation than its inflow pipe, so inspection of the inflow pipe was necessary to determine how to effectively plug it so that it could be cleaned without generating excess waste water. The inspection revealed that the inflow pipe for MH-9 consisted of an approximately 15-inch-diameter reinforced concrete pipe (RCP). Various debris (stone, brick, sand) in the inflow pipe was removed in an attempt to insert a small inflatable plug. However, the use of an inflatable plug was abandoned after multiple attempts, as unreachable debris in the inflow pipe (and the angle at which the pipe itself was placed) hindered water-tight placement of the plug. Therefore, sandbags were used to block the inflow pipe.

A confined space entry permit was obtained from facility operations by the field team, and a multi-gas meter was continuously used during confined space entry. When cleaning began, the water depth within MH-9 was 18 inches, and the sediment debris depth ranged from approximately three to eight inches. Water in MH-9 was pumped via a two-inch trash pump into United States Department of Transportation (USDOT)-approved 55-gallon steel drums. Once water was evacuated from the manhole, MH-9 was cleaned manually by hand digging. Accumulated debris, sediment, and brick was shoveled into a five-gallon bucket, the contents of which was then transferred into a USDOT-approved 55-gallon steel drum. This method was repeated until as much material as practical was removed; less than one-half inch of sediment remained in MH-9 after the cleaning process. The sandbags blocking the inflow pipe were then removed and placed in another 55-gallon steel drum, into which the personal protective equipment (PPE) used by the field team was also placed.

*Investigation Derived Waste*

All investigation-derived waste (IDW) drums were temporarily staged in Block E until they were removed from the site by Clean Harbors. IDW for this project consisted of sediment and water from the storm drain cleaning as well as sand bags used for blocking the pipes and PPE used by the field team. Two drums of waste water, one drum of sediment, and one drum of contaminated sand/PPE were generated from the cleaning process. The drums were removed from the site on May 30, 2018. Documentation of IDW management is included as Attachment A.

Please let me know if you have any questions. My office phone is (301) 548-2209.

Sincerely,



Thomas D. Blackman  
Project Lead, Environmental Remediation

Enclosure: Attachment A

cc: (via email with enclosure)

Gary Schold, MDE  
Mark Mank, MDE  
Lynnette Drake, Lockheed Martin  
Christine Kline, Lockheed Martin  
Norm Varney, Lockheed Martin  
Dave Brown, MRAS  
Michael Martin, Tetra Tech  
Cannon Silver, CDM Smith

cc: (via mail with enclosure)

Tom Green, LMCPI  
Mike Musheno, LMCPI

cc: (via Secure Information Exchange)

Jann Richardson, Lockheed Martin  
Scott Heinlein, LMCPI  
Christopher Keller, LMCPI  
Glen Harriel, LMCPI  
Terry Miller, Lockheed Martin RMS

## ATTACHMENT A

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) 104 1802370021

SCPPW 10/10/2017

**UNIFORM HAZARDOUS WASTE MANIFEST**

1 Generator ID Number: MDR000524413  
 2 Page 1 of 1  
 3 Emergency Response Phone: (800) 487-3718  
 4 Manifest Tracking Number: **011851968 FLE**

5 Generator's Name and Mailing Address: Middle River Complex, 195 Chesapeake Park Plaza Rd, Middle River, MD 21220  
 Generator's Phone: (410) 520-2021  
 Generator's Site Address (if different than mailing address): 195 Chesapeake Park Plaza Rd, Baltimore, MD 21220

6 Transporter 1 Company Name: Clean Harbors Environmental Services, Inc  
 U.S. EPA ID Number: MADD39322250

7 Transporter 2 Company Name: \_\_\_\_\_  
 U.S. EPA ID Number: \_\_\_\_\_

8 Designated Facility Name and Site Address: Clean Harbors Deer Park, LLC, 2027 Independence Parkway South, La Porte, TX 77571  
 Facility's Phone: (281) 930-2300  
 U.S. EPA ID Number: TXD055141378

GENERATOR

9a HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes	
		No.	Type				
1	<u>UN2315, POLYCHLORINATED BIPHENYLS, LIQUID, 9, PG III (PCBS)</u>					<u>MT01</u>	<u>DT01</u>
2	<u>RQ, UN2315, POLYCHLORINATED BIPHENYLS, LIQUID, 9, PG III (PCBS)</u>	<u>006</u>	<u>DM X240</u>	<u>P</u>		<u>MT01</u>	<u>DT01</u>
3							
4							

14. Special Handling Instructions and Additional Information:  
1. ERG 1630340  
2. CH1639356 ERG 6171 (6YSS)

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Month: 10 Day: 30 Year: 17

16. International Shipments:  Import to U.S.  Export from U.S. Port of entry/exit: \_\_\_\_\_ Date leaving U.S.: \_\_\_\_\_

17. Transporter Acknowledgment of Receipt of Materials  
 Transporter signature (for exports only): \_\_\_\_\_  
 Transporter 1 Printed/Typed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Month: 10 Day: 30 Year: 17  
 Transporter 2 Printed/Typed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Month: \_\_\_\_\_ Day: \_\_\_\_\_ Year: \_\_\_\_\_

18. Discrepancy  
 18a. Discrepancy Indication Space:  Quantity  Type  Residue  Partial Rejection  Full Rejection  
 Manifest Reference Number: \_\_\_\_\_

18b. Alternate Facility (or Generator): \_\_\_\_\_ U.S. EPA ID Number: \_\_\_\_\_

18c. Signature of Alternate Facility (or Generator): \_\_\_\_\_ Month: \_\_\_\_\_ Day: \_\_\_\_\_ Year: \_\_\_\_\_

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. H040 2. H040 3. \_\_\_\_\_ 4. \_\_\_\_\_

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a  
 Printed/Typed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Month: \_\_\_\_\_ Day: \_\_\_\_\_ Year: \_\_\_\_\_

Form 8700-22 (Rev 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL



# WASTE MATERIAL PROFILE SHEET

Clean Harbors Profile No. CH1639356

### A. GENERAL INFORMATION

GENERATOR EPA ID #/REGISTRATION # **MDR000524413** GENERATOR NAME: **Middle River Complex**  
 GENERATOR CODE (Assigned by Clean Harbors) **MI5240** CITY **Baltimore** STATE/PROVINCE **MD** ZIP/POSTAL CODE **21220**  
 ADDRESS **195 Chesapeake Park Plaza Rd** PHONE: **(301) 528-3021**  
 CUSTOMER CODE (Assigned by Clean Harbors) **TE0740** CUSTOMER NAME: **Tetra Tech Inc**  
 ADDRESS **20251 Century Boulevard Suite 200** CITY **Germantown** STATE/PROVINCE **MD** ZIP/POSTAL CODE **20874**

### B. WASTE DESCRIPTION

WASTE DESCRIPTION: **Storm Drain Cleaning Water/Sediment**

PROCESS GENERATING WASTE: **Storm Drain Cleaning**

IS THIS WASTE CONTAINED IN SMALL PACKAGING CONTAINED WITHIN A LARGER SHIPPING CONTAINER? **No**

### C. PHYSICAL PROPERTIES (at 25C or 77F)

<b>PHYSICAL STATE</b> SOLID WITHOUT FREE LIQUID POWDER MONOLITHIC SOLID <input checked="" type="checkbox"/> LIQUID WITH NO SOLIDS <input checked="" type="checkbox"/> LIQUID/SOLID MIXTURE % FREE LIQUID <b>1.00 - 5.00</b> % SETTLED SOLID <b>95.00 - 99.00</b> % TOTAL SUSPENDED SOLID SLUDGE GAS/AEROSOL	<b>NUMBER OF PHASES/LAYERS</b> <input checked="" type="checkbox"/> 1    2    3    TOP <b>99.00</b> % BY VOLUME (Approx.)    MIDDLE <b>0.00</b> BOTTOM <b>1.00</b>		<b>VISCOSITY (If liquid present)</b> 1 - 100 (e.g. Water) 101 - 500 (e.g. Motor Oil) 501 - 10,000 (e.g. Molasses) <input checked="" type="checkbox"/> > 10,000	<b>COLOR</b>  <b>varies</b>
	<b>ODOR</b> <input checked="" type="checkbox"/> NONE MILD STRONG Describe:	<b>BOILING POINT °F (°C)</b> <= 95 (<=35) 95 - 100 (35-38) 101 - 129 (38-54) <input checked="" type="checkbox"/> >= 130 (>54)	<b>MELTING POINT °F (°C)</b> < 140 (<60) 140-200 (60-93) <input checked="" type="checkbox"/> > 200 (>93)	<b>TOTAL ORGANIC CARBON</b> <input checked="" type="checkbox"/> <= 1% 1-9% >= 10%
<b>FLASH POINT °F (°C)</b> < 73 (<23) 73 - 100 (23-38) 101 - 140 (38-60) 141 - 200 (60-93) <input checked="" type="checkbox"/> > 200 (>93)	<b>pH</b> <= 2 2.1 - 6.9 <input checked="" type="checkbox"/> 7 (Neutral) 7.1 - 12.4 >= 12.5	<b>SPECIFIC GRAVITY</b> < 0.8 (e.g. Gasoline) 0.8-1.0 (e.g. Ethanol) 1.0 (e.g. Water) 1.0-1.2 (e.g. Antifreeze) <input checked="" type="checkbox"/> > 1.2 (e.g. Methylene Chloride)	<b>ASH</b> < 0.1    > 20 0.1 - 1.0 <input checked="" type="checkbox"/> Unknown 1.1 - 5.0 5.1 - 20.0	<b>BTU/LB (MJ/kg)</b> <input checked="" type="checkbox"/> < 2,000 (<4.6) 2,000-5,000 (4.6-11.6) 5,000-10,000 (11.6-23.2) > 10,000 (>23.2)  Actual:

D. COMPOSITION (List the complete composition of the waste, include any inert components and/or debris. Ranges for individual components are acceptable. If a trade name is used, please supply an MSDS. Please do not use abbreviations.)

CHEMICAL	MIN	MAX	UOM
1,2,3-TRICHLOROBENZENE	1.200000	1.200000	PPM
1,2,4-TRICHLOROBENZENE	0.130000	6.000000	PPM
1,2-DICHLOROBENZENE	0.004000	0.004000	PPM
1,2-DICHLOROETHENE	0.005000	0.005000	%
1,4-DICHLOROBENZENE	0.003000	0.003000	PPM
ACETONE	0.027000	0.027000	PPM
AROCLOR-1260	0.000000	100.000000	PPM
CHLOROFORM	0.003000	0.003000	PPM
DIRT, SAND, PPE	95.000000	100.000000	%
METHYL TERT-BUTYL ETHER	0.005000	0.005000	PPM

DOES THIS WASTE CONTAIN ANY HEAVY GAUGE METAL DEBRIS OR OTHER LARGE OBJECTS (EX., METAL PLATE OR PIPING >1/4" THICK OR >12" LONG, METAL REINFORCED HOSE >12" LONG, METAL WIRE >12" LONG, METAL VALVES, PIPE FITTINGS, CONCRETE REINFORCING BAR OR PIECES OF CONCRETE >3")? YES  NO

If yes, describe, including dimensions:

DOES THIS WASTE CONTAIN ANY METALS IN POWDERED OR OTHER FINELY DIVIDED FORM? YES  NO

DOES THIS WASTE CONTAIN OR HAS IT CONTACTED ANY OF THE FOLLOWING; ANIMAL WASTES, HUMAN BLOOD, BLOOD PRODUCTS, BODY FLUIDS, MICROBIOLOGICAL WASTE, PATHOLOGICAL WASTE, HUMAN OR ANIMAL DERIVED SERUMS OR PROTEINS OR ANY OTHER POTENTIALLY INFECTIOUS MATERIAL? YES  NO

I acknowledge that this waste material is neither infectious nor does it contain any organism known to be a threat to human health. This certification is based on my knowledge of the material. Select the answer below that applies:

The waste was never exposed to potentially infectious material. YES NO

Chemical disinfection or some other form of sterilization has been applied to the waste. YES NO

I ACKNOWLEDGE THAT THIS PROFILE MEETS THE CLEAN HARBORS BATTERY PACKAGING REQUIREMENTS. YES NO

I ACKNOWLEDGE THAT MY FRIABLE ASBESTOS WASTE IS DOUBLE BAGGED AND WETTED. YES NO

SPECIFY THE SOURCE CODE ASSOCIATED WITH THE WASTE. **G19** SPECIFY THE FORM CODE ASSOCIATED WITH THE WASTE. **W301**



E. CONSTITUENTS

Are these values based on testing or knowledge? Knowledge  Testing

If constituent concentrations are based on analytical testing, analysis must be provided. Please attach document(s) using the link on the Submit tab.

Please indicate which constituents below apply. Concentrations must be entered when applicable to assist in accurate review and expedited approval of your waste profile. Please note that the total regulated metals and other constituents sections require answers.

RCRA	REGULATED METALS	REGULATORY LEVEL (mg/l)	TCLP mg/l	TOTAL	UOM	NOT APPLICABLE
D004	ARSENIC	5.0				<input checked="" type="checkbox"/>
D005	BARIUM	100.0				<input checked="" type="checkbox"/>
D006	CADMIUM	1.0				<input checked="" type="checkbox"/>
D007	CHROMIUM	5.0				<input checked="" type="checkbox"/>
D008	LEAD	5.0				<input checked="" type="checkbox"/>
D009	MERCURY	0.2				<input checked="" type="checkbox"/>
D010	SELENIUM	1.0				<input checked="" type="checkbox"/>
D011	SILVER	5.0				<input checked="" type="checkbox"/>
<b>VOLATILE COMPOUNDS</b>						
D018	BENZENE	0.5				<input checked="" type="checkbox"/>
D019	CARBON TETRACHLORIDE	0.5				<input checked="" type="checkbox"/>
D021	CHLOROBENZENE	100.0				<input checked="" type="checkbox"/>
D022	CHLOROFORM	6.0	0.0030			<input checked="" type="checkbox"/>
D028	1,2-DICHLOROETHANE	0.5				<input checked="" type="checkbox"/>
D029	1,1-DICHLOROETHYLENE	0.7				<input checked="" type="checkbox"/>
D035	METHYL ETHYL KETONE	200.0				<input checked="" type="checkbox"/>
D039	TETRACHLOROETHYLENE	0.7				<input checked="" type="checkbox"/>
D040	TRICHLOROETHYLENE	0.5				<input checked="" type="checkbox"/>
D043	VINYL CHLORIDE	0.2				<input checked="" type="checkbox"/>
<b>SEMI-VOLATILE COMPOUNDS</b>						
D023	o-CRESOL	200.0				<input checked="" type="checkbox"/>
D024	m-CRESOL	200.0				<input checked="" type="checkbox"/>
D025	p-CRESOL	200.0				<input checked="" type="checkbox"/>
D026	CRESOL (TOTAL)	200.0	0.0040			<input checked="" type="checkbox"/>
D027	1,4-DICHLOROENZENE	7.5				<input checked="" type="checkbox"/>
D030	2,4-DINITROTOLUENE	0.13				<input checked="" type="checkbox"/>
D032	HEXACHLOROENZENE	0.13				<input checked="" type="checkbox"/>
D033	HEXACHLOROBUTADIENE	0.5				<input checked="" type="checkbox"/>
D034	HEXACHLOROETHANE	3.0				<input checked="" type="checkbox"/>
D036	NITROBENZENE	2.0				<input checked="" type="checkbox"/>
D037	PENTACHLOROPHENOL	100.0				<input checked="" type="checkbox"/>
D038	PYRIDINE	5.0				<input checked="" type="checkbox"/>
D041	2,4,5-TRICHLOROPHENOL	400.0				<input checked="" type="checkbox"/>
D042	2,4,6-TRICHLOROPHENOL	2.0				<input checked="" type="checkbox"/>
<b>PESTICIDES AND HERBICIDES</b>						
D012	ENDRIN	0.02				<input checked="" type="checkbox"/>
D013	LINDANE	0.4				<input checked="" type="checkbox"/>
D014	METHOXYCHLOR	10.0				<input checked="" type="checkbox"/>
D015	TOXAPHENE	0.5				<input checked="" type="checkbox"/>
D016	2,4-D	10.0				<input checked="" type="checkbox"/>
D017	2,4,5-TP (SILVEX)	1.0				<input checked="" type="checkbox"/>
D020	CHLORDANE	0.03				<input checked="" type="checkbox"/>
D031	HEPTACHLOR (AND ITS EPOXIDE)	0.008				<input checked="" type="checkbox"/>

OTHER CONSTITUENTS	MAX	UOM	NOT APPLICABLE
BROMINE			<input checked="" type="checkbox"/>
CHLORINE			<input checked="" type="checkbox"/>
FLUORINE			<input checked="" type="checkbox"/>
IODINE			<input checked="" type="checkbox"/>
SULFUR			<input checked="" type="checkbox"/>
POTASSIUM			<input checked="" type="checkbox"/>
SODIUM			<input checked="" type="checkbox"/>
AMMONIA			<input checked="" type="checkbox"/>
CYANIDE AMENABLE			<input checked="" type="checkbox"/>
CYANIDE REACTIVE			<input checked="" type="checkbox"/>
CYANIDE TOTAL			<input checked="" type="checkbox"/>
SULFIDE REACTIVE			<input checked="" type="checkbox"/>

HOCs	PCBs
<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> NONE
<input checked="" type="checkbox"/> < 1000 PPM	<input type="checkbox"/> < 50 PPM
<input type="checkbox"/> >= 1000 PPM	<input checked="" type="checkbox"/> >=50 PPM
	IF PCBs ARE PRESENT, IS THE WASTE REGULATED BY TSCA 40 CFR 761?
	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

ADDITIONAL HAZARDS DOES THIS WASTE HAVE ANY UNDISCLOSED HAZARDS OR PRIOR INCIDENTS ASSOCIATED WITH IT, WHICH COULD AFFECT THE WAY IT SHOULD BE HANDLED?

YES  NO (If yes, explain)

CHOOSE ALL THAT APPLY

- DEA REGULATED SUBSTANCES
- POLYMERIZABLE
- EXPLOSIVE
- RADIOACTIVE
- FUMING
- REACTIVE MATERIAL
- OSHA REGULATED CARCINOGENS
- NONE OF THE ABOVE



F. REGULATORY STATUS

YES  NO USEPA HAZARDOUS WASTE?

YES NO DO ANY STATE WASTE CODES APPLY?  
**MT01**  
 Texas Waste Code

YES  NO DO ANY CANADIAN PROVINCIAL WASTE CODES APPLY?

YES  NO IS THIS WASTE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT PER 40 CFR PART 268?  
 LDR CATEGORY: **Not subject to LDR**  
 VARIANCE INFO:

YES  NO IS THIS A UNIVERSAL WASTE?

YES  NO IS THE GENERATOR OF THE WASTE CLASSIFIED AS VERY SMALL QUANTITY GENERATOR (VSQG) OR A STATE EQUIVALENT DESIGNATION?

YES NO IS THIS MATERIAL GOING TO BE MANAGED AS A RCRA EXEMPT COMMERCIAL PRODUCT, WHICH IS FUEL (40 CFR 261.2 (C)(2)(II))?

YES  NO DOES TREATMENT OF THIS WASTE GENERATE A F006 OR F019 SLUDGE?

YES NO IS THIS WASTE STREAM SUBJECT TO THE INORGANIC METAL BEARING WASTE PROHIBITION FOUND AT 40 CFR 268.3(C)?

YES  NO DOES THIS WASTE CONTAIN VOC'S IN CONCENTRATIONS >=500 PPM?

YES NO DOES THE WASTE CONTAIN GREATER THAN 20% OF ORGANIC CONSTITUENTS WITH A VAPOR PRESSURE >= .3KPA (.044 PSIA)?

YES  NO DOES THIS WASTE CONTAIN AN ORGANIC CONSTITUENT WHICH IN ITS PURE FORM HAS A VAPOR PRESSURE > 77 KPA (11.2 PSIA)?

YES  NO IS THIS CERCLA REGULATED (SUPERFUND ) WASTE ?

YES  NO IS THE WASTE SUBJECT TO ONE OF THE FOLLOWING NESHAP RULES?  
 Hazardous Organic NESHAP (HON) rule (subpart G)      Pharmaceuticals production (subpart GGG)

YES NO IF THIS IS A US EPA HAZARDOUS WASTE, DOES THIS WASTE STREAM CONTAIN BENZENE?  
 YES NO Does the waste stream come from a facility with one of the SIC codes listed under benzene NESHAP or is this waste regulated under the benzene NESHAP rules because the original source of the waste is from a chemical manufacturing, coke by-product recovery, or petroleum refinery process?  
 YES NO Is the generating source of this waste stream a facility with Total Annual Benzene (TAB) >10 Mg/year?  
 What is the TAB quantity for your facility?      Megagram/year (1 Mg = 2,200 lbs)  
 The basis for this determination is: Knowledge of the Waste Or Test Data      Knowledge      Testing  
 Describe the knowledge :

G. DOT/TDG INFORMATION

DOT/TDG PROPER SHIPPING NAME:  
**RQ, UN2315, POLYCHLORINATED BIPHENYLS, LIQUID, 9, PG III (PCBS)**

H. TRANSPORTATION REQUIREMENTS

ESTIMATED SHIPMENT FREQUENCY  ONE TIME   WEEKLY   MONTHLY   QUARTERLY   YEARLY   OTHER Other

CONTAINERIZED		BULK LIQUID	BULK SOLID		
<b>5-20</b> CONTAINERS/SHIPMENT		GALLONS/SHIPMENT: <b>0 Min -0 Max</b>	GAL.	SHIPMENT UOM:	TON      YARD
STORAGE CAPACITY: <b>100</b>					TONS/YARDS/SHIPMENT: <b>0 Min - 0 Max</b>
CONTAINER TYPE:					
PORTABLE TOTE TANK	BOX CARTON CASE				
CUBIC YARD BOX	<input checked="" type="checkbox"/> DRUM				
OTHER	DRUM SIZE: <b>55</b>				

I. SPECIAL REQUEST

COMMENTS OR REQUESTS:

GENERATOR'S CERTIFICATION

I certify that I am authorized to execute this document as an authorized agent. I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge. I also certify that any samples submitted are representative of the actual waste. If Clean Harbors discovers a discrepancy during the approval process, Generator grants Clean Harbors the authority to amend the profile, as Clean Harbors deems necessary, to reflect the discrepancy.

AUTHORIZED SIGNATURE	NAME (PRINT)	TITLE	DATE
	Michael Mosheno	Sr. Staff ESH Engineer	4-23-18

**Addendum**

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**D. COMPOSITION**

**CHEMICAL**

**MIN -- MAX UOM**

**WATER**

**1.00000 -- 5.0000 %  
00 000**

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**G. DOT/TDG INFORMATION**





# WASTE MATERIAL PROFILE SHEET

Clean Harbors Profile No. CH1639340

### A. GENERAL INFORMATION

GENERATOR EPA ID #/REGISTRATION # **MDR000524413** GENERATOR NAME: **Middle River Complex**  
 GENERATOR CODE (Assigned by Clean Harbors) **MI5240** CITY **Baltimore** STATE/PROVINCE **MD** ZIP/POSTAL CODE **21220**  
 ADDRESS **195 Chesapeake Park Plaza Rd** PHONE: **(301) 528-3021**  
 CUSTOMER CODE (Assigned by Clean Harbors) **TE0740** CUSTOMER NAME: **Tetra Tech Inc**  
 ADDRESS **20251 Century Boulevard Suite 200** CITY **Germantown** STATE/PROVINCE **MD** ZIP/POSTAL CODE **20874**

### B. WASTE DESCRIPTION

WASTE DESCRIPTION: **Storm Drain Cleaning Water with PCBs**

PROCESS GENERATING WASTE: **Storm Drain Cleaning**

IS THIS WASTE CONTAINED IN SMALL PACKAGING CONTAINED WITHIN A LARGER SHIPPING CONTAINER? **No**

### C. PHYSICAL PROPERTIES (at 25C or 77F)

<b>PHYSICAL STATE</b> SOLID WITHOUT FREE LIQUID POWDER MONOLITHIC SOLID <input checked="" type="checkbox"/> LIQUID WITH NO SOLIDS LIQUID/SOLID MIXTURE % FREE LIQUID % SETTLED SOLID % TOTAL SUSPENDED SOLID SLUDGE GAS/AEROSOL	<b>NUMBER OF PHASES/LAYERS</b> <input checked="" type="checkbox"/> 1    2    3    TOP <b>0.00</b> % BY VOLUME (Approx.)    MIDDLE <b>0.00</b> BOTTOM <b>0.00</b>			<b>VISCOSITY (If liquid present)</b> <input checked="" type="checkbox"/> 1 - 100 (e.g. Water) 101 - 500 (e.g. Motor Oil) 501 - 10,000 (e.g. Molasses) > 10,000		<b>COLOR</b>  <b>Varies</b>
	<b>ODOR</b> <input checked="" type="checkbox"/> NONE MILD STRONG  Describe:		<b>BOILING POINT °F (°C)</b> <= 95 (<=35) 95 - 100 (35-38) 101 - 129 (38-54) <input checked="" type="checkbox"/> >= 130 (>54)		<b>MELTING POINT °F (°C)</b> < 140 (<60) 140-200 (60-93) > 200 (>93)	
<b>FLASH POINT °F (°C)</b> < 73 (<23) 73 - 100 (23-38) 101 - 140 (38-60) 141 - 200 (60-93) <input checked="" type="checkbox"/> > 200 (>93)	<b>pH</b> <= 2 2.1 - 6.9 <input checked="" type="checkbox"/> 7 (Neutral) 7.1 - 12.4 >= 12.5	<b>SPECIFIC GRAVITY</b> < 0.8 (e.g. Gasoline) 0.8-1.0 (e.g. Ethanol) <input checked="" type="checkbox"/> 1.0 (e.g. Water) 1.0-1.2 (e.g. Antifreeze) > 1.2 (e.g. Methylene Chloride)	<b>ASH</b> < 0.1    > 20 0.1 - 1.0 <input checked="" type="checkbox"/> Unknown 1.1 - 5.0 5.1 - 20.0		<b>BTU/LB (MJ/kg)</b> <input checked="" type="checkbox"/> < 2,000 (<4.6) 2,000-5,000 (4.6-11.6) 5,000-10,000 (11.6-23.2) > 10,000 (>23.2)  Actual:	

D. COMPOSITION (List the complete composition of the waste, include any inert components and/or debris. Ranges for individual components are acceptable. If a trade name is used, please supply an MSDS. Please do not use abbreviations.)

CHEMICAL	MIN	MAX	UOM
1,2,3-TRICHLOROBENZENE	34.0000000	1200.00000	PPB
1,2,4-TRICHLOROBENZENE	130.0000000	6000.00000	PPB
1,2-DICHLOROBENZENE	0.0000000	4.0000000	PPB
1,2-DICHLOROETHENE	0.0000000	5.0000000	PPB
1,4-DICHLOROBENZENE	0.0000000	3.0000000	PPB
ACETONE	15.0000000	27.0000000	PPB
CHLOROFORM	0.0000000	3.0000000	PPB
LEAD	0.0000000	0.0000000	PPB
METHYL T-BUTYL ETHER	0.0000000	5.0000000	PPB
PCBS	384.0000000	77000.0000	PPB

DOES THIS WASTE CONTAIN ANY HEAVY GAUGE METAL DEBRIS OR OTHER LARGE OBJECTS (EX., METAL PLATE OR PIPING >1/4" THICK OR >12" LONG, METAL REINFORCED HOSE >12" LONG, METAL WIRE >12" LONG, METAL VALVES, PIPE FITTINGS, CONCRETE REINFORCING BAR OR PIECES OF CONCRETE >3")? YES NO

If yes, describe, including dimensions:

DOES THIS WASTE CONTAIN ANY METALS IN POWDERED OR OTHER FINELY DIVIDED FORM? YES  NO

DOES THIS WASTE CONTAIN OR HAS IT CONTACTED ANY OF THE FOLLOWING; ANIMAL WASTES, HUMAN BLOOD, BLOOD PRODUCTS, BODY FLUIDS, MICROBIOLOGICAL WASTE, PATHOLOGICAL WASTE, HUMAN OR ANIMAL DERIVED SERUMS OR PROTEINS OR ANY OTHER POTENTIALLY INFECTIOUS MATERIAL? YES  NO

I acknowledge that this waste material is neither infectious nor does it contain any organism known to be a threat to human health. This certification is based on my knowledge of the material. Select the answer below that applies:

The waste was never exposed to potentially infectious material. YES NO

Chemical disinfection or some other form of sterilization has been applied to the waste. YES NO

I ACKNOWLEDGE THAT THIS PROFILE MEETS THE CLEAN HARBORS BATTERY PACKAGING REQUIREMENTS. YES NO

I ACKNOWLEDGE THAT MY FRIABLE ASBESTOS WASTE IS DOUBLE BAGGED AND WETTED. YES NO

SPECIFY THE SOURCE CODE ASSOCIATED WITH THE WASTE **G09** SPECIFY THE FORM CODE ASSOCIATED WITH THE WASTE. **W113**



E. CONSTITUENTS

Are these values based on testing or knowledge? Knowledge  Testing

If constituent concentrations are based on analytical testing, analysis must be provided. Please attach document(s) using the link on the Submit tab.

Please indicate which constituents below apply. Concentrations must be entered when applicable to assist in accurate review and expedited approval of your waste profile. Please note that the total regulated metals and other constituents sections require answers.

RCRA	REGULATED METALS	REGULATORY LEVEL (mg/l)	TCLP mg/l	TOTAL	UOM	NOT APPLICABLE
D004	ARSENIC	5.0				<input checked="" type="checkbox"/>
D005	BARIUM	100.0				<input checked="" type="checkbox"/>
D006	CADMIUM	1.0				<input checked="" type="checkbox"/>
D007	CHROMIUM	5.0				<input checked="" type="checkbox"/>
D008	LEAD	5.0				<input checked="" type="checkbox"/>
D009	MERCURY	0.2				<input checked="" type="checkbox"/>
D010	SELENIUM	1.0				<input checked="" type="checkbox"/>
D011	SILVER	5.0				<input checked="" type="checkbox"/>
VOLATILE COMPOUNDS			OTHER CONSTITUENTS			MAX UOM NOT APPLICABLE
D018	BENZENE	0.5		BROMINE		<input checked="" type="checkbox"/>
D019	CARBON TETRACHLORIDE	0.5		CHLORINE		<input checked="" type="checkbox"/>
D021	CHLOROBENZENE	100.0		FLUORINE		<input checked="" type="checkbox"/>
D022	CHLOROFORM	6.0		IODINE		<input checked="" type="checkbox"/>
D028	1,2-DICHLOROETHANE	0.5		SULFUR		<input checked="" type="checkbox"/>
D029	1,1-DICHLOROETHYLENE	0.7		POTASSIUM		<input checked="" type="checkbox"/>
D035	METHYL ETHYL KETONE	200.0		SODIUM		<input checked="" type="checkbox"/>
D039	TETRACHLOROETHYLENE	0.7		AMMONIA		<input checked="" type="checkbox"/>
D040	TRICHLOROETHYLENE	0.5		CYANIDE AMENABLE		<input checked="" type="checkbox"/>
D043	VINYL CHLORIDE	0.2		CYANIDE REACTIVE		<input checked="" type="checkbox"/>
SEMI-VOLATILE COMPOUNDS				CYANIDE TOTAL		<input checked="" type="checkbox"/>
D023	o-CRESOL	200.0		SULFIDE REACTIVE		<input checked="" type="checkbox"/>
D024	m-CRESOL	200.0				
D025	p-CRESOL	200.0				
D026	CRESOL (TOTAL)	200.0				
D027	1,4-DICHLOROBENZENE	7.5				
D030	2,4-DINITROTOLUENE	0.13				
D032	HEXACHLOROBENZENE	0.13				
D033	HEXACHLOROBUTADIENE	0.5				
D034	HEXACHLOROETHANE	3.0				
D036	NITROBENZENE	2.0				
D037	PENTACHLOROPHENOL	100.0				
D038	PYRIDINE	5.0				
D041	2,4,5-TRICHLOROPHENOL	400.0				
D042	2,4,6-TRICHLOROPHENOL	2.0				
PESTICIDES AND HERBICIDES						
D012	ENDRIN	0.02				
D013	LINDANE	0.4				
D014	METHOXYCHLOR	10.0				
D015	TOXAPHENE	0.5				
D016	2,4-D	10.0				
D017	2,4,5-TP (SILVEX)	1.0				
D020	CHLORDANE	0.03				
D031	HEPTACHLOR (AND ITS EPOXIDE)	0.008				

**HOCs**

NONE  
 < 1000 PPM  
 >= 1000 PPM

**PCBs**

NONE  
 < 50 PPM  
 >=50 PPM

IF PCBs ARE PRESENT, IS THE WASTE REGULATED BY TSCA 40 CFR 761?

YES  NO

ADDITIONAL HAZARDS DOES THIS WASTE HAVE ANY UNDISCLOSED HAZARDS OR PRIOR INCIDENTS ASSOCIATED WITH IT, WHICH COULD AFFECT THE WAY IT SHOULD BE HANDLED?

YES  NO (If yes, explain)

CHOOSE ALL THAT APPLY

- DEA REGULATED SUBSTANCES
- EXPLOSIVE
- FUMING
- OSHA REGULATED CARCINOGENS
- POLYMERIZABLE
- RADIOACTIVE
- REACTIVE MATERIAL
- NONE OF THE ABOVE



F. REGULATORY STATUS

YES  NO USEPA HAZARDOUS WASTE?

YES NO DO ANY STATE WASTE CODES APPLY?  
**MT01**  
 Texas Waste Code

YES  NO DO ANY CANADIAN PROVINCIAL WASTE CODES APPLY?

YES  NO IS THIS WASTE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT PER 40 CFR PART 268?  
 LDR CATEGORY: **Not subject to LDR**  
 VARIANCE INFO:

YES  NO IS THIS A UNIVERSAL WASTE?

YES  NO IS THE GENERATOR OF THE WASTE CLASSIFIED AS VERY SMALL QUANTITY GENERATOR (VSQG) OR A STATE EQUIVALENT DESIGNATION?

YES NO IS THIS MATERIAL GOING TO BE MANAGED AS A RCRA EXEMPT COMMERCIAL PRODUCT, WHICH IS FUEL (40 CFR 261.2 (C)(2)(II))?

YES  NO DOES TREATMENT OF THIS WASTE GENERATE A F006 OR F019 SLUDGE?

YES NO IS THIS WASTE STREAM SUBJECT TO THE INORGANIC METAL BEARING WASTE PROHIBITION FOUND AT 40 CFR 268.3(C)?

YES  NO DOES THIS WASTE CONTAIN VOC'S IN CONCENTRATIONS >=500 PPM?

YES NO DOES THE WASTE CONTAIN GREATER THAN 20% OF ORGANIC CONSTITUENTS WITH A VAPOR PRESSURE >= .3KPA (.044 PSIA)?

YES  NO DOES THIS WASTE CONTAIN AN ORGANIC CONSTITUENT WHICH IN ITS PURE FORM HAS A VAPOR PRESSURE > 77 KPA (11.2 PSIA)?

YES  NO IS THIS CERCLA REGULATED (SUPERFUND ) WASTE ?

YES  NO IS THE WASTE SUBJECT TO ONE OF THE FOLLOWING NESHAP RULES?  
 Hazardous Organic NESHAP (HON) rule (subpart G)      Pharmaceuticals production (subpart GGG)

YES NO IF THIS IS A US EPA HAZARDOUS WASTE, DOES THIS WASTE STREAM CONTAIN BENZENE?  
 YES NO Does the waste stream come from a facility with one of the SIC codes listed under benzene NESHAP or is this waste regulated under the benzene NESHAP rules because the original source of the waste is from a chemical manufacturing, coke by-product recovery, or petroleum refinery process?  
 YES NO Is the generating source of this waste stream a facility with Total Annual Benzene (TAB) >10 Mg/year?  
 What is the TAB quantity for your facility?  Megagram/year (1 Mg = 2,200 lbs)  
 The basis for this determination is: Knowledge of the Waste Or Test Data      Knowledge      Testing  
 Describe the knowledge :

G. DOT/TDG INFORMATION

DOT/TDG PROPER SHIPPING NAME:  
**UN2315, POLYCHLORINATED BIPHENYLS, LIQUID, 9, PG III**

H. TRANSPORTATION REQUIREMENTS

ESTIMATED SHIPMENT FREQUENCY ONE TIME WEEKLY MONTHLY QUARTERLY  YEARLY OTHER

CONTAINERIZED      BULK LIQUID      BULK SOLID

**1-5** CONTAINERS/SHIPMENT      GALLONS/SHIPMENT: **0 Min - 0 Max** GAL.      SHIPMENT UOM: TON YARD

STORAGE CAPACITY: **100**      TONS/YARDS/SHIPMENT: **0 Min - 0 Max**

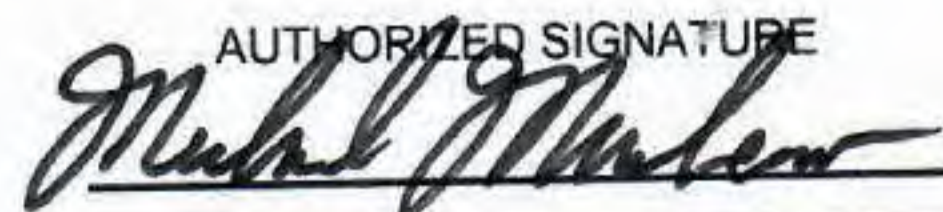
CONTAINER TYPE:  
 PORTABLE TOTE TANK      BOX|CARTON|CASE  
 CUBIC YARD BOX       DRUM  
 OTHER      DRUM SIZE: **55**

I. SPECIAL REQUEST

COMMENTS OR REQUESTS:

GENERATOR'S CERTIFICATION

I certify that I am authorized to execute this document as an authorized agent. I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge. I also certify that any samples submitted are representative of the actual waste. If Clean Harbors discovers a discrepancy during the approval process, Generator grants Clean Harbors the authority to amend the profile, as Clean Harbors deems necessary, to reflect the discrepancy.

AUTHORIZED SIGNATURE:  NAME (PRINT): **Michael Mvsheno** TITLE: **Sr. Staff ESH Engineer** DATE: **5-1-18**

**Addendum**

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**D. COMPOSITION**

**CHEMICAL**

**WATER**

<b>MIN</b>	<b>--</b>	<b>MAX</b>	<b>UOM</b>
<b>99.0000</b>	<b>--</b>	<b>100.00</b>	<b>%</b>
<b>000</b>		<b>00000</b>	

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**G. DOT/TDG INFORMATION**