

Good Evening,

The waste debris sampling and laboratory testing results are attached for samples collected from piles 5, 6 and 7.

Also in this amendment are a few answers to questions received through 2 PM today. In the bidding invitation we indicated that comments should have been provided by 5 PM on Monday, December 17th to include within Amendment No. 1. Note that the question period for Amendments 1 and No. 2 (this email) will end at 1 PM on Friday, December 21st.

Questions:

1. With the elevated levels of arsenic in the wood chips, would it be required that all contractors are 40 Hr OSHA HAZWOPER trained?

Answer: Uncertain, we are accepting bids from all interested bidders without regard for 40 Hr OSHA HAZWOPER training.

2. Is there a minority participation goal for this project?

Answer: No, there is not.

3. Can we email the proposals to you or do they need to be mailed to your address listed on the advertisement?

Answer: The bid proposals can be emailed.

4. Could you tell me a proposed landfill site to take the hazardous material to?

Answer: The bidding documents indicate that the bidding firm should contact Subtitle D, State-approved landfills to obtain pricing for disposal of the material.

Thank you for your continued interest in this project and have a great remainder of your week.

- Eric

Eric B. Aufderhaar, P.G.

Senior Geologist

MID-ATLANTIC ASSOCIATES, INC.

409 Rogers View Court | Raleigh, NC 27610

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TABLE 1
 SUMMARY OF GRAB SOIL SAMPLE LABORATORY RESULTS - VOLATILE ORGANIC COMPOUNDS IN WASTE STOCKPILE SAMPLES
 FROMER PHOENIX CONSTRUCTION AND DEMOLITION DERRIS LANDFILL
 HAVELOCK, NORTH CAROLINA
 MID-ATLANTIC JOB NO. 000R2478.04

RED ARROWS DENOTE SAMPLES COLLECTED FROM PILES SCHEDULED FOR REMOVAL OR RELOCATION/SPREADING.

CHEMICAL CONSTITUENT	ANALYTICAL METHOD	CONCENTRATION (mg/kg)										Protection of Groundwater PSRG (mg/kg)	Residential Health Based PSRG (mg/kg)	Industrial/Commercial Health Based PSRG (mg/kg)			
		P1-01(10) Collected 5/31/2018	P2-01(3) Collected 5/31/2018	P2-02(5) Collected 5/31/2018	P3-01(10) Collected 5/31/2018	P3-02(20) Collected 5/30/2018	P3-03(20) Collected 5/30/2018	P3-04(20) Collected 5/30/2018	P5-01(10) Collected 5/31/2018	P5-02(12) Collected 5/31/2018							
Volatile Organic Compounds																	
Acetone	8260B	0.11	0.062	0.15	0.11	0.2	0.1	0.05	0.067	0.062		25	12000	14000			
Benzene	8260B	0.0039 J	ND (<0.00025)	0.0026 J	ND (<0.00040)	ND (<0.00055)	0.0053	ND (<0.00028)	0.0038	ND (<0.00022)		0.01	1.2	5.4			
2-Butanone (MEK)	8260B	ND (<0.00075)	ND (<0.00039)	ND (<0.00058)	NC (<0.00083)	0.018 J	ND (<0.00058)	ND (<0.00044)	0.013 J	0.0088 J		17	5500	40000			
Carbon Disulfide	8260B	0.51 LL	ND (<0.00021)	0.015	0.022	0.11	ND (<0.00031)	0.037	0.0074 J	ND (<0.00018)		4.1	160	740			
Chloroethane	8260B	ND (<0.00056)	ND (<0.00035)	ND (<0.00043)	ND (<0.00047)	ND (<0.00064)	0.0034 J	ND (<0.00032)	ND (<0.00029)	ND (<0.00025)		0.015	23	99			
Cyclohexane	8260B	ND (<0.00054)	ND (<0.00027)	0.0035 J	ND (<0.00045)	ND (<0.00082)	0.0054 J	ND (<0.00031)	ND (<0.00028)	ND (<0.00024)		Not Established	1400	5800			
Ethylbenzene	8260B	ND (<0.00032)	ND (<0.00016)	ND (<0.00025)	ND (<0.00027)	ND (<0.00093)	ND (<0.00025)	ND (<0.00018)	ND (<0.00017)	ND (<0.00014)		13	6.1	27			
Isopropylbenzene (cumene)	8260B	ND (<0.00049)	ND (<0.00025)	ND (<0.00038)	ND (<0.00041)	ND (<0.00056)	ND (<0.00038)	ND (<0.00028)	ND (<0.00026)	ND (<0.00022)		2.3	410	2100			
Methyl Acetate	8260B	0.0048 J	0.0076	0.0053 J	0.025	0.038	0.0063 J	0.0079	0.0029 J	0.0056		29	16000	23000			
Methyl Butyl Ketone (2-hexanone)	8260B	ND (<0.00075)	ND (<0.00038)	ND (<0.00058)	ND (<0.00063)	ND (<0.00089)	ND (<0.00058)	ND (<0.00044)	ND (<0.00039)	ND (<0.00034)		0.18	42	280			
Methyl Isobutyl Ketone	8260B	ND (<0.00071)	ND (<0.00038)	ND (<0.00054)	ND (<0.00059)	ND (<0.00081)	ND (<0.00054)	ND (<0.00041)	0.0024 J	ND (<0.00032)		0.45	7000	30000			
Methyl Cyclohexane	8260B	0.0044 J	ND (<0.00036)	0.0049 J	ND (<0.00054)	ND (<0.00081)	0.0076	ND (<0.00041)	ND (<0.00037)	ND (<0.00032)		0.45	7000	30000			
Methylene Chloride	8260B	ND (<0.00047)	0.0059 J	ND (<0.00036)	0.0098 J	ND (<0.00053)	ND (<0.00036)	ND (<0.00027)	ND (<0.00024)	ND (<0.00021)		0.025	58	650			
Toluene	8260B	0.013	ND (<0.00024)	0.0040 J	ND (<0.00040)	ND (<0.00054)	0.0056 J	ND (<0.00028)	0.0022 J	ND (<0.00021)		8.3	990	9700			
Trichloroethene	8260B	ND (<0.00054)	ND (<0.00027)	ND (<0.00041)	ND (<0.00045)	ND (<0.00067)	ND (<0.00041)	0.0056	ND (<0.00028)	ND (<0.00024)		290	4700	70000			
Xylenes, meta- and para-	8260B	ND (<0.00076)	ND (<0.00039)	ND (<0.00059)	ND (<0.00064)	ND (<0.00087)	ND (<0.00059)	ND (<0.00044)	ND (<0.00040)	ND (<0.00034)		9.8	140	590			
Xylenes, ortho-	8260B	0.0033 J	ND (<0.00017)	ND (<0.00026)	ND (<0.00028)	ND (<0.00039)	ND (<0.00026)	ND (<0.00020)	ND (<0.00018)	NC (<0.00015)		9.8	140	590			

ND (<0.023) = Not Detected at the Method Detection Limit shown in parentheses
 NE = Not Established
 PSRG = Preliminary Soil Remediation Goal (PSRG) as listed in the February 2018 PSRG table produced by the Division of Waste Management.
 - = Not Tested
 J = Estimated concentration above the laboratory's method detection limit (MDL) but below the reporting limit.
 LL = Medium level analysis result below the reporting limit. Low level analysis reported estimated above the calibration range.
 mg/Kg - Milligrams per Kilogram
 Bold = Concentration exceeds laboratory method detection limits
 Shaded = Concentration exceeds Protection of Groundwater Preliminary Soil Remediation Goal

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 FORMER PHOENIX CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL
 HAVELOCK, NORTH CAROLINA
 MID-ATLANTIC JOB NO. 00062478.04

CHEMICAL CONSTITUENT	ANALYTICAL METHOD	CONCENTRATION (mg/kg)										Protection of Groundwater PSRG (mg/kg)	Residential Health Based PSRG (mg/kg)	Industrial/Commercial Health Based PSRG (mg/kg)			
		P5-03(10) Collected 5/31/2018	P6-01(18) Collected 5/31/2018	P7-01(10) Collected 5/31/2018	P7-02(15) Collected 5/31/2018	P9-01(20) Collected 5/30/2018	P9-02(10) Collected 5/30/2018	P9-03(20) Collected 5/30/2018	Duplicate #1 Of P6-01 (18) Collected 5/31/2018	Duplicate #2 Of P1-01 (10) Collected 5/31/2018							
Volatiles Organic Compounds																	
Acetone	82608	0.084	0.17	0.05	0.29	0.11	0.13	0.26	0.14	0.10	25	12000	140000				
Benzene	82608	0.0041	0.0027 J	ND (<0.00030)	ND (<0.0017)	0.0025	0.0040 J	ND (<0.00037)	0.012 J	0.0034 J	0.01	1.2	5.4				
2-Butanone (MEK)	82608	0.012 J	0.016 J	ND (<0.00046)	ND (<0.0017)	0.010 J	ND (<0.00072)	0.019 J	0.012 J	0.0058 J	17	5500	40000				
Carbon Disulfide	82608	0.013	0.23	ND (<0.00025)	ND (<0.00094)	0.0039 J	ND (<0.00039)	0.0097 J	0.13	0.23	4.1	160	740				
Chloroethane	82608	ND (<0.00031)	ND (<0.00039)	ND (<0.00042)	ND (<0.0013)	0.0029 J	ND (<0.00052)	ND (<0.00041)	ND (<0.00025)	ND (<0.00042)	0.015	23	99				
Cyclohexane	82608	ND (<0.00030)	ND (<0.00037)	ND (<0.00033)	ND (<0.0012)	0.0029 J	ND (<0.00031)	ND (<0.00024)	0.0020 J	ND (<0.00025)	Not Established	1400	5800				
Ethylbenzene	82608	0.0020 J	0.0035 J	ND (<0.00019)	ND (<0.00073)	ND (<0.00016)	ND (<0.00031)	ND (<0.00024)	0.0020 J	ND (<0.00025)	13	6.1	27				
Isopropylbenzene (Cumene)	82608	ND (<0.00027)	0.0027 J	ND (<0.00030)	ND (<0.0011)	ND (<0.00025)	ND (<0.00047)	ND (<0.00038)	0.0017 J	ND (<0.00038)	2.3	410	2100				
Methyl Acetate	82608	0.0076	ND (<0.00087)	0.0034 J	0.021 J	ND (<0.00054)	ND (<0.00072)	ND (<0.00096)	ND (<0.00058)	ND (<0.00097)	2.9	2.3	23000				
Methyl Ethyl Ketone (2-hexanone)	82608	ND (<0.00042)	ND (<0.00052)	ND (<0.00046)	ND (<0.0016)	ND (<0.00038)	ND (<0.00068)	ND (<0.00054)	0.0021 J	ND (<0.00055)	0.18	42	280				
Methyl Isobutyl Ketone	82608	ND (<0.00039)	0.0033 J	ND (<0.00043)	ND (<0.0016)	ND (<0.00036)	ND (<0.00068)	ND (<0.00054)	0.0021 J	ND (<0.00055)	0.45	7000	30000				
Methyl Cyclohexane	82608	0.0024 J	0.0030 J	ND (<0.00043)	ND (<0.0016)	0.0038 J	0.0060 J	0.0040 J	0.0022 J	0.0037 J	Not Established	Not Established	Not Established				
Methylene Chloride	82608	ND (<0.00028)	0.0072 J	0.0065 J	0.019 J	ND (<0.00024)	ND (<0.00045)	0.0066 J	ND (<0.00022)	ND (<0.00036)	0.225	58	650				
Toluene	82608	0.0028 J	0.0059	ND (<0.00029)	ND (<0.0011)	0.0021 J	0.0039 J	ND (<0.00036)	0.0030 J	0.0089	8.3	990	9700				
Trichloroethene	82608	ND (<0.00030)	ND (<0.00037)	ND (<0.00033)	ND (<0.00091)	ND (<0.00027)	ND (<0.00051)	ND (<0.00041)	ND (<0.00025)	ND (<0.00041)	250	4700	70000				
Xylenes, meta- and para-	82608	ND (<0.00042)	0.0041 J	ND (<0.00047)	ND (<0.0018)	ND (<0.00039)	ND (<0.00073)	ND (<0.00059)	0.0024 J	ND (<0.00059)	9.8	140	590				
Xylenes, ortho-	82608	ND (<0.00019)	0.012	ND (<0.00027)	ND (<0.00078)	ND (<0.00017)	ND (<0.00033)	ND (<0.00026)	0.0087	ND (<0.00026)	9.8	140	590				

ND (<0.023) = Not Detected at the Method Detection Limit shown in parentheses
 NE = Not Established
 PSRG = Preliminary Soil Remediation Goal (PSRG) as listed in the February 2018 PSRG table produced by the Division of Waste Management.
 - = Not Traced
 J = Estimated concentration above the laboratory's method detection limit (MDL) but below the reporting limit
 LL = Medium level analysis result below the reporting limit. Low level analysis reported estimated above the calibration range.
 mg/kg - Milligrams per Kilogram

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TABLE 2
 SUMMARY OF SOIL SAMPLE LABORATORY RESULTS - RCRA METALS IN WASTE STOCKPILE SAMPLES
 FORMER PHOENIX CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL
 HAVELOCK, NORTH CAROLINA
 MID-ATLANTIC PROJECT NO.: 000R2278.04

RED ARROWS DENOTE SAMPLES
 COLLECTED FROM PILES
 SCHEDULED FOR REMOVAL OR
 RELOCATION/SPREADING.

CHEMICAL CONSTITUENT	ANALYTICAL METHOD	CONCENTRATION (mg/Kg or PPM)										Risk Evaluation (8-21-2015), mg/Kg	Protection of Groundwater PSRG (mg/kg)	Residential Health Based PSRG (mg/kg)	Industrial/Commercial Health Based PSRG (mg/kg)	
		P1-01 (Composite) Collected 5/31/2018	P2-01(3) Collected 5/31/2018	P2-02(5) Collected 5/31/2018	P3-01 (Composite) Collected 5/31/2018	P3-02 (Composite) Collected 5/30/2018	P3-03 (Composite) Collected 5/30/2018	P3-04 (Composite) Collected 5/30/2018	P5-01 (Composite) Collected 5/30/2018							
Metals																
Arsenic	6010D	45	1.9	260	100	250	300	81	7.1	35	5.8	0.68	3			
Barium	6010D	150	20	96	91	120	94	120	9.5 J	580	580	3100	47000			
Cadmium (Diet)	6010D	0.57	0.15 J	1.2	0.82	0.71	0.73	0.74	ND (<0.022)	3	3	14	200			
Chromium (III)	Calculation	52	17	390	76	190	390	88	7.8	360000	360000	23000	350000			
Chromium (VI)	7196A	ND(<0.19)	1.8	ND(<0.19)	0.22 J	ND(<0.27)	ND(<0.25)	0.86	0.25 J	3.8	3.8	0.31	6.5			
Chromium (Total)	6010D	52	19	390	76	190	390	89	7.8	See Chromium (III) & Chromium (VI)	270	400	800			
Lead	6010D	120	9.7	140	110	120	110	110	7.1	270	270	400	800			
Mercury	7471B	0.42	0.016 J	0.019 J	0.28	0.22	0.3	1.2	0.033	1	1	2.3	9.7			
Selenium	6010D	0.38 J	0.65 J	0.32 J	0.37 J	0.45 J	ND (<0.39)	ND (<0.35)	0.31 J	2.1	2.1	78	1200			
Silver	6010D	0.22 J	0.049 J	0.24 J	0.52	0.054 J	0.099 J	0.18 J	ND (<0.022)	3.4	3.4	78	1200			

PSRG = Preliminary Soil Remediation Goal
 mg/Kg = Milligrams per Kilogram
 Bold = Concentration exceeds laboratory method detection limit (MDL).
 Shaded = Concentration or MDL exceeds the lower of the Protection of Groundwater or Residential health-based Preliminary Soil Remediation Goal (PSRG)
 Shaded and Bordered = Concentration exceeds Protection of Groundwater Preliminary Soil Remediation Goal (PSRG) and Health-based PSRG(s)

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 FORMER PHENIX CONSTRUCTION AND DEMITION DEBRIS LANDFILL
 HAVELOCK, NORTH CAROLINA
 MID-ATLANTIC PROJECT NO.: 000R2278.04

CHEMICAL CONSTITUENT	ANALYTICAL METHOD	CONCENTRATION (mg/kg or ppm)									Concentration based on Risk Evaluation (8-21-2015), mg/Kg	Protection of Groundwater PSRG (mg/kg)	Residential Health Based PSRG (mg/kg)	Industrial/Commercial Health Based PSRG (mg/kg)
		P5-02 (Composite) Collected 5/30/2018	P5-03 (Composite) Collected 5/30/2018	P6-01 (Composite) Collected 5/31/2018	P7-01 (Composite) Collected 5/31/2018	P7-02 (Composite) Collected 5/31/2018	P9-01 (Composite) Collected 5/30/2018	P9-02 (Composite) Collected 5/30/2018	P9-03 (Composite) Collected 5/30/2018					
Metals														
Arsenic	6010D	4	6.3	36	180	440	170	80	460	35	5.8	0.68	3	
Barium	6010D	14	11	80	39	82	300	310	140		580	3100	47000	
Cadmium (Diet)	6010D	ND (<0.021)	ND (<0.021)	0.39	0.12 J	0.39 J	0.58	0.59	0.54		3	14	200	
Chromium (III)	Calculation	8.4	11	52	200	540	190	48	560		360000	23000	350000	
Chromium (VI)	7196A	0.37 J	0.35 J	ND(<0.18)	ND(<0.20)	ND(<0.34)	ND(<0.22)	0.23 J	ND(<0.20)		3.8	0.31	6.5	
Chromium (Total)	6010D	8.4	11	52	200	540	190	48	560		See Chromium (III) & Chromium (VI)			
Lead	6010D	14	8.6	97	47	91	180	340	130		270	400	800	
Mercury	7471B	0.039	0.074	0.29	0.075	0.3	0.64	1.0	0.73		1	2.3	9.7	
Selenium	6010D	0.28 J	0.37 J	0.30 J	ND (<0.31)	ND (<0.54)	ND (<0.35)	0.42 J	ND (<0.32)		2.1	78	1200	
Silver	6010D	ND (<0.021)	ND (<0.021)	ND (<0.026)	ND (<0.029)	ND (<0.050)	ND (<0.032)	0.068 J	0.77		3.4	78	1200	

PSRG = Preliminary Soil Remediation Goal
 mg/Kg = Milligrams per Kilogram
 Bold = Concentration exceeds laboratory method detection limits
 Shaded = Concentration or MDL exceeds the lower of the Protection of Groundwater or Residential health-based Preliminary Soil Remediation Goal (PSRG)
 Shaded and Bordered = Concentration exceeds Protection of Groundwater Preliminary Soil Remediation Goal (PSRG) and Health-based PSRG(s)

TABLE 3
SUMMARY OF SOIL SAMPLE LABORATORY RESULTS - SEMI-VOLATILE ORGANIC COMPOUNDS IN WASTE STOCKPILE SAMPLES
FORMER PHOENIX CONSTRUCTION AND DEBRIS LANDFILL
HAYELOCK, NORTH CAROLINA
MID-ATLANTIC JOB NO. 000R2478.04

RED ARROWS DENOTE SAMPLES
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CHEMICAL CONSTITUENT	ANALYTICAL METHOD	CONCENTRATION (mg/kg or PPM)										Protection of Groundwater PSRG (mg/kg)	Residential Health Based PSRG (mg/kg)	Industrial/Commercial Health Based PSRG (mg/kg)
		P1-01 (Composite) Collected 5/31/2018	P2-01(3') Collected 5/31/2018	P2-02(5') Collected 5/31/2018	P3-01 (Composite) Collected 5/31/2018	P3-02 (Composite) Collected 5/30/2018	P3-03 (Composite) Collected 5/30/2018	P3-04 (Composite) Collected 5/30/2018	P5-01 (Composite) Collected 5/30/2018					
Semi-volatile Organic Compounds														
Acenaphthene	8270D	0.15 J	ND (<0.051)	ND (<0.65)	ND (<0.072)	ND (<0.092)	ND (<0.084)	ND (<0.078)	ND (<0.051)	3.1	170	820		
Anthracene	8270D	0.45 J	ND (<0.061)	ND (<0.077)	0.15 J	ND (<0.11)	ND (<0.099)	0.31 J	ND (<0.061)	1300	3600	45000		
Benzaldehyde	8270D	0.13 J	ND (<0.033)	0.26 J	ND (<0.047)	0.21 J	0.22 J	ND (<0.050)	ND (<0.033)	3.1	170	820		
Benz(a)anthracene	8270D	0.9	ND (<0.049)	0.15 J	ND (<0.070)	0.35 J	ND (<0.081)	0.85	ND (<0.049)	0.35	1.1	21		
Benz(a)pyrene	8270D	0.37 J	ND (<0.041)	0.16 J	ND (<0.058)	0.32 J	ND (<0.067)	0.7	ND (<0.041)	0.12	0.11	2.1		
Benz(b)fluoranthene	8270D	0.63	ND (<0.044)	0.25 J	0.23 J	0.46 J	0.22 J	0.96	0.11 J	1.2	1.1	21		
Benz(g,h,i)perylene	8270D	0.14 J	ND (<0.041)	ND (<0.052)	ND (<0.058)	0.22 J	ND (<0.068)	0.34 J	ND (<0.041)	15600	Not Established	Not Established		
Benz(k)fluoranthene	8270D	0.22 J	ND (<0.049)	ND (<0.063)	ND (<0.070)	ND (<0.089)	ND (<0.081)	0.32 J	ND (<0.049)	1.2	1.1	21		
Bis(2-ethylhexyl)phthalate	8270D	2.4	ND (<0.056)	ND (<0.071)	ND (<0.079)	ND (<0.10)	ND (<0.092)	0.31 J	ND (<0.056)	14	39	160		
Butyl benzyl phthalate	8270D	6.6	ND (<0.053)	ND (<0.068)	ND (<0.076)	0.52 J	ND (<0.088)	ND (<0.081)	ND (<0.054)	290	290	1200		
Chrysene	8270D	0.9	ND (<0.047)	0.16 J	ND (<0.067)	0.40 J	ND (<0.078)	0.80	ND (<0.048)	36	110	2100		
Dibenzofuran	8270D	0.14 J	ND (<0.057)	ND (<0.073)	ND (<0.081)	ND (<0.10)	ND (<0.094)	ND (<0.087)	ND (<0.057)	10	15	210		
Di-n-butyl phthalate	8270D	0.14 J	ND (<0.053)	ND (<0.068)	ND (<0.076)	ND (<0.097)	ND (<0.088)	ND (<0.081)	ND (<0.054)	35	1300	16000		
Fluoranthene	8270D	2.1	ND (<0.048)	0.18 J	0.40 J	0.45 J	0.20 J	1.6	0.19 J	670	480	6000		
Fluorene	8270D	0.24 J	ND (<0.054)	ND (<0.069)	ND (<0.076)	ND (<0.098)	ND (<0.089)	ND (<0.082)	ND (<0.054)	110	480	6000		
Indeno(1,2,3-cd)pyrene	8270D	0.14 J	ND (<0.043)	ND (<0.055)	ND (<0.061)	ND (<0.078)	ND (<0.071)	0.40 J	ND (<0.043)	3.9	1.1	21		
Naphthalene	8270D	ND (<0.075)	ND (<0.060)	ND (<0.077)	ND (<0.086)	ND (<0.11)	ND (<0.099)	ND (<0.092)	ND (<0.061)	0.39	4.1	18		
Phenanthrene	8270D	1.2	ND (<0.049)	ND (<0.062)	0.32 J	0.34 J	ND (<0.080)	0.74	0.11 J	134	Not Established	Not Established		
Pyrene	8270D	1.8	ND (<0.050)	0.16 J	0.30 J	0.45 J	0.16 J	1.4	0.14 J	440	360	4500		

ND (<0.023) = Not Detected at the Method Detection Limit shown in parentheses
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Shaded and Bordered = Concentration exceeds Protection of Groundwater Preliminary Soil Remediation Goal (PSRG) and Health-based PSRG(s)

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 MIB-ATLANTIC JOB NO. 000R2478.04

CHEMICAL CONSTITUENT	ANALYTICAL METHOD	CONCENTRATION (mg/kg or PPM)									Protection of Groundwater PSRG (mg/kg)	Residential Health Based PSRG (mg/kg)	Industrial/Commercial Health Based PSRG (mg/kg)
		P5-02 (Composite) Collected 5/30/2018	P5-03 (Composite) Collected 5/30/2018	P6-01 (Composite) Collected 5/31/2018	P7-01 (Composite) Collected 5/31/2018	P7-02 (Composite) Collected 5/31/2018	P9-01 (Composite) Collected 5/30/2018	P9-02 (Composite) Collected 5/30/2018	P9-03 (Composite) Collected 5/30/2018				
Semi-volatile Organic Compounds													
Acenaphthene	8270D	ND (<0.050)	ND (<0.051)	0.26 J	ND (<0.069)	ND (<0.12)	ND (<0.076)	ND (<0.080)	ND (<0.070)	3.1	170	820	
Anthracene	8270D	0.20 J	ND (<0.060)	0.54	ND (<0.081)	ND (<0.14)	0.16 J	ND (<0.095)	ND (<0.082)	1300	3600	45000	
Benzaldehyde	8270D	ND (<0.032)	ND (<0.033)	0.14 J	0.22 J	ND (<0.075)	ND (<0.049)	ND (<0.051)	0.15 J	3.1	170	820	
Benz(a)anthracene	8270D	ND (<0.049)	ND (<0.049)	0.69	ND (<0.066)	ND (<0.11)	0.24 J	ND (<0.077)	ND (<0.067)	0.35	1.1	21	
Benz(a)pyrene	8270D	ND (<0.040)	ND (<0.040)	0.45	ND (<0.054)	ND (<0.093)	0.23 J	ND (<0.068)	ND (<0.055)	0.12	0.11	2.1	
Benz(b)fluoranthene	8270D	ND (<0.043)	ND (<0.043)	0.67	ND (<0.058)	0.39 J	0.48 J	ND (<0.068)	0.20 J	1.2	1.1	21	
Benz(o)fluoranthene	8270D	ND (<0.041)	ND (<0.041)	0.16 J	ND (<0.055)	ND (<0.094)	0.15 J	ND (<0.064)	0.14 J	15600	Not Established	Not Established	
Benz(k)fluoranthene	8270D	ND (<0.049)	ND (<0.049)	0.25 J	ND (<0.066)	ND (<0.11)	0.14 J	ND (<0.077)	ND (<0.067)	1.2	1.1	21	
Bis(2-ethylhexyl)phthalate	8270D	0.26 J	ND (<0.055)	0.6	ND (<0.075)	ND (<0.13)	0.64	ND (<0.087)	0.45 J	14	39	160	
Bis(2-ethylhexyl)phthalate	8270D	ND (<0.053)	ND (<0.053)	ND (<0.064)	ND (<0.072)	ND (<0.12)	0.26 J	ND (<0.084)	ND (<0.073)	290	290	1200	
Butyl benzyl phthalate	8270D	ND (<0.057)	ND (<0.057)	0.43 J	ND (<0.077)	ND (<0.13)	ND (<0.086)	ND (<0.090)	ND (<0.078)	0.74	Not Established	Not Established	
Carbazole	8270D	ND (<0.047)	ND (<0.047)	0.71	ND (<0.064)	ND (<0.11)	0.27 J	ND (<0.074)	0.13 J	36	110	2100	
Chrysene	8270D	ND (<0.056)	ND (<0.057)	0.21 J	ND (<0.077)	ND (<0.13)	ND (<0.085)	ND (<0.089)	ND (<0.078)	10	15	210	
Dibenzofuran	8270D	ND (<0.049)	ND (<0.049)	ND (<0.059)	ND (<0.069)	ND (<0.11)	ND (<0.077)	0.48 J	ND (<0.068)	Not Established	Not Established	Not Established	
Dimethyl phthalate	8270D	ND (<0.053)	ND (<0.053)	ND (<0.064)	ND (<0.072)	ND (<0.12)	ND (<0.080)	ND (<0.083)	ND (<0.073)	35	1300	16000	
Di-n-butyl phthalate	8270D	0.36 J	ND (<0.048)	1.8	ND (<0.064)	ND (<0.11)	0.42 J	ND (<0.075)	0.21 J	670	480	6000	
Fluorene	8270D	0.17 J	ND (<0.054)	0.41 J	ND (<0.072)	ND (<0.12)	ND (<0.081)	ND (<0.084)	ND (<0.073)	110	480	6000	
Indeno(1,2,3-cd)pyrene	8270D	ND (<0.043)	ND (<0.043)	0.17 J	ND (<0.058)	0.23 J	ND (<0.064)	ND (<0.067)	ND (<0.059)	3.9	1.1	21	
Naphthalene	8270D	ND (<0.060)	ND (<0.060)	0.11 J	ND (<0.081)	ND (<0.14)	ND (<0.090)	ND (<0.095)	ND (<0.082)	0.39	4.1	18	
Phenanthrene	8270D	0.75	ND (<0.048)	1.6	ND (<0.065)	ND (<0.11)	0.38 J	ND (<0.076)	0.18 J	134	Not Established	Not Established	
Pyrene	8270D	0.30 J	ND (<0.049)	1.4	ND (<0.067)	ND (<0.11)	0.48 J	ND (<0.078)	0.18 J	440	360	4500	

ND (<0.023) = Not Detected at the Method Detection Limit shown in parentheses
 PSRG = Preliminary Soil Remediation Goal
 mg/kg = Milligrams per Kilogram
 Bold = Concentration exceeds laboratory method detection limits
 Shaded = Concentration exceeds Protection of Groundwater Preliminary Soil Remediation Goal
 Shaded and Bolded = Concentration exceeds Protection of Groundwater Preliminary Soil Remediation Goal (PSRG) and Health-based PSRG(s)



	2017 TEST PITS - WASTE SAMPLING
	NCDOT EASEMENT LINE
	NCDOT PROJECT RIGHT-OF-WAY LINES
	MATERIAL PILE



2017 TEST PIT LOCATIONS - WASTE CHARACTERIZATION SAMPLING
 FORMER PHOENIX RECYCLING SITE
 PINE GROVE ROAD BEHIND 860 HIGHWAY 70 WEST
 HAVELOCK, NORTH CAROLINA

DRAWN BY: EBA	DATE: JUNE 2018
DRAFT CHECK BY:	JOB NO.: 000R2478.04
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APPROVED BY:	DRAWING NO.: 1

REFERENCE: MARCH 2018 (4-) AERIAL IMAGERY FROM NCDOT. NCDOT CONSTRUCTION DRAWINGS. 2017 AERIAL PHOTO (FAR RIGHT) FROM NC ONE MAP. MID-ATLANTIC FIELD NOTES.