



DEPARTMENT OF THE ARMY

OFFICE OF ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
U.S. ARMY FORT MONMOUTH
P.O. 148
OCEANPORT, NEW JERSEY 07757

12 June 2017

Ms. Linda Range
New Jersey Department of Environmental Protection
Case Manager
Bureau of Southern Field Operations
401 East State Street, 5th Floor
PO Box 407
Trenton, NJ 08625

**Subject: Request for No Further Action Determination at Building 283 Squire Hall
Fort Monmouth, New Jersey
PI G000000032**

Enclosures:

- A. Figures:
 - a. Figure 1: Main Post Layout
 - b. Figure 2: Building 283 Squire Hall Soil Results
- B. Tables:
 - a. Table 1: 2007 and 2016 Detected Soil Analytes at Building 283
 - b. Table 2: 2017 Background Soil Sample Results
- C. Letter Report: Excavation at Parcels 49 and 57
- D. 2017 Analytical Data Package
- E. Regulatory Correspondence

Dear Ms. Range:

The U.S. Army Fort Monmouth (FTMM) Team has completed site restoration activities in the immediate vicinity of Building 283 Squire Hall at Fort Monmouth. Building 283 is located in the north-central portion of the Main Post (see Figure 1) within Environmental Condition of Property (ECP) Parcel 49. Multiple rounds of soil sampling were performed near Building 283 in 2007 and 2016 (see Table 1 and Figure 2) and site restoration activities were conducted in July 2016 (see Attachment C) and May 2017 to unearth soils that were not suitable for re-development and repair property damaged by previous site investigation activities. The Army is committed to maintaining good stewardship of the environment and therefore all unearthed soils were containerized and characterized for proper disposal. Background samples were collected after site restoration activities to document existing site conditions (see Table 2 and Attachment D). All background soil sample constituents were less than the New Jersey Department of Environmental Protection (NJDEP) Residential Direct Contact Soil Remediation Standards (RDCSRs). Therefore, a No Further Action (NFA) determination is requested for Building 283.

Following is a summary of the site restoration activities at Building 283 Squire Hall:

- Soil was unearthed and background sample BKG-283-001 was collected outside of a doorway in the southwest corner of the Building 283 courtyard (Figure 2). Results from previous sampling at sample P49-SS8 (US Army BRAC, 2008) encountered multiple polynuclear aromatic hydrocarbons (PAHs) and Aroclor-1260 (a polychlorinated biphenyl [PCB]) in excess of RDCSRs (Table 1). Subsequent re-sampling in 2016 (PAR-49-SB-04) confirmed the RDCSRs exceedance of PAHs and PCBs at this location (Table 1). The presence of the Building 283 crawl space and foundations to a depth of approximately 6 feet (ft) below ground surface (bgs) to the west and south of this location further constrains the extent of this occurrence (as discussed in NJDEP, 2016 in Attachment E). A 5 ft by 6 ft by 3 ft deep volume of soil was initially excavated from this area in July 2016 to address the PCBs in soil (see the Parcel 49 discussion in Attachment C); however, PAHs were not included in the confirmation sample analyses. Therefore, an additional 11 ft by 11 ft by 3 ft deep volume of soil was unearthed from this location in May 2017. Background sample BKG-283-001 was collected from the bottom of the excavation and analyzed for PCBs, semivolatile organics (SVOCs; including PAHs) and Total Petroleum Hydrocarbons (TPH); none of the analytes were detected in the background sample (Table 2).
- Soil was unearthed and background sample BKG-283-002 was collected outside of a doorway in the northern portion of the Building 283 courtyard (Figure 2). Results from previous sampling at sample P49-SS7 (US Army BRAC, 2008) encountered PAHs and the PCB Aroclor-1260 in excess of RDCSRs. Subsequent re-sampling in 2016 (PAR-49-SB-03) indicated no exceedances of the RDCSRs at this location. Although the RDCSRs exceedances were not confirmed, site restoration activities were conducted at this location to address any uncertainty regarding suitability of soils at Building 283 for re-development. A 5 ft by 5 ft by 3 ft deep volume of soil was unearthed from this area in May 2017. Background sample BKG-283-002 was collected at depth and analyzed for PCBs, SVOCs and TPH; results were less than the RDCSRs for all analytes (Table 2).
- Soil was unearthed and background sample BKG-283-003 was collected near a loading dock at the eastern wing of Building 283 (Figure 2). Results from previous sampling at sample P49-SB3 (US Army BRAC, 2008) encountered PAHs and the PCB Aroclor-1260 in excess of RDCSRs. Subsequent re-sampling in 2016 (PAR-49-SB-05) indicated no exceedances of the RDCSRs at this location. Although the RDCSRs exceedances were not confirmed, site restoration activities were conducted at this location to address any uncertainty regarding suitability of Building 283 for re-development. A 5 ft by 5 ft by 3 ft deep volume of soil was unearthed from this area in May 2017. Background sample BKG-283-003 was collected at depth and analyzed for PCBs, SVOCs and TPH; none of the analytes were detected in the background sample (Table 2).
- Soil was unearthed and background sample BKG-283-004 was collected near a loading dock at the western wing of Building 283 (Figure 2). Results from previous sampling at sample P49-SB4 (US Army BRAC, 2008) encountered PAHs in excess of RDCSRs. Subsequent re-sampling in 2016 (PAR-49-SB-02) did not confirm the exceedance of RDCSRs at this location. However, one PAH from the 16.0 to 16.5 ft bgs interval

slightly exceeded the RDCSRS; this result was considered anomalous as previously described (Parsons, 2016; approved by NJDEP, 2017b). Although the RDCSRS exceedances were not confirmed, site restoration activities were conducted at this location to address any uncertainty regarding suitability of soils at Building 283 for re-development. A 5 ft by 5 ft by 3 ft deep volume of soil was unearthed from this area in May 2017. Background sample BKG-283-004 was collected from the bottom of the excavation and analyzed for PCBs, SVOCs and TPH; none of the analytes were detected in the background sample (Table 2).

- The previous 2007 and 2016 analytical results (Table 1) from the following soil samples (Figure 2) also demonstrate the general suitability of soils near Building 283 for re-development, because no analytes were detected above RDCSRSs:
 - Boring P49-SB2, located northwest of Building 283;
 - Soil sample PAR-49-SB-11, located east of Building 283; and
 - Soil sample PAR-49-SB-12, located within the Building 283 courtyard.

Proof of proper disposal for the soil that was unearthed and containerized in May 2017 will be submitted to NJDEP when available. Environmental concerns for the remaining portion of Parcel 49 exclusive of Building 283 (as discussed in Parsons, 2016) will be addressed under separate cover. It should be noted that the Installation Restoration Program (IRP) site FTMM-61, which is historically associated with Building 283, was previously approved for NFA by NJDEP (2017a).

A NFA determination is requested for Building 283. The technical Point of Contact (POC) for this matter is Kent Friesen at (732) 383-7201 or kent.friesen@parsons.com. Should you have any questions or require additional information, please contact me by phone at (732) 380-7064 or by email at william.r.colvin18.civ@mail.mil.

Sincerely,



William R. Colvin, PMP, CHMM, PG
BRAC Environmental Coordinator

cc: Linda Range, NJDEP (2 hard copies)
Joseph Pearson, Calibre (e-mail)
James Moore, USACE (e-mail)
Jim Kelly, USACE (e-mail)
Cris Grill, Parsons (e-mail)

References Cited:

New Jersey Department of Environmental Quality (NJDEP). 2017a. Approval Letter to William Colvin, Re: *Remedial Action Type: Unrestricted Use. Scope of Remediation: Area of Concern: FTMM-61 aka Building 283 Former Gasoline UST, Monmouth County*. May 4. (Provided in Attachment E).

NJDEP. 2017b. Letter to William Colvin, Re: *December 2016 Letter Work Plan Addendum for Parcel 49, Former Squier Laboratory and other facilities, Fort Monmouth, Oceanport, Monmouth County*. January 10. (Provided in Attachment E).

NJDEP. 2016. Letter to William Colvin, Re: *Response to NJDEP Comments on Parcel 49 – Revised LWPA, Fort Monmouth, Oceanport, Monmouth County*. August 15. (Provided in Attachment E).

Parsons. 2016. *December 2016 Letter Work Plan Addendum for Parcel 49, Former Squier Laboratory and other facilities, Fort Monmouth, New Jersey*. December 28. (Provided in Attachment E).

United States (US) Army Base Realignment and Closure (BRAC). 2008. *Site Investigation Report, Fort Monmouth*. Final. July 21.



New Jersey Department of Environmental Protection
Site Remediation Program

Report Certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites

These certifications are to be used for reports submitted for RCRA GPRA 2020, CERCLA, and Federal Facility Sites. The Department has developed guidance for report certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites under traditional oversight. The "Person Responsible for Conducting the Remediation Information and Certification" is required to be submitted with each report. For those sites that are required or opt to use a Licensed Site Remediation Professional (LSRP) the report must also be certified by the LSRP using the "Licensed Site Remediation Professional Information and Statement". For additional guidance regarding the requirement for LSRPs at RCRA GPRA 2020, CERCLA and Federal Facility Sites see http://www.nj.gov/dep/srp/srra/training/matrix/quick_ref/rcra_cercla_fed_facility_sites.pdf.

Document: "Request for No Further Action Determination at Building 283 Squire Hall, Fort Monmouth, New Jersey"

PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: William R. Colvin

Representative First Name: William

Representative Last Name: Colvin

Title: BRAC Environmental Coordinator

Phone Number: (732) 380-7064

Ext:

Fax:

Mailing Address: P.O. Box 148

City/Town: Oceanport

State: NJ

Zip Code: 07757

Email Address: william.r.colvin18.civ@mail.mil

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

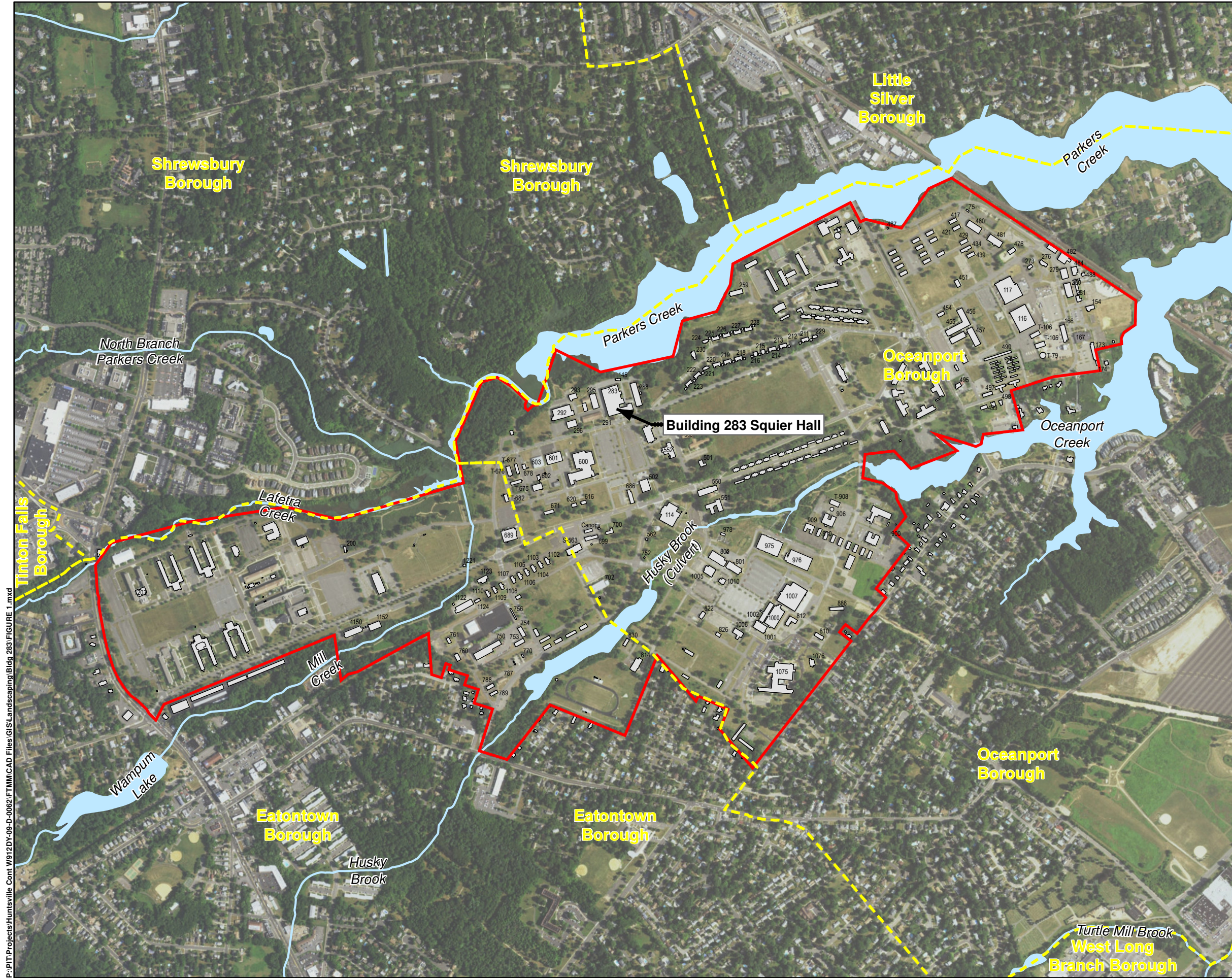
I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature:

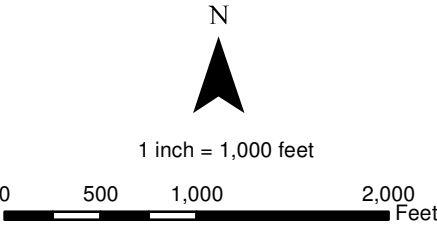
Date: 06/12/2017

Name/Title: William R. Colvin / BRAC Environmental
Coordinator

Attachment A
Figures

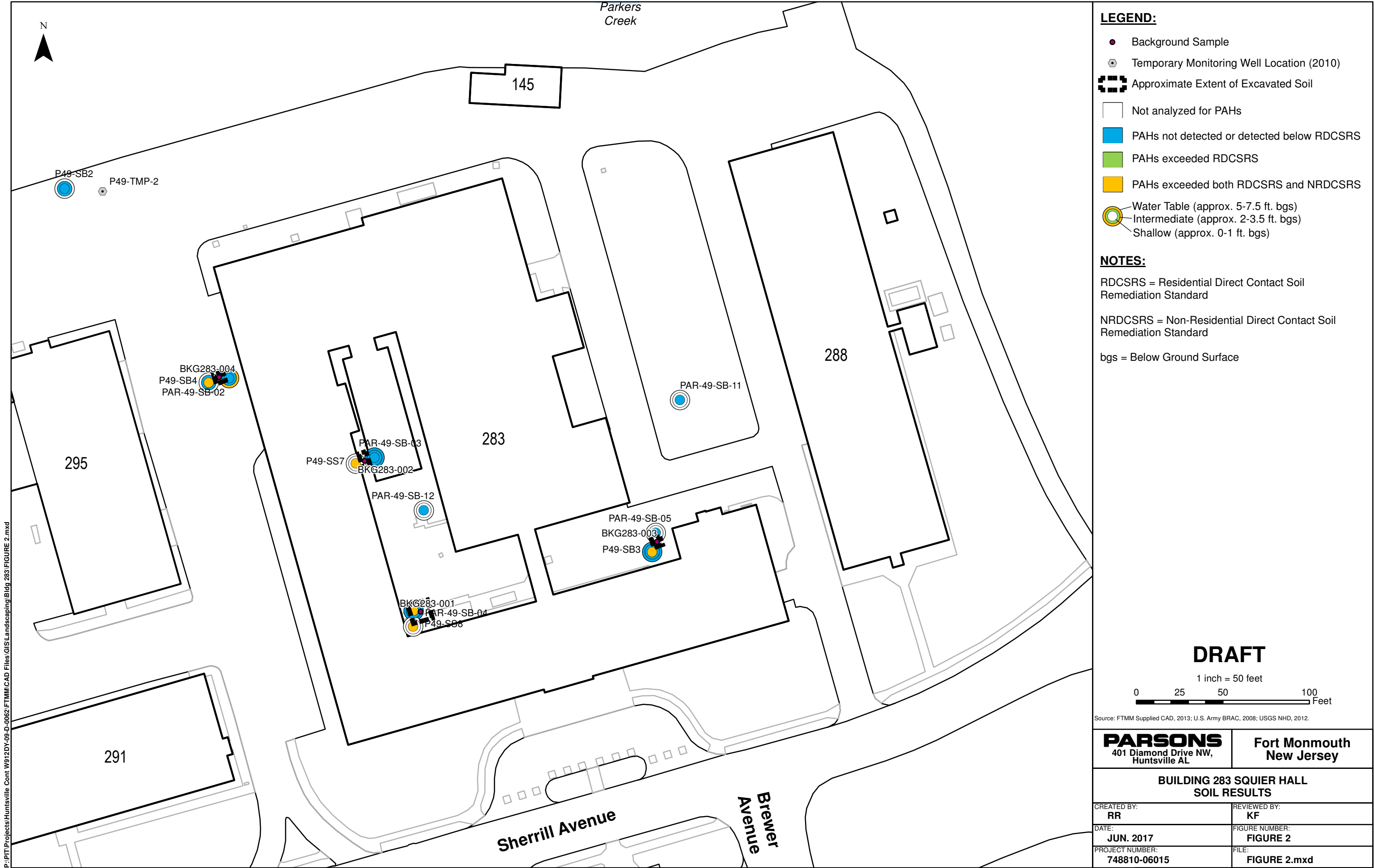


- LEGEND:**
- Municipal Boundary
 - Installation Boundary
 - Building
 - Surface Water Feature



Source: FTMM Supplied CAD, 2013; ESRI Data and Maps, 2011; USGS NHD, 2012.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
MAIN POST LAYOUT	
CREATED BY: RR	REVIEWED BY: KF
DATE: JUN. 2017	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-03000	FILE: FIGURE 1.mxd



Attachment B
Tables

TABLE 1
2007 AND 2016 DETECTED SOIL ANALYTES AT BUILDING 283 AND
COMPARISON TO SOIL REMEDIATION STANDARDS
BUILDING 283
FORT MONMOUTH, NEW JERSEY

[illegible]

TABLE 1
2007 AND 2016 DETECTED SOIL ANALYTES AT BUILDING 283 AND
COMPARISON TO SOIL REMEDIATION STANDARDS
BUILDING 283
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non- Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	P49-SS7		P49-SS8		SB02		
Sample ID				P49-SS7-A	P49-SS7-B	P49-SS8-A	P49-SS8-B	PAR-49-SS-SB-02-1-1.5	PAR-49-SS-SB-02-16-16.5	PAR-49-SS-SB-02-3.3-3.8
Sample Depth Interval (ft bgs)				0-0.5	1.5-2	0-0.5	1.5-2	1-1.5	16-16.5	3.3-3.8
Sample Date				12/6/2007	12/6/2007	12/6/2007	12/6/2007	3/30/2016	3/30/2016	3/30/2016
Semivolatile Organic Compounds (mg/kg)										
1-Methylnaphthalene	NLE	NLE	NLE	NA	NA	NA	NA	< 0.0072	0.04	< 0.0082
2-Methylnaphthalene	230	2,400	8	4.4	NA	0.13 J	NA	< 0.0072	0.059	< 0.0082
4-Methylphenol	31	340	NLE	0.32 J	NA	< 1.2	NA	NA	NA	NA
Acenaphthene	3,400	37,000	110	20 JD	NA	0.66 J	NA	< 0.0072	0.005 J	< 0.0082
Acenaphthylene	NLE	300,000	NLE	0.45 J	NA	0.048 J	NA	< 0.0072	0.18	< 0.0082
Anthracene	17,000	30,000	2,400	46 JD	NA	1.8	NA	< 0.0072	0.14	< 0.0082
Benzo(a)anthracene	0.6	2	0.8	80 D	NA	3.6	NA	0.0052 J	0.3	0.0026 J
Benzo(a)pyrene	0.2	0.2	0.2	54 JD	NA	2.6	NA	0.0042 J	0.3	< 0.0082
Benzo(b)fluoranthene	0.6	2	2	75 D	NA	3.9	NA	0.0055 J	0.32	< 0.0082
Benzo(ghi)perylene	380,000	30,000	NLE	16 JD	NA	0.84 J	NA	0.0045 J	0.26	< 0.0082
Benzo(k)fluoranthene	6	23	25	29 JD	NA	1.5	NA	0.0023 J	0.11	< 0.0082
Bis(2-Ethylhexyl)phthalate	35	140	1,200	< 1.1	NA	0.69 J	NA	NA	NA	NA
Butyl benzyl phthalate	1,200	14,000	230	0.67 J	NA	0.52 J	NA	NA	NA	NA
Chrysene	62	230	80	79 D	NA	3.7	NA	0.0043 J	0.43	< 0.0082
Dibenz(a,h)anthracene	0.2	0.2	0.8	2.6	NA	0.34 J	NA	< 0.0072	0.053	< 0.0082
Dibenzofuran	NLE	NLE	NLE	12	NA	0.39 J	NA	NA	NA	NA
Di-n-butylphthalate	6,100	68,000	760	< 1.1	NA	0.63 JB	NA	NA	NA	NA
Fluoranthene	2,300	24,000	1,300	190 D	NA	9	NA	0.0052 J	0.27	< 0.0082
Fluorene	2,300	24,000	170	17 JD	NA	0.64 J	NA	< 0.0072	0.024	< 0.0082
Indeno(1,2,3-cd)pyrene	0.6	2	7	18 JD	NA	0.93 J	NA	0.0041 J	0.18	< 0.0082
Naphthalene	6	17	25	11	NA	0.28 J	NA	< 0.0072	0.051	< 0.0082
Phenanthrene	NLE	300,000	NLE	170 D	NA	7.1	NA	< 0.0072	0.085	< 0.0082
Pyrene	1,700	18,000	840	160 D	NA	7.3	NA	0.0069 J	0.6	< 0.0082
Pesticides & PCBs (mg/kg)										
Aroclor-1260	0.2	1	NLE	0.47	NA	8.85	NA	NA	NA	NA
Aroclor-1268	0.2	1	NLE	NA	NA	NA	NA	NA	NA	NA

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BUILDING 283
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non- Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	SB03			SB04	
Sample ID				PAR-49-SS-SB-03-0.5-1	PAR-49-SS-SB-03-12.5-13	PAR-49-SS-SB-03-2.5-3	PAR-49-SS-SB-04-0.5-1	PAR-49-SS-SB-04-1.5-2
Sample Depth Interval (ft bgs)				0.5-1	12.5-13	2.5-3	0.5-1	1.5-2
Sample Date				3/30/2016	3/30/2016	3/30/2016	3/30/2016	3/30/2016
Semivolatile Organic Compounds (mg/kg)								
1-Methylnaphthalene	NLE	NLE	NLE	0.0054 J	< 0.009	< 0.0085	0.22 J	NA
2-Methylnaphthalene	230	2,400	8	0.0066 J	< 0.009	< 0.0085	0.32 J	NA
4-Methylphenol	31	340	NLE	NA	NA	NA	NA	NA
Acenaphthene	3,400	37,000	110	0.01	< 0.009	< 0.0085	0.7 J	NA
Acenaphthylene	NLE	300,000	NLE	0.0038 J	< 0.009	< 0.0085	0.026 J	NA
Anthracene	17,000	30,000	2,400	0.033	< 0.009	< 0.0085	1.7 J	NA
Benzo(a)anthracene	0.6	2	0.8	0.18	< 0.009	< 0.0085	2.5 J	NA
Benzo(a)pyrene	0.2	0.2	0.2	0.2	< 0.009	< 0.0085	2.3 J	NA
Benzo(b)fluoranthene	0.6	2	2	0.25	< 0.009	< 0.0085	2.8 J	NA
Benzo(ghi)perylene	380,000	30,000	NLE	0.14	< 0.009	< 0.0085	1.7 J	NA
Benzo(k)fluoranthene	6	23	25	0.091	< 0.009	< 0.0085	0.99 J	NA
Bis(2-Ethylhexyl)phthalate	35	140	1,200	NA	NA	NA	NA	NA
Butyl benzyl phthalate	1,200	14,000	230	NA	NA	NA	NA	NA
Chrysene	62	230	80	0.18	< 0.009	< 0.0085	2.4 J	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	0.028	< 0.009	< 0.0085	0.37 J	NA
Dibenzofuran	NLE	NLE	NLE	NA	NA	NA	NA	NA
Di-n-butylphthalate	6,100	68,000	760	NA	NA	NA	NA	NA
Fluoranthene	2,300	24,000	1,300	0.33	< 0.009	< 0.0085	5.7 J	NA
Fluorene	2,300	24,000	170	0.0067 J	< 0.009	< 0.0085	0.86 J	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	0.14	< 0.009	< 0.0085	1.7 J	NA
Naphthalene	6	17	25	0.0072 J	< 0.009	< 0.0085	0.36 J	NA
Phenanthrene	NLE	300,000	NLE	0.11	< 0.009	< 0.0085	5.5 J	NA
Pyrene	1,700	18,000	840	0.29	< 0.009	< 0.0085	5 J	NA
Pesticides & PCBs (mg/kg)								
Aroclor-1260	0.2	1	NLE	< 0.041	NA	NA	0.69 J	0.3
Aroclor-1268	0.2	1	NLE	< 0.041	NA	NA	0.73 J	< 0.039

TABLE 1
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BUILDING 283
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non- Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	SB04				SB05
Sample ID				PAR-49-SS-SB-04-2.75-3.25	PAR-49-SS-SB-04-2-2.5	PAR-49-SS-SB-04-9.5-10	PAR-49-SS-SB-104-0.5-1	PAR-49-SS-SB-05-0.5-1
Sample Depth Interval (ft bgs)				2.75-3.25	2-2.5	9.5-10	0.5-1	0.5-1
Sample Date				3/30/2016	3/30/2016	3/30/2016	3/30/2016	3/30/2016
Semivolatile Organic Compounds (mg/kg)								
1-Methylnaphthalene	NLE	NLE	NLE	< 0.0077	NA	< 0.0088	0.89 J	< 0.0081
2-Methylnaphthalene	230	2,400	8	< 0.0077	NA	< 0.0088	0.92 J	< 0.0081
4-Methylphenol	31	340	NLE	NA	NA	NA	NA	NA
Acenaphthene	3,400	37,000	110	< 0.0077	NA	< 0.0088	4.3 J	< 0.0081
Acenaphthylene	NLE	300,000	NLE	< 0.0077	NA	< 0.0088	0.2 J	< 0.0081
Anthracene	17,000	30,000	2,400	< 0.0077	NA	< 0.0088	11 J	< 0.0081
Benzo(a)anthracene	0.6	2	0.8	0.0026 J	NA	0.003 J	15 J	0.0028 J
Benzo(a)pyrene	0.2	0.2	0.2	< 0.0077	NA	< 0.0088	13 J	< 0.0081
Benzo(b)fluoranthene	0.6	2	2	< 0.0077	NA	< 0.0088	16 J	< 0.0081
Benzo(ghi)perylene	380,000	30,000	NLE	< 0.0077	NA	< 0.0088	8.2 J	< 0.0081
Benzo(k)fluoranthene	6	23	25	< 0.0077	NA	< 0.0088	6.2 J	< 0.0081
Bis(2-Ethylhexyl)phthalate	35	140	1,200	NA	NA	NA	NA	NA
Butyl benzyl phthalate	1,200	14,000	230	NA	NA	NA	NA	NA
Chrysene	62	230	80	< 0.0077	NA	< 0.0088	14 J	< 0.0081
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.0077	NA	< 0.0088	1.8 J	< 0.0081
Dibenzofuran	NLE	NLE	NLE	NA	NA	NA	NA	NA
Di-n-butylphthalate	6,100	68,000	760	NA	NA	NA	NA	NA
Fluoranthene	2,300	24,000	1,300	0.0028 J	NA	< 0.0088	37 J	< 0.0081
Fluorene	2,300	24,000	170	< 0.0077	NA	< 0.0088	4.4 J	< 0.0081
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.0077	NA	< 0.0088	8.4 J	< 0.0081
Naphthalene	6	17	25	< 0.0077	NA	< 0.0088	0.94 J	< 0.0081
Phenanthrene	NLE	300,000	NLE	< 0.0077	NA	< 0.0088	36 J	< 0.0081
Pyrene	1,700	18,000	840	< 0.0077	NA	< 0.0088	30 J	< 0.0081
Pesticides & PCBs (mg/kg)								
Aroclor-1260	0.2	1	NLE	NA	0.15	NA	1.6 J	< 0.04
Aroclor-1268	0.2	1	NLE	NA	< 0.039	NA	< 0.19 UJ	< 0.04

TABLE 1
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FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non- Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	SB11	SB12
Sample ID				PAR-49-SS-SB-11-0-0.5	PAR-49-SS-SB-12-0.5-1
Sample Depth Interval (ft bgs)				0-0.5	0.5-1
Sample Date				3/30/2016	3/30/2016
Semivolatile Organic Compounds (mg/kg)					
1-Methylnaphthalene	NLE	NLE	NLE	< 0.0085	< 0.0077
2-Methylnaphthalene	230	2,400	8	< 0.0085	< 0.0077
4-Methylphenol	31	340	NLE	NA	NA
Acenaphthene	3,400	37,000	110	< 0.0085	< 0.0077
Acenaphthylene	NLE	300,000	NLE	< 0.0085	0.0075 J
Anthracene	17,000	30,000	2,400	< 0.0085	0.0074 J
Benzo(a)anthracene	0.6	2	0.8	< 0.0085	0.037
Benzo(a)pyrene	0.2	0.2	0.2	< 0.0085	0.04
Benzo(b)fluoranthene	0.6	2	2	< 0.0085	0.048
Benzo(ghi)perylene	380,000	30,000	NLE	< 0.0085	0.033
Benzo(k)fluoranthene	6	23	25	< 0.0085	0.02
Bis(2-Ethylhexyl)phthalate	35	140	1,200	NA	NA
Butyl benzyl phthalate	1,200	14,000	230	NA	NA
Chrysene	62	230	80	< 0.0085	0.04
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.0085	0.0073 J
Dibenzofuran	NLE	NLE	NLE	NA	NA
Di-n-butylphthalate	6,100	68,000	760	NA	NA
Fluoranthene	2,300	24,000	1,300	< 0.0085	0.06
Fluorene	2,300	24,000	170	< 0.0085	< 0.0077
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.0085	0.03
Naphthalene	6	17	25	< 0.0085	0.0029 J
Phenanthrene	NLE	300,000	NLE	< 0.0085	0.031
Pyrene	1,700	18,000	840	< 0.0085	0.061
Pesticides & PCBs (mg/kg)					
Aroclor-1260	0.2	1	NLE	< 0.042	NA
Aroclor-1268	0.2	1	NLE	< 0.042	NA

Footnote:

- 1) All historical data collected prior to 2013 are reported as provided by others.
- 2) Not used.
- 3) NLE = no limit established.
- 4) ND = not detected in any background sample, no background concentration available.
- 5) **Bold** = chemical detection
- 6) SS = Site Specific action level, see "Specific Chemical Class (or Parameter)" footnote for details.

7) Chemical result qualifiers are assigned by the laboratory and are evaluated and modified (if necessary) during the data validation.

[blank] = detect, i.e. detected chemical result value.	J = estimated detected value due to a concetration below the reporting limit or due to discrepancies in meeting certain analyte-specific quality control.
B =Compound detected in the sample at a concentration less than or equal to 5 times (10 times for common lab contaminants) the blank concentration.	E (or ER) = Estimated result.
R = Rejected, data validation rejected the results.	D = Results from dilution of sample.
U = non-detect, i.e. not detected at or above this value.	J-DL = Elevated sample detection limit due to difficult sample matrix.
U-DL = Elevated sample detection limit due to difficult sample matrix.	JN = Tentatively identified compound, estimated concentration.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.	

8) Specific Chemical Classes (or Parameters) comments or notes regarding how data is displayed, compared to Action Levels, or represented in this table.

9) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.

- Cell Shade values represent a result that is above the NJ Residential Direct Contact Soil Remediation Standard.	####
There are no NJDEP soil standards for individual PCB Aroclors, therefore the total PCB NJDEP standards were used for individual Aroclors.	
- Cell Shade values represent a result that is above the NJ Non-Residential Direct Contact Soil Remediation Standard.	###
There are no NJDEP soil standards for individual PCB Aroclors, therefore the total PCB NJDEP standards were used for individual Aroclors.	
- Cell Shade values represent a result that is above the NJ Impact to GW Soil Screening Level	###
n/a = all concentrations were less than the detection limit, therefore, no location of maximum value identified.	
Dash (-) = only background concentrations for metals are being used as comparison criteria.	
- Cell Shade values represent a result that is above both the NJ Residential, Non-Residential, AND NJ Impact to GW Soil Screening Level Direct Contact Soil Remediation Standard.	###
- Cell Shade values represent a result that is above both the NJ Residential and Non-Residential Direct Contact Soil Remediation Standard.	###

10) Criteria action level source document and web address.

- The NJ Residential Direct Contact Soil Remediation Standard refers to the NJDEP's May 7, 2012 Remediation Standards
http://www.nj.gov/dep/rules/rules/njac7_26d.pdf
- The NJ Non-Residential Direct Contact Soil Remediation Standard refers to the NJDEP's May 7, 2012 Remediation Standards.
http://www.nj.gov/dep/rules/rules/njac7_26d.pdf
- The NJ Impact to GW Soil Screening Level criteria refers to the Development of Site Specific Impact to Ground Water Soil Remediation Standards - Nov 2013 revised
http://www.nj.gov/dep/srp/guidance/rs/partition_equation.pdf

TABLE 2
2017 BACKGROUND SOIL SAMPLE RESULTS AND COMPARISON TO SOIL REMEDIATION STANDARDS
BUILDING 283
FORT MONMOUTH, NEW JERSEY

						CLIENT ID: LAB ID: COLLECTION DATE: SAMPLE MATRIX: SAMPLE UNITS:	BKG-283-002 AC98118-001 5/24/2017 Soil mg/Kg	BKG-283-001 AC98118-002 5/24/2017 Soil mg/Kg	BKG-283-003 AC98118-003 5/24/2017 Soil mg/Kg	BKG-283-004 AC98118-004 5/25/2017 Soil mg/Kg	BKG-283-004-FD AC98118-005 5/25/2017 Soil mg/Kg	
			NJ Residential Direct Contact SRS	NJ Non- Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level							
TestCode	CAS#	Analyte	mg/Kg	mg/Kg	mg/Kg		Result	RL	Result	RL	Result	RL
PCBs												
PCB-8082	1336-36-3	Aroclor (Total)	0.2	1	0.2		ND	0.03	ND	0.031	ND	0.031
PCB-8082	12674-11-2	Aroclor-1016	0.2	1	0.2		ND	0.03	ND	0.031	ND	0.031
PCB-8082	11104-28-2	Aroclor-1221	0.2	1	0.2		ND	0.03	ND	0.031	ND	0.031
PCB-8082	11141-16-5	Aroclor-1232	0.2	1	0.2		ND	0.03	ND	0.031	ND	0.031
PCB-8082	53469-21-9	Aroclor-1242	0.2	1	0.2		ND	0.03	ND	0.031	ND	0.031
PCB-8082	12672-29-6	Aroclor-1248	0.2	1	0.2		ND	0.03	ND	0.031	ND	0.031
PCB-8082	11097-69-1	Aroclor-1254	0.2	1	0.2		ND	0.03	ND	0.031	ND	0.031
PCB-8082	11096-82-5	Aroclor-1260	0.2	1	0.2		ND	0.03	ND	0.031	ND	0.031
PCB-8082	37324-23-5	Aroclor-1262	NA	NA	NA		ND	0.03	ND	0.031	ND	0.031
PCB-8082	11100-14-4	Aroclor-1268	NA	NA	NA		ND	0.03	ND	0.031	ND	0.031
SemiVolatiles												
BNPAH-8270	91-57-6	2-Methylnaphthalene	230	2,400	8		ND	0.04	ND	0.042	ND	0.041
BNPAH-8270	83-32-9	Acenaphthene	3,400	37,000	110		ND	0.04	ND	0.042	ND	0.041
BNPAH-8270	208-96-8	Acenaphthylene	NA	300,000	NA		ND	0.04	ND	0.042	ND	0.041
BNPAH-8270	120-12-7	Anthracene	17,000	30,000	2,400		0.049	0.04	ND	0.042	ND	0.041
BNPAH-8270	56-55-3	Benzo[a]anthracene	0.6	2	0.8		0.11	0.04	ND	0.042	ND	0.041
BNPAH-8270	50-32-8	Benzo[a]pyrene	0.2	0.2	0.2		0.14	0.04	ND	0.042	ND	0.041
BNPAH-8270	205-99-2	Benzo[b]fluoranthene	0.6	2	2		0.23	0.04	ND	0.042	ND	0.041
BNPAH-8270	191-24-2	Benzo[g,h,i]perylene	380,000	30,000	NA		0.12	0.04	ND	0.01	ND	0.01
BNPAH-8270	207-08-9	Benzo[k]fluoranthene	6	23	25		0.053	0.04	ND	0.042	ND	0.041
BNPAH-8270	218-01-9	Chrysene	62	230	80		0.12	0.04	ND	0.042	ND	0.041
BNPAH-8270	53-70-3	Dibenzo[a,h]anthracene	0.2	0.2	0.8		ND	0.04	ND	0.01	ND	0.01
BNPAH-8270	206-44-0	Fluoranthene	2,300	24,000	1,300		0.17	0.04	ND	0.042	ND	0.041
BNPAH-8270	86-73-7	Fluorene	2,300	24,000	170		ND	0.04	ND	0.042	ND	0.041
BNPAH-8270	193-39-5	Indeno[1,2,3-cd]pyrene	0.6	2	7		0.1	0.04	ND	0.042	ND	0.041
BNPAH-8270	91-20-3	Naphthalene	6	17	25		ND	0.0099	ND	0.01	ND	0.01
BNPAH-8270	85-01-8	Phenanthrene	NA	300,000	NA		ND	0.04	ND	0.042	ND	0.041
BNPAH-8270	129-00-0	Pyrene	1,700	18,000	840		0.15	0.04	ND	0.042	ND	0.041
TPH												
8015-EPHCAT2	EPHC9C40	C9-C40	NA	NA	NA		ND	71	ND	75	ND	74
Wet Chemistry												
%SOLIDS	PERSOL	% Solids	NA	NA	NA		84(Percent)		80(Percent)		79(Percent)	

Result exceeds at least one criterion (none for these samples)

Bold Positive result detected below all criteria

NJ Soil Remediation Standards
Note 1) Residential and Non-residential criteria from the NJDEP June 2, 2008 Soil Remediation Standards
Note 2) Dec 2008 DEP guidance document for the development of site-specific IGW soil remediation standards using the soil-water partition equation.

N/A No criterion derived for this contaminant.

Attachment C
Letter Report: Excavation at Parcels 49 and 57



October 18, 2016

Mr. James Moore
U.S. Army Corps of Engineers, New York District
Attn: CENAN-PP-E
26 Federal Plaza, Room 1811
New York, NY 10278

**Subject: Excavation at Parcels 49 and 57 Environmental Contamination Assessments/Support,
Fort Monmouth, Oceanport, New Jersey
Contract Number W912DY-10-D-0015, Task Order 0007
DCN: TTEC-WERS-17-0008**

Dear Mr. Moore:

In accordance with the requirements of the Performance Work Statement for Task Order 0007 of Contract Number W9128DY-10-D-0015 as amended, Tetra Tech is pleased to submit this Letter Report for the interim removal actions at Parcels 49 and 57 at Fort Monmouth, New Jersey. Copies of this letter report have also been submitted to the recipients on the attached distribution list, quantities as indicated.

At the request of the U.S. Army Corps of Engineers, Tetra Tech initiated an interim removal action for polychlorinated biphenyls (PCBs) at two locations – Parcel 49 and Parcel 57. **Attachment 1** contains figures showing relevant sample locations and excavation areas. Within Parcel 49, historic soil sample P49-SS8, located in the Building 283 courtyard, exhibited an exceedance of PCBs at a concentration of 8.85 milligrams per kilogram (mg/kg) which is above the Residential Soil Remediation Standard (RSRS) of 0.2 mg/kg and the Non-Residential Soil Remediation Standard (NRSRS) of 1 mg/kg. This location was resampled during the Shaw Site Investigation and exhibited a high concentration of 1.6 mg/kg for PCBs at 0.5-1 feet (ft.) below ground surface (bgs) (sample PAR-49-SS-SB-04). Based on this data, Tetra Tech performed an interim removal action via excavation. The excavation dimensions were 5 ft. by 5 ft. to a depth of 3 ft. bgs centered on the P49-SS8 location with confirmation sampling for PCBs and extractable petroleum hydrocarbons (EPH). The goal of this interim action was to achieve compliance with the NRSRS. **Figure 1** shows these sample locations and final excavation boundaries.

Within Parcel 57, Parsons detected PCBs in subsurface soils near the former railroad tracks. The highest exhibited concentration was 8.8 mg/kg at 3-3.5 ft. bgs (PAR-57-SS-04) which is above the RSRS and NRSRS of 1 mg/kg. Step-out sampling was performed to delineate the extent of PCB contamination. Based on the data, Tetra Tech performed an interim removal action via excavation. The excavation was 5 ft. by 5 ft. to a depth of 5 ft. bgs and centered on PAR-57-SS-04 with confirmation sampling for PCBs and EPH. **Figure 2** shows this sample location and final excavation boundaries.

Tetra Tech and its subcontractor AWT Environmental Services mobilized to the site and began locating underground utilities and soil excavation areas on 22 July 2016. Photographs documenting site activities are provided in **Attachment 2**.

Excavation activities at Parcel 49 began on 29 July 2016. The final dimensions of the excavation were 5.4 ft. (east-west direction) by 6 ft. (north-south direction) by 3 ft. deep. Excavated materials were placed in a roll off box. Prior to backfilling, a confirmation sample was collected from the bottom of the excavation and analyzed for PCBs and EPH, and neither PCBs nor EPH was detected in the confirmation sample. Full laboratory results are provided in **Attachment 3**. The excavation was filled with dense gravel aggregate and topsoil, compacted with the excavator bucket, and the surface was seeded and covered with straw.

Tetra Tech, Inc.

1093 Commerce Park Drive Suite 100, Oak Ridge, Tennessee 37830
Tel 865.483.9900 Fax 865.425.1182 www.tetrattech.com



Work at Parcel 57 began on 28 July 2016. At 5 ft. depth, water began seeping into the excavation. Soil and material removed was placed in a roll off box. The final dimensions of the excavation were 7.6 ft. (east-west direction) by 5.5 ft. (north-south direction) by 5 ft. deep. A confirmation sample was collected from the bottom of the excavation and analyzed for PCBs and EPH. PCBs were not detected in the confirmation sample and thus below the NRSRS and RSRS. EPH was detected at 120 mg/kg, which is below the 1700 mg/kg New Jersey Department of Environmental Protection Category 2 EPH Protocol. Full laboratory results are provided in **Attachment 3**. The excavation was filled with dense gravel aggregate, compacted with the excavator bucket, and the surface was patched with asphalt (see Photograph 12).

Both Parcel 49 and Parcel 57 excavations were filled with backfill material provided by Maddox Materials, LLC who provided a certification of clean fill. The certification and lab results for the backfill are provided in **Attachment 4**.

On 1-3 August 2016, Tetra Tech coordinated the loadout of potentially PCB-impacted soils from Parcels 49 and 57 in conjunction with the loadout of materials from Parcel 97. The material was transported to the Wayne Disposal, Inc. landfill facility in Belleville, Michigan. The waste disposal information for the August 2016 removal are included in **Attachment 5**.

This report summarizes the interim removal action and confirmation sampling activities conducted 28-29 July 2016 for the presence of PCBs in soil at Parcels 49 and 57 and the soil loadout on 1-3 August 2016. Should you have any questions or require additional information, please do not hesitate to contact the undersigned at (865) 220-4757 or via e-mail at mikael.spangberg@tetrattech.com.

Sincerely,

Mikael L. Spangberg, P.E., PMP
Project Manager

Attachments:

- Attachment 1 – Figures
- Attachment 2 – Photographs
- Attachment 3 – Laboratory Analytical Reports
- Attachment 4 – Backfill Material Certification
- Attachment 5 – Waste Disposal



Document Distribution List

U.S. Army Engineering & Support Center, Huntsville
Project Manager and Contracting Officer's Representative
Attn: CEHNC-ED-CS-P (Mary Young)
4820 University Square
Huntsville, AL 35816-1822

1 electronic (via email)

U.S. Army Corps of Engineers, New York District
Attn: CENAN-PP-E (Mr. James Moore)
26 Federal Plaza, Room 1811
New York, NY 10278

1 electronic (via email)

ATTACHMENT 1

FIGURES

PARCEL 49 FEATURES

- SAMPLE LOCATION
- EXCAVATION
- - - PARCEL BOUNDARY
- BUILDING
- ROAD

Note: Residential Soil Remediation Standard (RSRS) = 0.2 mg/kg for PCBs
Non-Residential Soil Remediation Standard (NRSRS) = 1.0 mg/kg for PCBs

283

5.4' x 6'
EXCAVATION
3' DEEP

P49-SS8 (Shaw) - 8.85 mg/kg

PAR-49-SS-SB-04 (Parsons) - 1.6 mg/kg

NO PCBs DETECTED
IN POST-EXCAVATION
CONFIRMATION SAMPLE

283

295

291

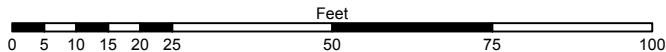
PARCEL 49

BLDG. 283

INSTALLATION
BOUNDARY

SHERILL AVENUE

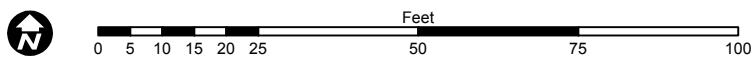
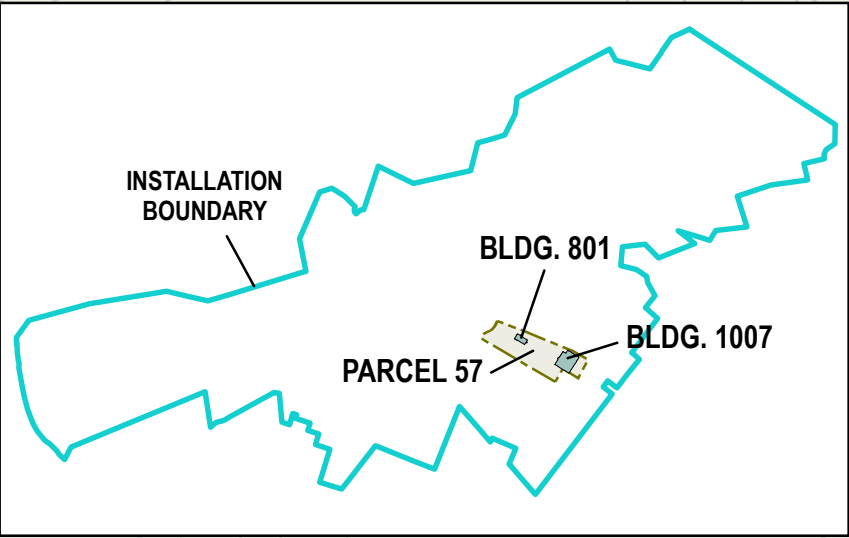
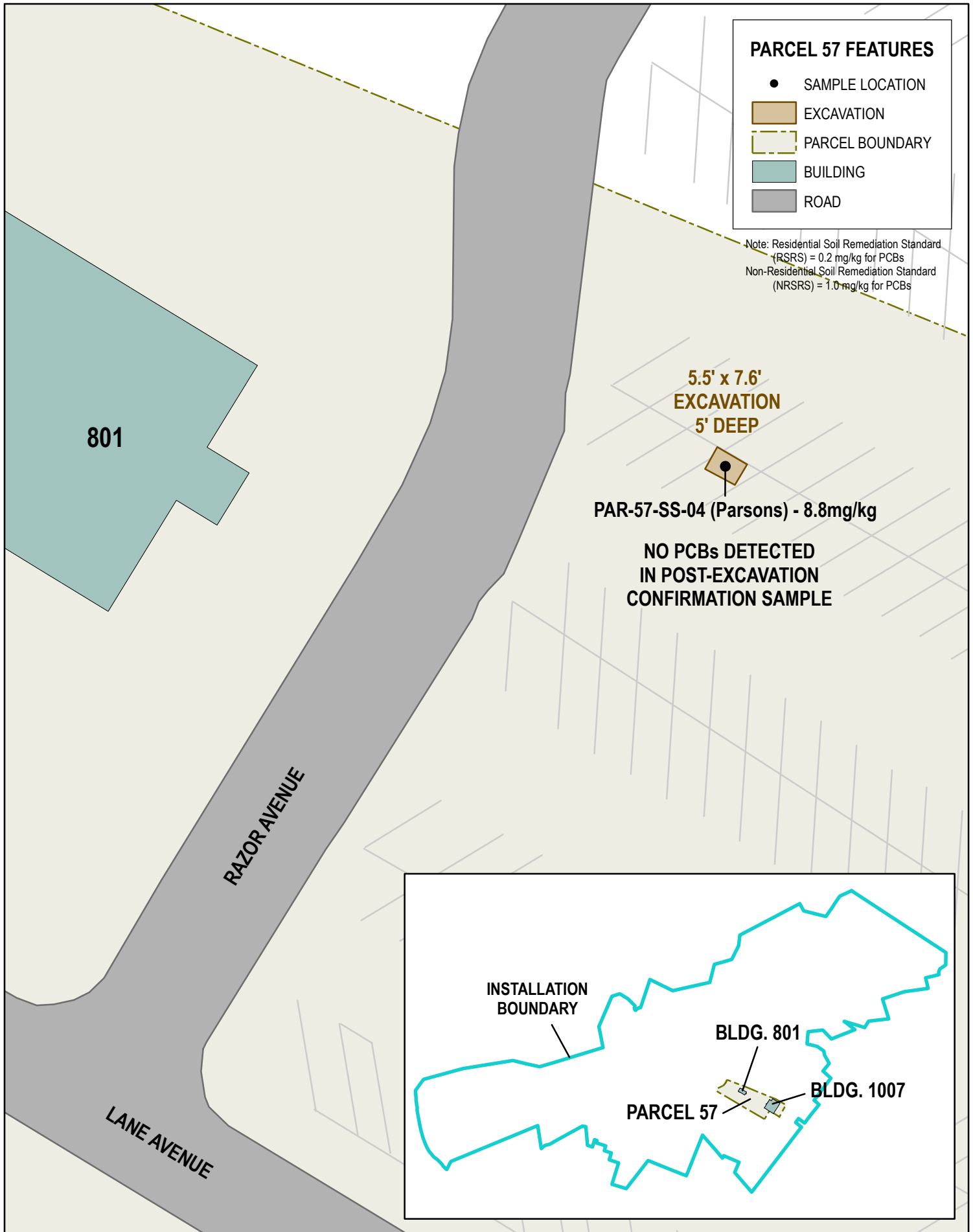
IRWIN AVENUE



FORT MONMOUTH, NJ

FIGURE 1
PARCEL 49 SOIL SAMPLING





FORT MONMOUTH, NJ
FIGURE 2
PARCEL 57 SOIL SAMPLING



ATTACHMENT 2
PHOTOGRAPHS



Photograph 1. Parcel 49, north wall of excavation, view north, 29 July 2016.



Photograph 2. Parcel 49, west wall of excavation, view west, 29 July 2016.



Photograph 3. Parcel 49, excavation floor and east wall, view east, 29 July 2016.



Photograph 4. Parcel 49, backfilled excavation, view west, 01 August 2016.



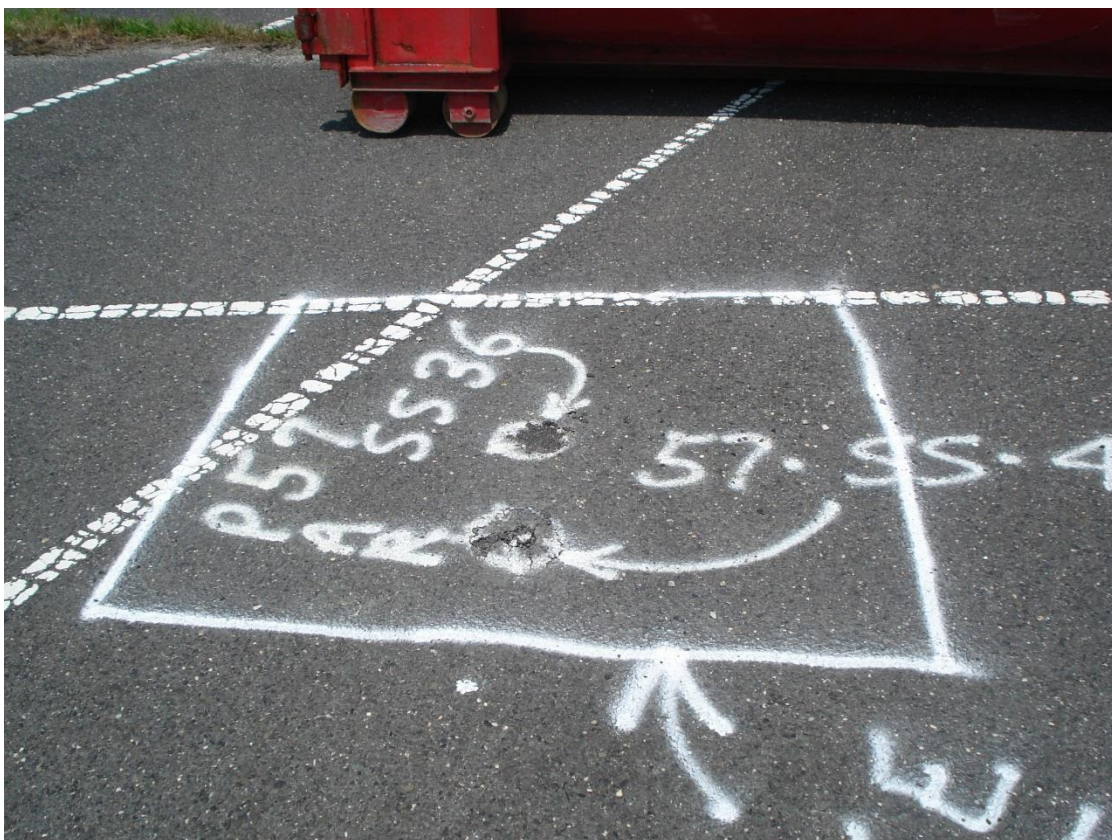
Photograph 5. Parcel 49, backfilled excavation and adjacent area, view west, 01 August 2016.



Photograph 6. Parcel 49, adjacent area after seed and straw, view west, 26 August 2016.



Photograph 7. Parcel 57, marked excavation area, view west, 28 July 2016.



Photograph 8. Parcel 57, prior to excavation, view north, 28 July 2016.



Photograph 9. Parcel 57, excavation completed, view north, 28 July 2016.



Photograph 10. Parcel 57, east wall of excavation, view east, 28 July 2016.



Photograph 11. Parcel 57, bottom of excavation with water seeping in, 28 July 2016.



Photograph 12. Parcel 57, backfilled excavation, view west, 28 July 2016.



Photograph 13 – Parcel 57, excavation with asphalt patch, view west, 26 August 2016.

ATTACHMENT 3
LABORATORY ANALYTICAL REPORTS

HC Report of Analysis

Client: Tetra Tech Inc.
Project: Fort Monmouth Additional

HC Project #: 6080102

Sample ID: FM-PAR-57-SS-04-05
Lab#: AC92683-001
Matrix: Soil

Collection Date: 7/28/2016
Receipt Date: 8/1/2016

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		84

NJ EPH Category 2

Analyte	DF	Units	RL	Result
C9-C40	1	mg/kg	71	120

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.030	ND
Aroclor-1016	1	mg/kg	0.030	ND
Aroclor-1221	1	mg/kg	0.030	ND
Aroclor-1232	1	mg/kg	0.030	ND
Aroclor-1242	1	mg/kg	0.030	ND
Aroclor-1248	1	mg/kg	0.030	ND
Aroclor-1254	1	mg/kg	0.030	ND
Aroclor-1260	1	mg/kg	0.030	ND
Aroclor-1262	1	mg/kg	0.030	ND
Aroclor-1268	1	mg/kg	0.030	ND

Sample ID: FM-P49-SS8-C

Lab#: AC92683-002

Matrix: Soil

Collection Date: 7/29/2016

Receipt Date: 8/1/2016

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		80

NJ EPH Category 2

Analyte	DF	Units	RL	Result
C9-C40	1	mg/kg	75	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.031	ND
Aroclor-1016	1	mg/kg	0.031	ND
Aroclor-1221	1	mg/kg	0.031	ND
Aroclor-1232	1	mg/kg	0.031	ND
Aroclor-1242	1	mg/kg	0.031	ND
Aroclor-1248	1	mg/kg	0.031	ND
Aroclor-1254	1	mg/kg	0.031	ND
Aroclor-1260	1	mg/kg	0.031	ND
Aroclor-1262	1	mg/kg	0.031	ND
Aroclor-1268	1	mg/kg	0.031	ND

6080102

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056



A Women-Owned, Disadvantaged, Small Business Enterprise

**CHAIN OF CUSTODY
RECORD**

Project # (Lab Use Only)

6080102

Page 1 of 1

3) Reporting Requirements (Please Circle)

Turnaround

Report Type

Electronic Deliv.

When Available:

- 1 Business Day (100%)*
- 2 Business Days (75%)*
- 3 Business Days (50%)*
- 4 Business Days (35%)*

- 5 Business Days (25%)*
- 10 Business Days (Standard)

Other:

Data Summary

Results + QC (Waste)

NJ Reduced

NY Reduced

PA Reduced

Full / Category B

Category A

Electronic (PDF)

Hazsite/CSV

EnviroData

Excel - NJ Regulatory

Excel - NY Regulatory

Excel - PA Regulatory

EQuIS (specify below):

4-File/EZ/NYS/Reg. 2 or 5

Other: PDF

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: Tetra Tech
Address: 1093 Commerce Park Dr. Ste 100
Oak Ridge TN 37830

1b) Email/Cell/Fax/Ph: Rob Rolon 407-448-9553

1c) Send Invoice to: Maureen Mohlyler 865-220-4762

1d) Send Report to: Maureen Mohlyler

Project Information

2a) Project: Fort Monmouth
Additional Areas

2b) Project Mgr: Mikael Spangberg

2c) Project Location (City/State): Ft. Monmouth
NJ

2d) Quote/PO # (If Applicable): 4817

FOR LAB
USE
ONLY

Batch #

==== Check If Contingent ====

Matrix Codes

DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

Sample
Type

Composite (C)

Grab (G)

5) Matrix

6) Sample

Date Time

4) Customer Sample ID

Lab Sample #

8)

of Bottles

None MeOH En Core NaOH HCl H2SO4 HNO3 Other

9) Comments

-001 FM-PAR-57-SS-04-05 S 7/28/16

-002 FM-P49-SS8-C S 7/29/16 1420

Last Entry

KR

7/29/16

10) Relinquished by:

Accepted by:

Date

Time

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):

- ☐ BN or BNA (8270D SIM)
- ☐ VOC (8260C SIM or 8011)
- ☐ SPLP (BN, BNA, Metals)

Check if applicable:

- ☐ Project-Specific Reporting Limits
- ☐ High Contaminant Concentrations
- ☐ NJ LSRP Project (also check boxes above/right)

For NJ LSRP projects, indicate which standards need to be met:

- ☐ NJDEP GWQS
- ☐ NJDEP SRS
- ☐ NJDEP SPLP
- ☐ Other (specify):

Cooler Temperature

3.0

11) Sampler (print name):

Date:

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.

Additional Notes

ATTACHMENT 4

BACKFILL MATERIAL CERTIFICATION



Accredited Analytical Resources, LLC.

14 January 2015

AAR Work Order: 1500027

Bill Maddox
MADDOX MATERIALS
323 Main Street
Spotswood, NJ 08884
RE: Fred McDowell Inc. Schoolhouse Rd.

Enclosed are the results of analyses for samples received by the laboratory on 01/07/2015 15:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Daniel Miguel
Technical Director

New Jersey Certification Number 12007



MADDOX MATERIALS

323 Main Street
Spotswood NJ, 08884

Project: Fred McDowell Inc. Schoolhouse Rd.

Project Manager: Bill Maddox

Reported:

01/14/2015 14:59

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S1	1500027-01	Soil	01/07/2015 11:45	01/07/2015 15:25

Notes and Definitions

U	Analyte included in the analysis, but not detected
J	Indicates estimated value for TICs and all results when detected below the RL
D	Data reported from a dilution
B	Indicates compound found in associated blank
ND	Indicates compound analyzed for but not detected
U	Indicates compound analyzed for but not detected
dry	Sample results reported on a dry weight basis
RL	Reporting Limit
MDL	Method Detection Limit

Accredited Analytical Resources LLC

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Daniel Miguel, Technical Director

**MADDOX MATERIALS**

323 Main Street
Spotswood NJ, 08884

Project: Fred McDowell Inc. Schoolhouse Rd.

Project Manager: Bill Maddox

Reported:

01/14/2015 14:59

Methodology Summary

EPA 6010B

A 1-5 gram portion of soil is digested with nitric acid and hydrogen peroxide. The digestate is then refluxed with either nitric acid or hydrochloric acid. The basis of ICAP method is the measurement of atomic emission by an optical spectroscopy technique. The ICAP technique is specified in Method 6010B.

EPA 7471A

The mercury in the sample is reduced to the elemental state and detected by the cold vapor technique in a closed system. The analytical procedure associated with the Cold Vapor technique is derived from EPA Method 7470A.

EPA 8081/8082

A 30g portion of soil is mixed with anhydrous sodium sulfate and is serially extracted with 1:1 methylene chloride and acetone. The extract is dried and solvent/exchanged to hexane during concentration. A measured amount is injected onto a GC and the analytes are detected by an electron capture detector.

EPA 8260

An inert gas is purged through a 5g sample by EPA Method 5035. Alternatively the soil is extracted with methanol. A portion of extract is spiked into a purging vessel and purged by an inert gas. The vapor is swept through a sorbent column where the purgeables are trapped. The sorbent column is heated and back-flushed with the inert gas to desorb the purgeables onto a GC capillary column. The GC is temperature programmed to separate the purgeables which are then detected with a mass spectrometer

EPA 8270

A 30g portion of soil is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone mixture. The methylene chloride extract is dried and concentrated and a measured amount is injected onto a GC and the analytes are detected with a mass spectrometer.

EPA 9014

A representative portion of sample is weighed and placed into a cyanide distillation apparatus. The cyanide as hydrocyanic acid is released from cyanide complexes by means of a reflux-distillation operation and absorbed in a scrubber containing sodium hydroxide solution. The cyanide ion in the absorbing solution is then determined colorimetrically.

NJDEP EPH

Approximately 15 grams of sample is extracted with Methylene Chloride by Pressurized Fluid Extraction technique. The extract is then dried with sodium sulfate, concentrated and analyzed by GC-FID.

SM 2540 G

A representative 5-10 grams of solid sample is placed in a preweighed weighing dish. The sample is dried in an oven at 103-105°C for 12-24 hrs. Alternatively the constant weight of dried sample is attained for the drying period less than 12 hrs. The remaining weight of sample after drying to the original weight expressed in percentage is determined as percent solid.

Accredited Analytical Resources LLC

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Daniel Miguel, Technical Director



MADDOX MATERIALS

323 Main Street
Spotswood NJ, 08884

Project: Fred McDowell Inc. Schoolhouse Rd.

Project Manager: Bill Maddox

Reported:

01/14/2015 14:59

Client ID: S1

Lab ID: 1500027-01 (Soil)

CAS #	Analyte	Result	MDL	RL	Units	Dilution	Prepared Date	Analyzed Date/By	Method	Notes
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Accredited Analytical Resources LLC

Volatile Organic Compounds EPA Method SW846 8260

Sample Prepared by Method:EPA 5035A

107-02-8	Acrolein	ND	6.59	11.0	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
107-13-1	Acrylonitrile	ND	2.20	11.0	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
67-64-1	Acetone	2.80	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	B
75-71-8	Dichlorodifluoromethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
74-87-3	Chloromethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
75-01-4	Vinyl chloride	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
74-83-9	Bromomethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
75-00-3	Chloroethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
75-69-4	Trichlorofluoromethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
76-13-1	Freon 113	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
75-35-4	1,1-Dichloroethene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
75-15-0	Carbon disulfide	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
79-20-9	Methyl Acetate	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
75-09-2	Methylene Chloride	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
156-60-5	trans-1,2-Dichloroethene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
75-34-3	1,1-Dichloroethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
78-93-3	2-Butanone	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
156-59-4	cis-1,2-Dichloroethene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
67-66-3	Chloroform	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
74-97-5	Bromochloromethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
110-82-7	Cyclohexane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
71-55-6	1,1,1-Trichloroethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
75-65-0	t-Butyl alcohol	ND	5.49	22.0	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
56-23-5	Carbon Tetrachloride	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
107-06-2	1,2-Dichloroethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
71-43-2	Benzene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
79-01-6	Trichloroethene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U

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Daniel Miguel, Technical Director

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Project: Fred McDowell Inc. Schoolhouse Rd.

Project Manager: Bill Maddox

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01/14/2015 14:59

Client ID: S1**Lab ID: 1500027-01 (Soil)**

CAS #	Analyte	Result	MDL	RL	Units	Dilution	Prepared Date	Analyzed Date/By	Method	Notes
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Accredited Analytical Resources LLC**Volatile Organic Compounds EPA Method SW846 8260**

108-87-2	Methylcyclohexane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
78-87-5	1,2-Dichloropropane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
75-27-4	Bromodichloromethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
10061-01-5	cis-1,3-Dichloropropene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
108-88-3	Toluene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
79-00-5	1,1,2-Trichloroethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
108-10-1	4-Methyl-2-pentanone	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
106-93-4	1,2-Dibromoethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
591-78-6	2-Hexanone	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
127-18-4	Tetrachloroethene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
124-48-1	Dibromochloromethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
100-41-4	Ethylbenzene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
108-90-7	Chlorobenzene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
108-38-3/106-4m,p-Xylenes		ND	2.20	4.39	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
95-47-6	o-Xylene	ND	2.20	4.39	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
100-42-5	Styrene	ND	1.10	4.39	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
75-25-2	Bromoform	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
98-82-8	Isopropylbenzene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
541-73-1	1,3-Dichlorobenzene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
106-46-7	1,4-Dichlorobenzene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
95-50-1	1,2-Dichlorobenzene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
120-82-1	1,2,4-Trichlorobenzene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
87-61-6	1,2,3-Trichlorobenzene	ND	1.10	2.20	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
1634-04-4	Methyl tert-Butyl Ether	ND	2.20	4.39	ug/kg dry	1	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	U
Surrogate: 1,2-Dichloroethane-d4				99 %	70-121		01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B	

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Volatile Organic Compounds EPA Method SW846 8260

Surrogate: Toluene-d8	102 %	81-117	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B
Surrogate: Bromofluorobenzene	103 %	74-121	01/10/15 21:14	01/10/15 21:14/SCS	EPA 8260B

Semivolatile Organic Compounds EPA Method SW846 8270

Sample Prepared by Method:EPA 3550B GCMS

62-75-9	N-Nitrosodimethylamine	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
100-52-7	Benzaldehyde	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
108-95-2	Phenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
111-44-4	bis(2-chloroethyl)ether	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
95-57-8	2-Chlorophenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
95-48-7	2-Methylphenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
39638-32-9	bis(2-chloroisopropyl)ether	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
98-86-2	Acetophenone	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
106-44-5	3 & 4-Methylphenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
621-64-7	N-Nitroso-di-n-propylamine	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
67-72-1	Hexachloroethane	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
98-95-3	Nitrobenzene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
78-59-1	Isophorone	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
88-75-5	2-Nitrophenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
105-67-9	2,4-Dimethylphenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
111-91-1	bis(2-chloroethoxy)methane	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
120-83-2	2,4-Dichlorophenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
91-20-3	Naphthalene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
106-47-8	4-Chloroaniline	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
87-68-3	Hexachlorobutadiene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
105-60-2	Caprolactam	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
59-50-7	4-Chloro-3-methylphenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
91-57-6	2-Methylnaphthylene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U

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Semivolatile Organic Compounds EPA Method SW846 8270

77-47-4	Hexachlorocyclopentadiene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
88-06-2	2,4,6-Trichlorophenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
95-95-4	2,4,5-Trichlorophenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
91-58-7	2-Chloronaphthalene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
92-52-4	1,1-Biphenyl	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
88-74-4	2-Nitroaniline	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
131-11-3	Dimethylphthalate	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
208-96-8	Acenaphthylene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
99-09-2	3-Nitroaniline	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
83-32-9	Acenaphthene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
51-28-5	2,4-Dinitrophenol	ND	36.6	366	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
100-02-7	4-Nitrophenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
132-64-9	Dibenzofuran	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
606-20-2	2,6-Dinitrotoluene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
121-14-2	2,4-Dinitrotoluene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
58-90-2	2,3,4,6-Tetrachlorophenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
84-66-2	Diethyl phthalate	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
7005-72-3	4-Chlorophenyl-phenylether	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
86-73-7	Fluorene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
100-01-6	4-Nitroaniline	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
534-52-1	4,6-Dinitro-2-methylphenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
86-74-8	Carbazole	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
86-30-6	N-Nitrosodiphenylamine	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
122-66-7	1,2-Diphenylhydrazine	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
101-55-3	4-Bromophenyl-phenylether	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
1912-24-9	Atrazine	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
118-74-1	Hexachlorobenzene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
87-86-5	Pentachlorophenol	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
85-01-8	Phenanthrene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U

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Semivolatile Organic Compounds EPA Method SW846 8270

120-12-7	Anthracene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
84-74-2	Di-n-butyl phthalate	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
206-44-0	Fluoranthene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
92-87-5	Benzidine	ND	91.1	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
129-00-0	Pyrene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
85-68-7	Butylbenzylphthalate	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
91-94-1	3,3'-Dichlorobenzidine	ND	91.1	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
56-55-3	Benzo[a]anthracene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
117-81-7	bis(2-ethylhexyl)phthalate	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
218-01-9	Chrysene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
117-84-0	Di-n-octyl phthalate	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
205-99-2	Benzo[b]fluoranthene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
207-08-9	Benzo[k]fluoranthene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
50-32-8	Benzo[a]pyrene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
53-70-3	Dibenzo(a,h)anthracene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U
191-24-2	Benzo[ghi]perylene	ND	36.6	183	ug/kg dry	1	01/08/15 08:55	01/08/15 15:58/JMM	EPA 8270C	U

Surrogate: 2-Fluorophenol 80 % 25-121 01/08/15 08:55 01/08/15 15:58/JMM EPA 8270C

Surrogate: Phenol-d5 94 % 24-113 01/08/15 08:55 01/08/15 15:58/JMM EPA 8270C

Surrogate: Nitrobenzene-d5 69 % 23-120 01/08/15 08:55 01/08/15 15:58/JMM EPA 8270C

Surrogate: 2-Fluorobiphenyl 80 % 30-115 01/08/15 08:55 01/08/15 15:58/JMM EPA 8270C

Surrogate: 2,4,6-Tribromophenol 108 % 19-122 01/08/15 08:55 01/08/15 15:58/JMM EPA 8270C

Surrogate: Terphenyl-d14 78 % 18-137 01/08/15 08:55 01/08/15 15:58/JMM EPA 8270C

EPA Method SW846 8081/8082

Sample Prepared by Method:EPA 3550B

319-84-6	alpha-BHC	ND	0.724	0.724	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
319-85-7	beta-BHC	ND	0.724	0.724	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
319-86-8	delta-BHC	ND	0.724	0.724	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U

Accredited Analytical Resources LLC

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Daniel Miguel, Technical Director

**MADDOX MATERIALS**323 Main Street
Spotswood NJ, 08884

Project: Fred McDowell Inc. Schoolhouse Rd.

Project Manager: Bill Maddox

Reported:

01/14/2015 14:59

Client ID: S1**Lab ID: 1500027-01 (Soil)**

CAS #	Analyte	Result	MDL	RL	Units	Dilution	Prepared Date	Analyzed Date/By	Method	Notes
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Accredited Analytical Resources LLC**EPA Method SW846 8081/8082**

58-89-9	gamma-BHC [Lindane]	ND	0.724	0.724	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
76-44-8	Heptachlor	ND	0.724	0.724	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
309-00-2	Aldrin	ND	0.724	0.724	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
1024-57-3	Heptachlor Epoxide	ND	0.724	0.724	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
959-98-8	Endosulfan I	ND	0.724	0.724	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
60-57-1	Dieldrin	ND	1.46	1.46	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
72-55-9	4,4'-DDE	ND	1.46	1.46	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
72-20-8	Endrin	ND	1.46	1.46	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
33213-65-9	Endosulfan II	ND	1.46	1.46	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
72-54-8	4,4'-DDD	ND	1.46	1.46	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
1031-07-8	Endosulfan sulfate	ND	1.46	1.46	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
50-29-3	4,4'-DDT	ND	1.46	1.46	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
72-43-5	Methoxychlor	ND	7.31	7.31	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
53494-70-5	Endrin ketone	ND	1.46	1.46	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
7421-93-4	Endrin aldehyde	ND	1.46	1.46	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
5103-71-9	alpha-Chlordane	ND	0.724	0.724	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
5566-34-7	gamma-Chlordane	ND	0.724	0.724	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
8001-35-2	Toxaphene	ND	36.6	36.6	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
12674-11-2	Aroclor-1016	ND	18.2	36.6	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
11104-28-2	Aroclor-1221	ND	18.2	36.6	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
11141-16-5	Aroclor-1232	ND	18.2	36.6	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
53469-21-9	Aroclor-1242	ND	18.2	36.6	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
12672-29-6	Aroclor-1248	ND	18.2	36.6	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
11097-69-1	Aroclor-1254	ND	18.2	36.6	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
11096-82-5	Aroclor-1260	ND	18.2	36.6	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
37324-23-5	Aroclor-1262	ND	18.2	36.6	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U
11100-14-4	Aroclor-1268	ND	18.2	36.6	ug/kg dry	1	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082	U

Surrogate: Tetrachloro-m-xylene

77.7 % 30-150

01/08/15 05:50

01/09/15 15:26/JAM

EPA 8081A/8082

Accredited Analytical Resources LLC

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Daniel Miguel, Technical Director



MADDOX MATERIALS

323 Main Street
Spotswood NJ, 08884

Project: Fred McDowell Inc. Schoolhouse Rd.

Project Manager: Bill Maddox

Reported:

01/14/2015 14:59

Client ID: S1

Lab ID: 1500027-01 (Soil)

CAS #	Analyte	Result	MDL	RL	Units	Dilution	Prepared Date	Analyzed Date/By	Method	Notes
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Accredited Analytical Resources LLC

EPA Method SW846 8081/8082

Surrogate: Tetrachloro-m-xylene	91.0 %	30-150	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082
Surrogate: Decachlorobiphenyl	88.3 %	30-150	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082
Surrogate: Decachlorobiphenyl	97.5 %	30-150	01/08/15 05:50	01/09/15 15:26/JAM	EPA 8081A/8082

Total Metals by EPA Method SW846 6010B

Sample Prepared by Method:EPA 3050B

7429-90-5	Aluminum	919	22.0	22.0	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	
7440-36-0	Antimony	ND	4.39	4.39	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-38-2	Arsenic	ND	1.10	1.10	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-39-3	Barium	ND	22.0	22.0	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-41-7	Beryllium	ND	0.549	0.549	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-43-9	Cadmium	ND	0.549	0.549	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-70-2	Calcium	ND	27.4	27.4	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-47-3	Chromium	3.10	2.20	2.20	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	
7440-48-4	Cobalt	ND	5.49	5.49	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-50-8	Copper	ND	3.29	3.29	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7439-89-6	Iron	5560	27.4	27.4	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	
7439-92-1	Lead	2.67	1.10	1.10	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	
7439-95-4	Magnesium	ND	54.9	54.9	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7439-96-5	Manganese	8.49	2.20	2.20	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	
7440-02-0	Nickel	ND	4.39	4.39	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-09-7	Potassium	107	54.9	54.9	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	
7782-49-2	Selenium	ND	4.39	4.39	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-22-4	Silver	ND	1.10	1.10	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-23-5	Sodium	ND	54.9	54.9	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-28-0	Thallium	ND	1.65	3.29	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-62-2	Vanadium	ND	5.49	5.49	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U
7440-66-6	Zinc	ND	6.59	6.59	mg/kg dry	1	01/08/15 07:34	01/09/15 13:54/LIT	EPA 6010B	U

Accredited Analytical Resources LLC

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Daniel Miguel, Technical Director



MADDOX MATERIALS
323 Main Street
Spotswood NJ, 08884

Project: Fred McDowell Inc. Schoolhouse Rd.
Project Manager: Bill Maddox

Reported:
01/14/2015 14:59

Client ID: S1

Lab ID: 1500027-01 (Soil)

CAS #	Analyte	Result	MDL	RL	Units	Dilution	Prepared Date	Analyzed Date/By	Method	Notes
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Accredited Analytical Resources LLC

Total Mercury by SW846 7471

Sample Prepared by Method:EPA 7471A

7439-97-6	Mercury	ND	0.0823	0.0823	mg/kg dry	1	01/08/15 07:30	01/08/15 12:28/STM	EPA 7471A
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Wet Chemistry

Sample Prepared by Method:EPA 9010C

NA	Cyanide (total)	ND	1.10	1.10	mg/kg dry	1	01/12/15 09:23	01/12/15 16:41/NNM	EPA 9014
----	-----------------	----	------	------	-----------	---	----------------	--------------------	----------

Sample Prepared by Method:Percent Solids

NA	Percent Solids	91.1	0.100	0.100	%	1	01/09/15 10:30	01/09/15 14:38/CLD	SM 2540 G
----	----------------	------	-------	-------	---	---	----------------	--------------------	-----------

Extractable Petroleum Hydrocarbons by NJ EPH

Sample Prepared by Method:EPA 3545A

NA	Extractable Petroleum Hydrocarbons (EPH)	ND	17.6	17.6	mg/kg dry	1	01/09/15 09:02	01/09/15 13:38/MS	NJDEP EPH	U
----	--	----	------	------	-----------	---	----------------	-------------------	-----------	---

Surrogate: o-Terphenyl

74.1 % 40-140 01/09/15 09:02 01/09/15 13:38/MS NJDEP EPH

Surrogate: 1-Chlorooctadecane

83.5 % 40-140 01/09/15 09:02 01/09/15 13:38/MS NJDEP EPH

Accredited Analytical Resources LLC

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Daniel Miguel, Technical Director

20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE (732) 969-6112 FAX (732) 541-1383
accreditedanalytical.com

CLIENT	Maddox Materials Inc		
ADDRESS	323 Main Street		
CITY	Spotswood		
STATE	NJ	ZIP	08884

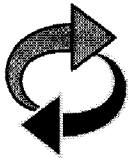
STATE AGENCY NJ NY PA CT DE OTHER _____	
PROJECT	Fred McDowell Inc Schoolhouse Rd
CONTACT	B. J. Maddox
PHONE	732 251-0054
FAX	
E-MAIL	jr.madd@verizon.net

[illegible]

TURNAROUND TIME	5 Days Spread Sheet		(IF BLANK, STD. 3 WEEKS)
RECIEVED W/ ICE? YES ☒ NO ☐	TEMPERATURE: 40C NISCC + IPGW		
QA/QC DELIVERABLES (circle one)	STD	NJ REDUCED	NJ FULL OTHER : NYASP Cat. A NYASP Cat. B
PRESERVATIVE CODE: 1=HCL 2=HNO ₃ 3=H ₂ SO ₄ 4=Na ₂ S ₂ O ₃ 5=NaOH 6=MeOH 7=OTHER			

RELINQUISHED BY:		RECEIVED BY:		ORGANIZATION	DATE	TIME	REASON
PRINT	SIGN	PRINT	SIGN				
William Muddar	<i>[Signature]</i>	K. MUNIZ	<i>[Signature]</i>	AAR	11/15	1525	Analysis

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: <u>William Maddox</u>		SIGN: <u>W Maddox</u>	
	<u>Rosario Trucking / Fred McDowell Inc</u>	AAR QUOTE #	
COMMENTS	<u>Block 930 Lot 1</u>	AAR CASE #	<u>1500027</u>
	<u>Monmouth County</u>	P.O. #	



Maddox Materials, LLC
Quality Aggregates & Construction Soils

February 9, 2015

AWT Environmental
PO Box 128
Sayreville, NJ 08871

Attn: Mario Postorino
Phone: 732-613-1660
Fax: 732-613-1536

Project: Clean Fill

To whom it may concern:

Please be advised the sand Maddox Materials llc supplies is a clean virgin material originating from the Fred McDowell sand and gravel property. The mining permit is #003911 Rosano Trucking Schoolhouse Rd., Block 930, Lot 1, Township of Wall, Monmouth County NJ. The entrance to this location is Route 33 Wall Township which is referenced on our certified weight ticket used during delivery.

The site was historically a wooded lot and is now being used as a registered mining operation. To the best of our knowledge, the material is not contaminated pursuant to any applicable remediation standards. Our belief is based on the fact that this site has been tested by Accredited Analytical Resources, LLC work order# 1500027 and found to be acceptable for residential development.

If you need any additional information please contact me at 732-251-0054.

Respectfully Submitted,

William Maddox
Member

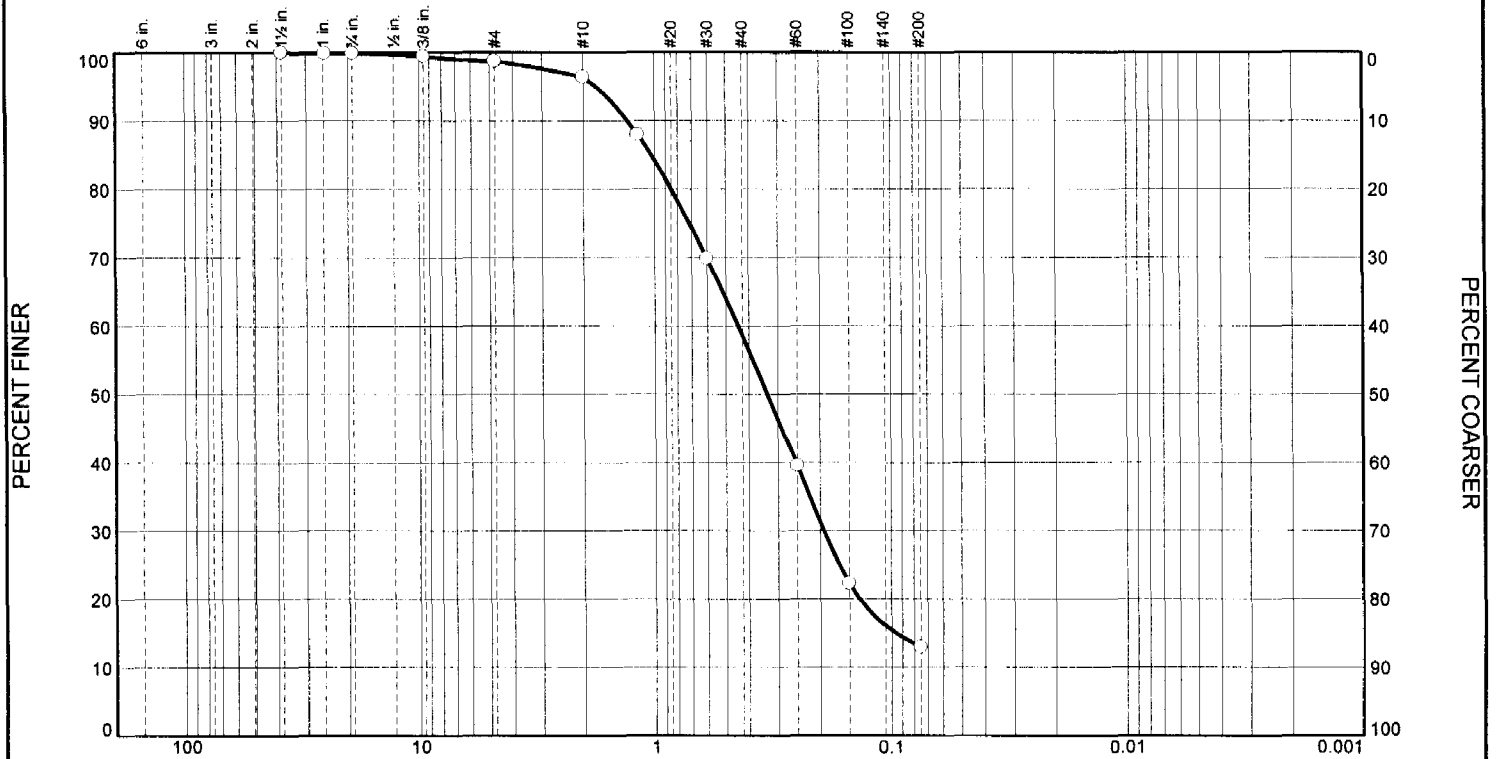


DATE: 1/15

[illegible]

* SEE TEST CURVES

Particle Size Distribution Report



GRAIN SIZE - mm.

% +3"	% Gravel			% Sand			% Fines
	Coarse	Medium	Fine	Coarse	Medium	Fine	
0.0	0.1	0.5	3.0	26.6	30.3	26.5	13.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	99.9		
.75	99.9		
.375	99.4		
#4	98.7		
#10	96.4		
#16	88.0		
#30	69.8		
#60	39.5		
#100	22.3		
#200	13.0		

* (no specification provided)

Material Description		
Orange Brown cmf SAND, little- Silt, trace f Gravel		
PL= NP	Atterberg Limits LL= NP	PI= NP
D ₉₀ = 1.3023	Coefficients D ₈₅ = 1.0353	D ₆₀ = 0.4434
D ₅₀ = 0.3327	D ₃₀ = 0.1929	D ₁₅ = 0.0961
D ₁₀ =	C _u =	C _c =
USCS= SM	Classification AASHTO=	A-2-4(0)
Remarks		

Location: Rosano Sand
Sample Number: S-119

Date: 1/21/15

FRENCH & PARRELLO ASSOCIATES, P.A.
CONSULTING ENGINEERS
Wall, NJ

Client: Maddox Materials, LLC
Project: Maddox

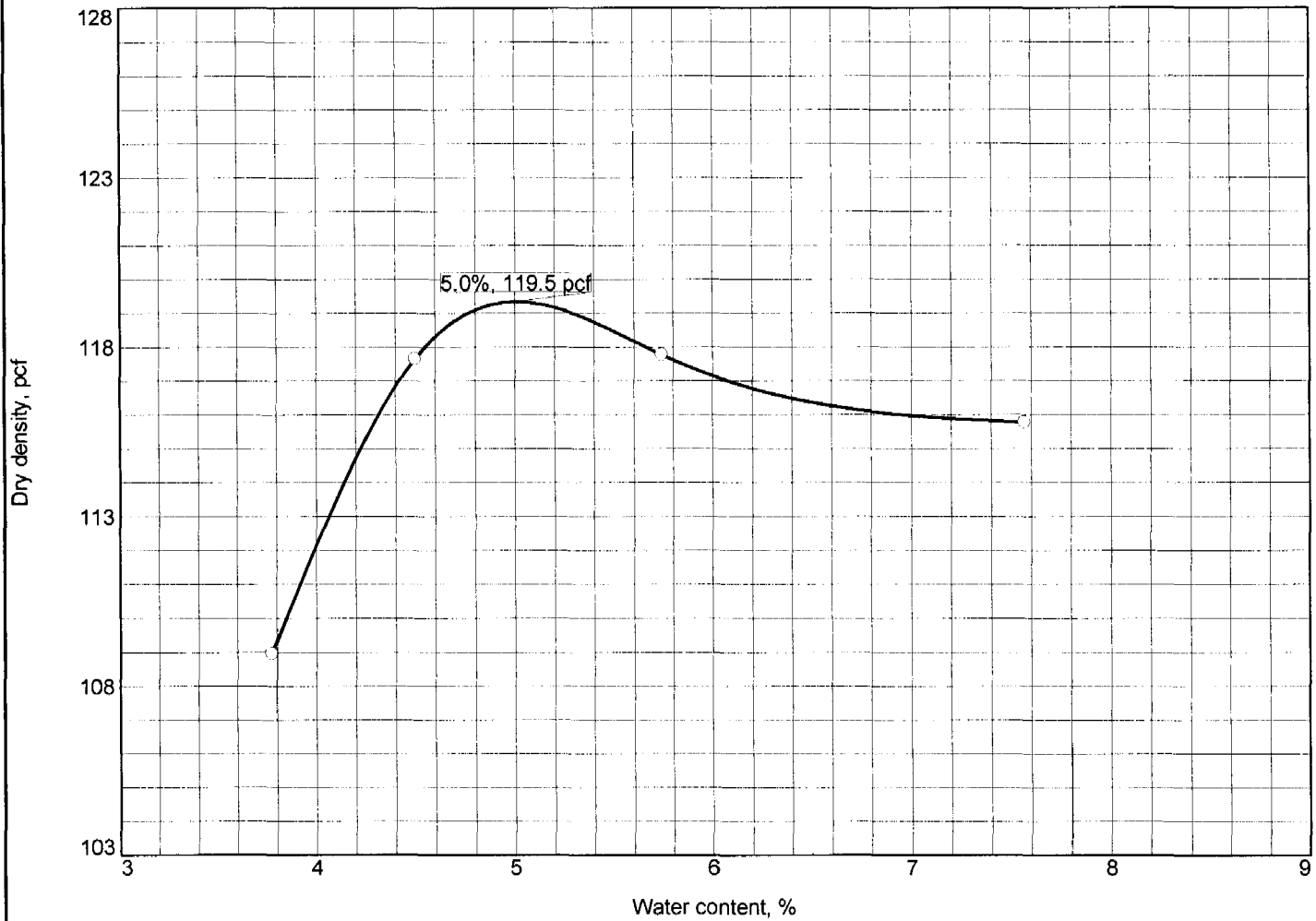
Project No: 07L001A

Figure

Tested By: MP

Checked By: RT

COMPACTION TEST REPORT



Test specification: ASTM D 1557-07 Method C Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
	SM	A-2-4(0)	9		NP	NP	0.1	13.0

TEST RESULTS

Maximum dry density = 119.5 pcf

Optimum moisture = 5.0 %

MATERIAL DESCRIPTION

Orange Brown cmf SAND, little- Silt, trace f
Gravel

Project No. 07L001A Client: Maddox Materials, LLC

Project: Maddox

Location: Rosano Sand Sample Number: S-119

FRENCH & PARRELLO ASSOCIATES, P.A.
CONSULTING ENGINEERS
Wall, NJ

Remarks:

Figure

Tested By: MP Checked By: RT

ATTACHMENT 5
WASTE DISPOSAL INFORMATION

**FREEHOLD CARTAGE INC.**P.O. BOX 5010 • FREEHOLD, NJ 07728-5010
(732) 462-1001 • FAX (732) 308-0924**BILL OF LADING**
FCI EPA ID NO. NJD054126164**S 590773**350 Pigeon Point Road
New Castle, DE 19720
Phone: (302) 658-2005
Fax: (302) 658-6229175 Bartow Mun. Airport
Bartow, FL 33830
Phone: (863) 533-4599
Fax: (863) 533-16135533 Dynham Road
Maple Heights, OH 44137
Phone: (330) 835-3473
Fax: (330) 835-3732108 Monahan Avenue
Dunmore, PA 18512
Phone: (570) 342-7232
Fax: (570) 342-7367132 Myrtle Beach Hwy
Sumter, SC 29153
Phone: (803) 773-2611
Fax: (803) 773-2942

SHIPPER NAME/ADDRESS US Army Ft. Monmouth Occupant WS		PHONE (AREA CODE) TRACTOR 800		TRAILER 24445		APPOINTMENT TIME :	
FCI REP. LOADING (PRINT) D. W. H.	PROCEDURE Transfer	EQUIP. SPOTTED	EQUIP. REMOVED 0714	TIME AT SHIPPER 14:30		(MILITARY TIME ONLY) 15:30	
COMMENTS OR DELAYS AT SHIPPER				ARRIVAL TIME		DEPARTURE TIME	
				EQUIPMENT USED			

BROKER:		MANIFEST / DOCUMENT NO: 01185257057K	
PO #:	WO #:	1117613	

(X) HM	PROPER U.S. D.O.T. SHIPPING NAME	U.S. D.O.T. HAZARDOUS CLASS	NA/UN NO	PACKING GROUP	NO. CONT.	CONT TYPE	NET QUANTITY	UNIT MEASURE	WASTE NO.	FORM
1	See Manifest	-	-	-	1	CM	30	YLS	-	5
2										
3										

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER.

SHIPPER'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor.

PLEASE PRINT NAME/TITLE William R Colvin	SHIPPER'S SIGNATURE William R Colvin for US Army I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT.	DATE LOADED 8/13/16 MO. DAY YR.
--	---	--

CONSIGNEE NAME/ADDRESS White Supersal Bellefonte, PA		PHONE (AREA CODE) TRACTOR 595		TRAILER 4445		APPOINTMENT TIME :	
FCI REP. UNLOADING (PRINT) D. W. H.	PROCEDURE Dump	EQUIP. SPOTTED	EQUIP. REMOVED 0714	TIME AT CONSIGNEE 16:30		(MILITARY TIME ONLY) 18:15	
COMMENTS OR DELAYS AT CONSIGNEE				ARRIVAL TIME		DEPARTURE TIME	
				EQUIPMENT USED			

PLEASE PRINT NAME/TITLE	CONSIGNEE SIGNATURE X [Signature]	DATE UNLOADED 8/14/16 MO. DAY YR.
-------------------------	---	--

AR H-0257	MD HWH-167	MO H-1490	OH UPW-0190713-OH	TX 40705
CT CT-HW-307	2001-OPV-2335	ND WH-429	OK UPW-0190713-OH	WI 11602
DE DE-HW-203	ME ME-HWT-47	NH TNH-0047	ONTARIO, CANADA A 840943	WV UPW-0190713-OH
DE-SW-203	ME-WOT-47	NJ S-2265	PA PA-AH-0067	
IL UPW-0190713-OH	MI UPW-0190713-OH	15939	QUEBEC, CANADA QC-6ML-047	
MA MA-294	MN UPW-0190713-OH	NY NJ-113	RI RI-535	

White - FCI Original
Yellow - FCI Billing
Blue - FCI Office/Customer
Green - Retained by TSDF
Gold - Retained by Generator**S 590773**

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NJ321002F567	2. Page 1 of 2	3. Emergency Response Phone NJ 813 1234	4. Manifest Tracking Number 011852570 JJK			
		5. Generator's Name and Mailing Address US Dept of Army-Fort Monmouth - Main Post P.O. Box 148 Oceanport, NJ 07757 Generator's Phone: _____						
Generator's Site Address (if different than mailing address) Main Post Fort Monmouth, NJ 07703								
6. Transporter 1 Company Name Freehold Cartage Inc. (FCI)				U.S. EPA ID Number NJ01054126164				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address Wayne Disposal, Inc. Site #2 Larkfield 49350 N 194 Service Drive Bellefonte, MI 48811 Facility's Phone: 800-592-5489				U.S. EPA ID Number MI10-180000033				
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			
	X	1. RCL UN 3432, Polychlorinated biphenyls, Solid Mixture, Class B, PG III, ERO# 1/1		XXI	CM	18,000	kg	PCB1
		2. 11/7613						
		3.						
		4.						
14. Special Handling Instructions and Additional Information 11541185WDL - PCB Soil & Concrete AWT PO # 14-85 MP Truck # 895 Trailer # 4445 Box # 0714								
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/Offor's Printed/Typed Name William R. Colaro				Signature <i>William R. Colaro</i>		Month Day Year 08 03 16		
TRANSPORTER	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 1 Printed/Typed Name Freehold Cartage Inc.				Signature <i>[Signature]</i>		Month Day Year 08 03 16	
	Transporter 2 Printed/Typed Name				Signature		Month Day Year	
DESIGNATED FACILITY	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	
	Facility's Phone: _____							
	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. PCB		2.		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]				Signature <i>[Signature]</i>		Month Day Year 08 11 16		

Wayne Disposal, Inc.
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

AWT ENVIRONMENTAL SERVICES, INC.
ATTN: ACCOUNTS PAYABLE
P.O. BOX 128
SAYERVILLE, NJ 08871

Receipt ID: 1266872
EQ Account #: 1070
Manifest / BOL: 011852570JJK
Transporter: FCI
Date: 08/04/2016
Time In: 4:38 PM
Time Out: 5:54 PM

Line	Description Generator	Qty. Unit
1 - 1	I150185WDI - PCB Concrete	21.050 TONS
	Hazardous Surcharge Ton	21.050 TONS
	NJ3210020597 US DEPT. OF ARMY-FORT MONMOUTH MAIN POST	
	Gross: 79,020 Tare: 36,920 Net: 42,100	
2	Wayne Disposal Host Community Agreement Royalty Fee	21.050 TONS
	NJ3210020597 US DEPT. OF ARMY-FORT MONMOUTH MAIN POST	
	Gross: 79,020 Tare: 36,920 Net: 42,100	



FREEHOLD CARTAGE INC.
P.O. BOX 5010 • FREEHOLD, NJ 07728-5010
(732) 462-1001 • FAX (732) 308-0924

BILL OF LADING
FCI EPA ID NO. NJD054126164
S 590931

350 Pigeon Point Road
New Castle, DE 19720
Phone: (302) 658-2005
Fax: (302) 658-6229

175 Bartow Mun. Airport
Bartow, FL 33830
Phone: (863) 533-4599
Fax: (863) 533-1613

5533 Dunham Road
Maple Heights, OH 44137
Phone: (330) 835-3473
Fax: (330) 835-3732

108 Monahan Avenue
Dunmore, PA 18512
Phone: (570) 342-7232
Fax: (570) 342-7367

132 Myrtle Beach Hwy
Sumter, SC 29153
Phone: (803) 773-2611
Fax: (803) 773-2942

SHIPPER NAME/ADDRESS <i>FCI Monahan</i>		PHONE (AREA CODE)			
<i>CCP/PA/PA NJ</i>		TRACTOR <i>796</i>	TRAILER <i>4105</i>	APPOINTMENT TIME :	
FCI REP. LOADING (PRINT) <i>Robert Maurer</i>	PROCEDURE <i>Removal</i>	EQUIP. SPOTTED <i>—</i>	EQUIP. REMOVED <i>2450</i>	TIME AT SHIPPER <i>12:00</i>	(MILITARY TIME ONLY) <i>13:30</i>
COMMENTS OR DELAYS AT SHIPPER <i>Lead Transferred (941060501) (RM)</i>				EQUIPMENT USED <i>0504</i>	

BROKER:		MANIFEST / DOCUMENT NO.									
PO#:		WO#:		<i>1116968</i>							
(X) HM	PROPER U.S. D.O.T. SHIPPING NAME	U.S. D.O.T. HAZARDOUS CLASS	NA/UN/NO.	PACKING GROUP	NO. CONT.	CONT. TYPE	NET QUANTITY	UNIT MEASURE	WASTE NO.	FORM	
<i>1</i>	<i>See Manifest</i>	<i>9</i>	<i>34130</i>	<i>III</i>	<i>1</i>	<i>CM</i>	<i>30</i>	<i>Y</i>			
<i>2</i>											
<i>3</i>											

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER.

SHIPPER'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor.

PLEASE PRINT NAME/TITLE <i>William E. Cullen</i>	SHIPPER'S SIGNATURE <i>X William E. Cullen for US Army</i> I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT	DATE LOADED <i>8/3/16</i> MO. DAY YR.
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CONSIGNEE NAME/ADDRESS <i>William E. Cullen</i>		PHONE (AREA CODE)			
<i>Bellville MA</i>		TRACTOR <i>796</i>	TRAILER <i>4105</i>	APPOINTMENT TIME :	
FCI REP. UNLOADING (PRINT) <i>Ken Maurer</i>	PROCEDURE <i>Drum</i>	EQUIP. SPOTTED <i>—</i>	EQUIP. REMOVED <i>0504</i>	TIME AT CONSIGNEE <i>13:30</i>	(MILITARY TIME ONLY) <i>15:—</i>
COMMENTS OR DELAYS AT CONSIGNEE				EQUIPMENT USED	
PLEASE PRINT NAME/TITLE		CONSIGNEE SIGNATURE <i>X [Signature]</i>		DATE UNLOADED <i>8/9/16</i> MO. DAY YR.	

AR H-0257	MD HWH-167	MO H-1490	OH UPW-0190713-OH	TX 40705
CT CT-HW-307	2001-OPV-2335	ND WH-429	OK UPW-0190713-OH	WI 11602
DE DE-HW-203	ME ME-HWT-47	NH TNH-0047	ONTARIO, CANADA A 840943	WV UPW-0190713-OH
DE-SW-203	ME-WOT-47	NJ S-2265	PA PA-AH-0067	
IL UPW-0190713-OH	MI UPW-0190713-OH	15939	QUEBEC, CANADA QC-6ML-047	
MA MA-294	MN UPW-0190713-OH	NY NJ-113	RI RI-535	

White - FCI Original
Yellow - FCI Billing
Blue - FCI Office/Customer
Green - Retained by TSDF
Gold - Retained by Generator

S 590931

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NJ3240020867	2. Page 1 of 1	3. Emergency Response Phone 732 613 1830	4. Manifest Tracking Number 011852565 JJK
5. Generator's Name and Mailing Address US Dept of Army-Fort Monmouth - Main Post P O Box 143 Fort Monmouth, NJ 07707			Generator's Site Address (if different than mailing address) Main Post Fort Monmouth, NJ 07707		
Generator's Phone: _____					
6. Transporter 1 Company Name Freehold Cartage Inc. (FCI)				U.S. EPA ID Number NJD 054126164	
7. Transporter 2 Company Name NA				U.S. EPA ID Number NA	
8. Designated Facility Name and Site Address Wynne Disposal, Inc. 400 W 2nd and 1st 400 W 2nd Service Drive Belleville, NJ 08003 800-552-2400				U.S. EPA ID Number MTX004000213	
Facility's Phone: _____					
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
			No.	Type	12. Unit Wt/Vol
	1.	1. POLYCHLORINATED BIPHENYLS, LIQUID, MIXTURE, 1:1, 1:1, PCBs III, EPCW 171	XXI	171	30,000 Kg
	2.				
	3.				
4.					
14. Special Handling Instructions and Additional Information 1150180000-PCB coils & concrete AWT PO # 14485 RPT Truck # 796, Trailer # 405 Box # 9450 00001 Rm					
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/Offor's Printed/Typed Name William C. [Signature]		Signature [Signature]		Month Day Year 08 03 16	
INTL	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____				
	17. Transporter Acknowledgment of Receipt of Materials				
TRANSPORTER	Transporter 1 Printed/Typed Name K. [Signature]		Signature [Signature]		Month Day Year 08 03 16
	Transporter 2 Printed/Typed Name		Signature		Month Day Year
DESIGNATED FACILITY	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				
	Facility's Phone: _____				
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. PLB		2.		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]		Signature [Signature]		Month Day Year 08 03 16	

Wayne Disposal, Inc.
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

AWT ENVIRONMENTAL SERVICES, INC
ATTN: ACCOUNTS PAYABLE
P.O. BOX 128
SAYERVILLE, NJ 08871

Receipt ID: 1267046
EQ Account #: 1070
Manifest / BOL: 011852565JJK
Transporter: FCI
Date: 08/09/2016
Time In: 1:42 PM
Time Out: 2:42 PM

Line	Description Generator	Qty.	Unit
1 - 1	1150185WDI - PCB Concrete	21.020	TONS
	Hazardous Surcharge Ton	21.020	TONS
	NJ3210020597 US DEPT. OF ARMY-FORT MONMOUTH MAIN POST		
	Gross: 78,600 Tare: 36,560 Net: 42,040		
2	Wayne Disposal Host Community Agreement Royalty Fee	21.020	TONS
	NJ3210020597 US DEPT. OF ARMY-FORT MONMOUTH MAIN POST		
	Gross: 78,600 Tare: 36,560 Net: 42,040		

**FREEHOLD CARTAGE INC.**P.O. BOX 5010 • FREEHOLD, NJ 07728-5010
(732) 462-1001 • FAX (732) 308-0924**BILL OF LADING**
FCI EPA ID NO. NJD054126164**S 590772**350 Pigeon Point Road
New Castle, DE 19720
Phone: (302) 658-2005
Fax: (302) 658-6229175 Bartow Mun. Airport
Bartow, FL 33830
Phone: (863) 533-4599
Fax: (863) 533-16135533 Dunham Road
Maple Heights, OH 44137
Phone: (330) 835-3473
Fax: (330) 835-3732108 Monahan Avenue
Dunmore, PA 18512
Phone: (570) 342-7232
Fax: (570) 342-7367132 Myrtle Beach Hwy
Sumter, SC 29153
Phone: (803) 773-2611
Fax: (803) 773-2942

SHIPPER NAME/ADDRESS <i>US Army / Fort Monmouth Orangetown, NJ</i>		PHONE (AREA CODE) TRACTOR <i>855</i> TRAILER <i>9445</i>		APPOINTMENT TIME : :	
FCI REP. LOADING (PRINT) <i>D. Wolk</i>	PROCEDURE <i>Removal</i>	EQUIP. SPOTTED	EQUIP. REMOVED <i>0605</i>	TIME AT SHIPPER <i>14:15</i>	(MILITARY TIME ONLY) <i>15:45</i>
COMMENTS OR DELAYS AT SHIPPER				ARRIVAL TIME DEPARTURE TIME	
				EQUIPMENT USED	

BROKER:

PO#:

WO#: *1116839***MANIFEST / DOCUMENT NO.** *01155 256434*

(X) HM	PROPER U.S. D.O.T. SHIPPING NAME	U.S. D.O.T. HAZARDOUS CLASS	NA/UN/NO.	PACKING GROUP	NO. CONT.	CONT TYPE	NET QUANTITY	UNIT MEASURE	WASTE NO.	FORM
1	<i>See Manifest</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>1</i>	<i>24</i>	<i>30</i>	<i>HD</i>	<i>-</i>	<i>5</i>
2										
3										

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER.

SHIPPER'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor.

PLEASE PRINT NAME/TITLE <i>William R. Colvin</i>	SHIPPER'S SIGNATURE <i>X William R. Colvin Gen US Army</i> I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT	DATE LOADED <i>5/1/16</i> MO. DAY YR.
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CONSIGNEE NAME/ADDRESS <i>Waste Services Bartow, FL</i>		PHONE (AREA CODE) TRACTOR <i>855</i> TRAILER <i>372</i>		APPOINTMENT TIME : :	
FCI REP. UNLOADING (PRINT) <i>D. Wolk</i>	PROCEDURE <i>Drop</i>	EQUIP. SPOTTED	EQUIP. REMOVED <i>0605</i>	TIME AT CONSIGNEE <i>15:00</i>	(MILITARY TIME ONLY) <i>16:15</i>
COMMENTS OR DELAYS AT CONSIGNEE				ARRIVAL TIME DEPARTURE TIME	
				EQUIPMENT USED	

PLEASE PRINT NAME/TITLE	CONSIGNEE SIGNATURE <i>X [Signature]</i>	DATE UNLOADED <i>5/1/16</i> MO. DAY YR.
-------------------------	---	---

AR H-0257	MD HWH-167	MO H-1490	OH UPW-0190713-OH	TX 40705
CT CT-HW-307	2001-OPV-2335	ND WH-429	OK UPW-0190713-OH	WI 11602
DE DE-HW-203	ME ME-HWT-47	NH TNH-0047	ONTARIO, CANADA A 840943	WV UPW-0190713-OH
DE-SW-203	ME-WOT-47	NJ S-2265	PA PA-AH-0067	
IL UPW-0190713-OH	MI UPW-0190713-OH	15939	QUEBEC, CANADA QC-6ML-047	
MA MA-294	MN UPW-0190713-OH	NY NJ-113	RI RI-535	

White - FCI Original
Yellow - FCI Billing
Blue - FCI Office/Customer
Green - Retained by TSDF
Gold - Retained by Generator

S 590772

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NJ3210020597	2. Page 1 of 1	3. Emergency Response Phone 732-612-1691	4. Manifest Tracking Number 011852564 JJK	
5. Generator's Name and Mailing Address US Dept of Army Fort Monmouth - Main Post - P.O. Box 148 Oceanport, NJ 07757			Generator's Site Address (if different than mailing address) Main Post Fort Monmouth, NJ 07703			
6. Transporter 1 Company Name Freehold Cartage Inc.			U.S. EPA ID Number NJ01 054126144			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address Wayne Industrial Inc. Site #21 Landfill 4935011 104 Service Drive Belle Mead, NJ 08502			U.S. EPA ID Number NJ01 054126144			
Facility's Phone: 609-661-5550						
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
				No.	Type	12. Unit WL/Vol.
	1.	1. RQ, UN 3077, Polychlorinated Biphenyls, Solid, Ignitable, Class 3, P001, PCBs 171		20	KG	PCB1
		Truck # 895 Box 0605				
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information 1150 HWY 1 - PCB DUMPS Concrete ASPH 10 # 1185MP Truck # 895 Box # 0605						
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/Offor's Printed/Typed Name William L. ...			Signature [Signature]		Month Day Year 12/01/12	
INT'L	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:					
	Transporter signature (for exports only):					
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials					
	Transporter 1 Printed/Typed Name			Signature		Month Day Year
	Transporter 2 Printed/Typed Name			Signature		Month Day Year
DESIGNATED FACILITY	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		
	Facility's Phone:					
	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. 116	2.	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

Wayne Disposal, Inc.
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

AWT ENVIRONMENTAL SERVICES, INC.
ATTN: ACCOUNTS PAYABLE
P.O. BOX 128
SAYERVILLE, NJ 08871

Receipt ID: 1267113
EQ Account #: 1070
Manifest / BOL: 011852564JJK
Transporter: FCI
Date: 08/10/2016
Time In: 3:22 PM
Time Out: 4:26 PM

Line	Description Generator	Qty. Unit
1 - 1	I150185WDI - PCB Concrete	20 950 TONS
	Hazardous Surcharge Ton	20 950 TONS
	NJ3210020597 US DEPT. OF ARMY-FORT MONMOUTH MAIN POST	
	Gross: 78,980 Tare: 37,080 Net: 41,900	
2	Wayne Disposal Host Community Agreement Royalty Fee	20 950 TONS
	NJ3210020597 US DEPT. OF ARMY-FORT MONMOUTH MAIN POST	
	Gross: 78,980 Tare: 37,080 Net: 41,900	



FREEHOLD CARTAGE INC.

P.O. BOX 5010 • FREEHOLD, NJ 07728-5010
(732) 462-1001 • FAX (732) 308-0924

BILL OF LADING
FCI EPA ID NO. NJD054126164

S 590953

350 Pigeon Point Road
New Castle, DE 19720
Phone: (302) 658-2005
Fax: (302) 658-6229

175 Bartow Mun. Airport
Bartow, FL 33830
Phone: (863) 533-4599
Fax: (863) 533-1613

5533 Dunham Road
Maple Heights, OH 44137
Phone: (330) 835-3473
Fax: (330) 835-3732

108 Monahan Avenue
Dunmore, PA 18512
Phone: (570) 342-7232
Fax: (570) 342-7367

132 Myrtle Beach Hwy
Sumter, SC 29153
Phone: (803) 773-2611
Fax: (803) 773-2942

SHIPPER NAME/ADDRESS <i>Full Member</i>			PHONE (AREA CODE)								
TRACTOR <i>796</i>			TRAILER <i>L105</i>			APPOINTMENT TIME _____:					
FCI REP. LOADING (PRINT) <i>Robert M...</i>		PROCEDURE <i>Removal</i>		EQUIP. SPOTTED		EQUIP. REMOVED <i>1901</i>		TIME AT SHIPPER (MILITARY TIME ONLY)			
ARRIVAL TIME		DEPARTURE TIME		COMMENTS OR DELAYS AT SHIPPER <i>Original In House - Lost by Wayne Salt House</i>		EQUIPMENT USED					
BROKER:			MANIFEST / DOCUMENT NO.								
PO#:			WO#:								
(X) HM	PROPER U.S. D.O.T. SHIPPING NAME	U.S. D.O.T. HAZARDOUS CLASS	NA/UN/NO.	PACKING GROUP	NO. CONT.	CONT. TYPE	NET QUANTITY	UNIT MEASURE	WASTE NO.	FORM	
<i>X</i>	<i>1</i>	<i>9</i>	<i>34137</i>	<i>III</i>	<i>1</i>	<i>CM</i>	<i>300</i>	<i>Y</i>			
	<i>2</i>										
	<i>3</i>										

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER.

SHIPPER'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor.

PLEASE PRINT NAME/TITLE	SHIPPER'S SIGNATURE <i>X</i>	DATE LOADED <i>8/1/16</i>
	I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT	MO. DAY YR.

CONSIGNEE NAME/ADDRESS <i>Wayne District</i>			PHONE (AREA CODE)								
TRACTOR <i>796</i>			TRAILER <i>L105</i>			APPOINTMENT TIME _____:					
FCI REP. UNLOADING (PRINT) <i>Robert M...</i>		PROCEDURE <i>Dump</i>		EQUIP. SPOTTED		EQUIP. REMOVED		TIME AT CONSIGNEE (MILITARY TIME ONLY)			
ARRIVAL TIME		DEPARTURE TIME		COMMENTS OR DELAYS AT CONSIGNEE <i>Original In House - Lost by Wayne Salt House</i>		EQUIPMENT USED					
PLEASE PRINT NAME/TITLE			CONSIGNEE SIGNATURE <i>X</i>			DATE UNLOADED <i>8/2/16</i>					
						MO. DAY YR.					

AR H-0257	MD HWH-167	MO H-1490	OH UPW-0190713-OH	TX 40705
CT CT-HW-307	2001-OPV-2335	ND WH-429	OK UPW-0190713-OH	WI 11602
DE DE-HW-203	ME ME-HWT-47	NH TNH-0047	ONTARIO, CANADA A 840943	WV UPW-0190713-OH
DE-SW-203	ME-WOT-47	NJ S-2265	PA PA-AH-0067	
IL UPW-0190713-OH	MI UPW-0190713-OH	15939	QUEBEC, CANADA QC-6ML-047	
MA MA-294	MN UPW-0190713-OH	NY NJ-113	RI RI-535	

White - FCI Original
Yellow - FCI Billing
Blue - FCI Office/Customer
Green - Retained by TSDF

S 590953

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number 1130185WDT	2. Page 1 of 1	3. Emergency Response Phone 732 613 1000	4. Manifest Tracking Number 011852563 JJK	
5. Generator's Name and Mailing Address U.S. Army Fort Monmouth, NJ 08034 Attn: 1130185WDT			Generator's Site Address (if different than mailing address) Attn: Fort Monmouth, NJ 08034			
Generator's Phone						
6. Transporter 1 Company Name Fleet Maintenance			U.S. EPA ID Number NJ D00511291001			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address 1130185WDT Fort Monmouth, NJ 08034			U.S. EPA ID Number NJ D00511291001			
Facility's Phone						
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 Wt/Vol	13. Waste Codes
		No.	Type			
1	1130185WDT POLYCHLORINATED BIPHENYL (PCB) CAS# 1336-36-3 Truck # 746	XXI	100	32.00	Kg	PCB
2						
3						
4						
14. Special Handling Instructions and Additional Information 1130185WDT-PCB Soil & Concrete AWT PO. # 14485-MP 7/05/16						
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/Offor's Printed/Typed Name William R. Colvin for US Army		Signature [Signature]		Month 08	Day 01	Year 16
16. International Shipments Transporter signature (for exports only):		☐ Import to U.S. ☐ Export from U.S.		Port of entry/exit: Date leaving U.S.:		
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Robert M. [Signature]		Signature [Signature]		Month 08	Day 01	Year 16
Transporter 2 Printed/Typed Name		Signature		Month	Day	Year
18. Discrepancy						
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection						
18b. Alternate Facility (or Generator)				Manifest Reference Number: U.S. EPA ID Number		
Facility's Phone:						
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.	2.	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]		Signature [Signature]		Month	Day	Year

Wayne Disposal, Inc.
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

AWT ENVIRONMENTAL SERVICES, INC.
ATTN: ACCOUNTS PAYABLE
P.O. BOX 128
SAYERVILLE, NJ 08871

Receipt ID: 1266731
EQ Account #: 1070
Manifest / BOL: 011852563.IJK
Transporter: FCI
Date: 08/02/2016
Time In: 8:58 AM
Time Out: 10:19 AM

Line	Description Generator	Qty. Unit
1 - 1	I150185VWDI - PCB Concrete	20 360 TONS
	Hazardous Surcharge Ton	20 350 TONS
	NJ3210020597 US DEPT. OF ARMY-FORT MONMOUTH MAIN POST	
	Gross: 78,020 Tare: 37,300 Net: 40,720	
2	Wayne Disposal Host Community Agreement Royalty Fee	20 360 TONS
	NJ3210020597 US DEPT. OF ARMY-FORT MONMOUTH MAIN POST	
	Gross: 78,020 Tare: 37,300 Net: 40,720	



FREEHOLD CARTAGE INC.

P.O. BOX 5010 • FREEHOLD, NJ 07728-5010
(732) 462-1001 • FAX (732) 308-0924BILL OF LADING
FCI EPA ID NO. NJD054126164

S 579185

350 Pigeon Point Road
New Castle, DE 19720
Phone: (302) 658-2005
Fax: (302) 658-6229175 Bartow Mun. Airport
Bartow, FL 33830
Phone: (863) 533-4599
Fax: (863) 533-16135533 Dunham Road
Maple Heights, OH 44137
Phone: (330) 835-3473
Fax: (330) 835-3732108 Monahan Avenue
Dunmore, PA 18512
Phone: (570) 342-7232
Fax: (570) 342-7367132 Myrtle Beach Hwy
Sumter, SC 29153
Phone: (803) 773-2611
Fax: (803) 773-2942

SHIPPER NAME/ADDRESS US Dept of Army - Fort Monmouth - main post PO Box 148 Fort Monmouth NJ		PHONE 732 303-1660 (AREA CODE)		S T R T M A N I F E S T	
TRACTOR 7417		TRAILER		APPOINTMENT TIME :	
FCI REP. LOADING (PRINT) K. Pecus	PROCEDURE Remove	EQUIP. SPOTTED	EQUIP. REMOVED 9741	TIME AT SHIPPER 12:15 ARRIVAL TIME	(MILITARY TIME ONLY) 12:30 DEPARTURE TIME
COMMENTS OR DELAYS AT SHIPPER				EQUIPMENT USED	

BROKER:		MANIFEST/DOCUMENT NO 011852566 SSK									
PO #:		WO #:		1116967							
(X) HM	PROPER U.S. D.O.T. SHIPPING NAME	U.S. D.O.T. HAZARDOUS CLASS	NA/UN/NO.	PACKING GROUP	NO. CONT.	CONT. TYPE	NET QUANTITY	UNIT MEASURE	WASTE NO.	FORM	
X	See manifest	9	3432	III	01	CM	EST 20 m	K	PERI	S	
2											
3											

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER.

SHIPPER'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor.

PLEASE PRINT NAME/TITLE William R Colvin	SHIPPER'S SIGNATURE x [Signature] for U.S. Army I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT	DATE LOADED 08/08/16 MO. DAY YR.
---	--	--

CONSIGNEE NAME/ADDRESS Wayne Disposal Belleville MI		PHONE 800 592-2489 (AREA CODE)		S T R T M A N I F E S T	
TRACTOR 880		TRAILER 335		APPOINTMENT TIME :	
FCI REP. UNLOADING (PRINT) Snyder	PROCEDURE Unload	EQUIP. SPOTTED 9741	EQUIP. REMOVED	TIME AT CONSIGNEE 16:00 ARRIVAL TIME	(MILITARY TIME ONLY) 17:00 DEPARTURE TIME
COMMENTS OR DELAYS AT CONSIGNEE				EQUIPMENT USED	

PLEASE PRINT NAME/TITLE	CONSIGNEE SIGNATURE X [Signature]	DATE UNLOADED 8/9/16 MO. DAY YR.
-------------------------	--------------------------------------	--

AR H-0257	MD HWH-167	MO H-1490	OH UPW-0190713-OH	TX 40705
CT CT-HW-307	2001-OPV-2335	ND WH-429	OK UPW-0190713-OH	WI 11602
DE DE-HW-203	ME ME-HWT-47	NH TNH-0047	ONTARIO, CANADA A 840943	WV UPW-0190713-OH
DE-SW-203	ME-WOT-47	NJ S-2265	PA PA-AH-0067	
IL UPW-0190713-OH	MI UPW-0190713-OH	15939	QUEBEC, CANADA QC-6ML-047	
MA MA-294	MN UPW-0190713-OH	NY NJ-113	RI RI-535	

White - FCI Original
 Yellow - FCI Billing
 Blue - FCI Office/Customer
 Green - Retained by TSDF
 Gold - Retained by Generator

S 579185

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number 113718020597		2. Page 1 of 1		3. Emergency Response Phone 732-413-1600		4. Manifest Tracking Number 011852566 JJK	
		5. Generator's Name and Mailing Address US Dept of Army - Fort Monmouth - Main Post P O Box 148 Oceanport, NJ 07757		Generator's Site Address (if different than mailing address) Main Post Fort Monmouth, NJ 07703		Generator's Phone 800-582-5460		U.S. EPA ID Number MSD 054126114	
6. Transporter 1 Company Name Freehold Carbage Inc. (FCI)		U.S. EPA ID Number NA		7. Transporter 2 Company Name NA		U.S. EPA ID Number NA		8. Designated Facility Name and Site Address Wayne Disposal Inc Site #2 Landfill 49350 N. 104 Service Drive Belleville, MI 48111	
Facility's Phone: 800-582-5460		U.S. EPA ID Number MSD048090631		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 Wt/Vol	
								13. Waste Codes	
X		1. RQ, UN-3432, Polychlorinated Biphenyls, Solid Mixture, Class 9, PG III, ERG# 171		XX1		CM		29000 Kg	
		2.							
		3.							
		4.							
14. Special Handling Instructions and Additional Information 1150185WPI - PCB Soil & Concrete Truck # 747 Box # 0741 AWT PO # 14485 MP ESD 8-0-16									
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/Offor's Printed/Typed Name William R Colvin									
Signature <i>William R Colvin</i> Month Day Year 08 03 16									
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: 1 Transporter signature (for exports only): Date leaving U.S.:									
17. Transporter Acknowledgment of Receipt of Materials									
Transporter 1 Printed/Typed Name Ken Brown									
Signature <i>Ken Brown</i> Month Day Year 08 03 16									
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: U.S. EPA ID Number									
18b. Alternate Facility (or Generator)									
Facility's Phone: 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. PLD 2. 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 William R Colvin									
Signature <i>William R Colvin</i> Month Day Year 08 03 16									

Wayne Disposal, Inc.
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

AWT ENVIRONMENTAL SERVICES, INC.
ATTN: ACCOUNTS PAYABLE
P.O. BOX 128
SAYERVILLE, NJ 08871

Receipt ID: 1267058
EQ Account #: 1070
Manifest / BOL: 011852566JJK
Transporter: FCI
Date: 08/09/2016
Time In: 4:18 PM
Time Out: 5:03 PM

Line	Description Generator	Qty. Unit
1 - 1	1150185WDI - PCB Concrete	20.300 TONS
	Hazardous Surcharge Ton	20.300 TONS
	NJ3210020597 US DEPT. OF ARMY-FORT MONMOUTH MAIN POST	
	Gross: 77,720 Tare: 37,120 Net: 40,600	
2	Wayne Disposal Host Community Agreement Royalty Fee	20.300 TONS
	NJ3210020597 US DEPT. OF ARMY-FORT MONMOUTH MAIN POST	
	Gross: 77,720 Tare: 37,120 Net: 40,600	

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NJ3210020597	2. Page 1 of 1	3. Emergency Response Phone 732-613-1660	4. Manifest Tracking Number 011852576 JJK	
5. Generator's Name and Mailing Address US Dept of Army-Fort Monmouth - Main Post P.O. Box 148 Oceanport, NJ 07757			Generator's Site Address (if different than mailing address) Main Post Fort Mounmouth, NJ 07703			
6. Transporter 1 Company Name Maumee Express, Inc.			U.S. EPA ID Number NJD986607380			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address Cycle Chem, Inc. 217 South First Street Elizabeth, NJ 07206 908-355-5800			U.S. EPA ID Number NJ988728846			
Facility's Phone:						
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
			No.	Type		
	X	1. UN-2315 - Polychlorinated Biphenyls - Liquid, Class 9, PG II	16	DM	5,600	X P
		2.				
		3.				
		4.				
14. Special Handling Instructions and Additional Information PCB Contaminated Water 90-100%, Sol/Debris 0-10% AWT P.O. # 14485-MP 980839						
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/Offero's Printed/Typed Name		Signature		Month	Day	Year
William R. Colvin for US Army		William R. Colvin for US Army		08	29	16
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 1 Printed/Typed Name		Signature		Month	Day	Year
M. Anderson		M. Anderson		8	29	16
Transporter 2 Printed/Typed Name		Signature		Month	Day	Year
18. Discrepancy						
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection						
14-1) 2545 14-1) R 14-1) 858 8/29/16 732 3835140						
18b. Alternate Facility (or Generator) U.S. EPA ID Number						
Facility's Phone:						
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. H111 2. 3. 4.						
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 19a						
Printed/Typed Name		Signature		Month	Day	Year
R. Gibson		R. Gibson		08	29	16

Attachment D
2017 Analytical Data Report

Hampton-Clarke Report Of Analysis

Client: Tetra Tech Inc.

HC Project #: 7052611

Project: Fort Monmouth

Sample ID: BKG-283-002-001

Collection Date: 5/24/2017

Lab#: AC98118-001

Receipt Date: 5/26/2017

Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		84

NJ EPH Category 2

Analyte	DF	Units	RL	Result		
C9-C40	1	mg/kg	71	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
O-Terphenyl	74.39	100	40	140	74	
1-Chlorooctadecane	71.94	100	40	140	72	

PAH Compounds 8270

Analyte	DF	Units	RL	Result		
2-Methylnaphthalene	1	mg/kg	0.040	ND		
Acenaphthene	1	mg/kg	0.040	ND		
Acenaphthylene	1	mg/kg	0.040	ND		
Anthracene	1	mg/kg	0.040	0.049		
Benzo[a]anthracene	1	mg/kg	0.040	0.11		
Benzo[a]pyrene	1	mg/kg	0.040	0.14		
Benzo[b]fluoranthene	1	mg/kg	0.040	0.23		
Benzo[g,h,i]perylene	1	mg/kg	0.040	0.12		
Benzo[k]fluoranthene	1	mg/kg	0.040	0.053		
Chrysene	1	mg/kg	0.040	0.12		
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND		
Fluoranthene	1	mg/kg	0.040	0.17		
Fluorene	1	mg/kg	0.040	ND		
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.040	0.10		
Naphthalene	1	mg/kg	0.0099	ND		
Phenanthrene	1	mg/kg	0.040	ND		
Pyrene	1	mg/kg	0.040	0.15		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	56.70	50	58	148	113	
Phenol-d5	105.28	100	49	129	105	
Nitrobenzene-d5	46.33	50	52	129	93	
2-Fluorophenol	99.97	100	43	128	100	
2-Fluorobiphenyl	42.42	50	58	125	85	
2,4,6-Tribromophenol	103.78	100	54	145	104	

PCB 8082

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.030	ND		
Aroclor-1016	1	mg/kg	0.030	ND		
Aroclor-1221	1	mg/kg	0.030	ND		
Aroclor-1232	1	mg/kg	0.030	ND		
Aroclor-1242	1	mg/kg	0.030	ND		
Aroclor-1248	1	mg/kg	0.030	ND		
Aroclor-1254	1	mg/kg	0.030	ND		
Aroclor-1260	1	mg/kg	0.030	ND		
Aroclor-1262	1	mg/kg	0.030	ND		
Aroclor-1268	1	mg/kg	0.030	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	128.35	100	37	141	128	
TCMX-Surrogate	125.49	100	37	141	125	
DCB-Surrogate	129.62	100	34	146	130	
DCB-Surrogate	123.35	100	34	146	123	

Sample ID: BKG-283-001-001

Lab#: AC98118-002

Matrix: Soil

Collection Date: 5/24/2017

Receipt Date: 5/26/2017

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		80

NJ EPH Category 2

Analyte	DF	Units	RL	Result		
C9-C40	1	mg/kg	75	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
O-Terphenyl	74.51	100	40	140	75	
1-Chlorooctadecane	71.69	100	40	140	72	

PAH Compounds 8270

Analyte	DF	Units	RL	Result		
2-Methylnaphthalene	1	mg/kg	0.042	ND		
Acenaphthene	1	mg/kg	0.042	ND		
Acenaphthylene	1	mg/kg	0.042	ND		
Anthracene	1	mg/kg	0.042	ND		
Benzo[a]anthracene	1	mg/kg	0.042	ND		
Benzo[a]pyrene	1	mg/kg	0.042	ND		
Benzo[b]fluoranthene	1	mg/kg	0.042	ND		
Benzo[g,h,i]perylene	1	mg/kg	0.010	ND		
Benzo[k]fluoranthene	1	mg/kg	0.042	ND		
Chrysene	1	mg/kg	0.042	ND		
Dibenzo[a,h]anthracene	1	mg/kg	0.010	ND		
Fluoranthene	1	mg/kg	0.042	ND		
Fluorene	1	mg/kg	0.042	ND		
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.042	ND		
Naphthalene	1	mg/kg	0.010	ND		
Phenanthrene	1	mg/kg	0.042	ND		
Pyrene	1	mg/kg	0.042	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	50.72	50	58	148	101	
Phenol-d5	74.47	100	49	129	74	
Nitrobenzene-d5	34.59	50	52	129	69	
2-Fluorophenol	80.31	100	43	128	80	
2-Fluorobiphenyl	38.60	50	58	125	77	
2,4,6-Tribromophenol	107.06	100	54	145	107	

PCB 8082

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.031	ND		
Aroclor-1016	1	mg/kg	0.031	ND		
Aroclor-1221	1	mg/kg	0.031	ND		
Aroclor-1232	1	mg/kg	0.031	ND		
Aroclor-1242	1	mg/kg	0.031	ND		
Aroclor-1248	1	mg/kg	0.031	ND		
Aroclor-1254	1	mg/kg	0.031	ND		
Aroclor-1260	1	mg/kg	0.031	ND		
Aroclor-1262	1	mg/kg	0.031	ND		
Aroclor-1268	1	mg/kg	0.031	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	116.20	100	37	141	116	
TCMX-Surrogate	112.52	100	37	141	113	
DCB-Surrogate	123.96	100	34	146	124	
DCB-Surrogate	116.17	100	34	146	116	

Sample ID: BKG-283-003-001

Lab#: AC98118-003

Matrix: Soil

Collection Date: 5/24/2017

Receipt Date: 5/26/2017

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		79

NJ EPH Category 2

Analyte	DF	Units	RL	Result		
C9-C40	1	mg/kg	76	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
O-Terphenyl	84.12	100	40	140	84	
1-Chlorooctadecane	82.79	100	40	140	83	

PAH Compounds 8270

Analyte	DF	Units	RL	Result		
2-Methylnaphthalene	1	mg/kg	0.042	ND		
Acenaphthene	1	mg/kg	0.042	ND		
Acenaphthylene	1	mg/kg	0.042	ND		
Anthracene	1	mg/kg	0.042	ND		
Benzo[a]anthracene	1	mg/kg	0.042	ND		
Benzo[a]pyrene	1	mg/kg	0.042	ND		
Benzo[b]fluoranthene	1	mg/kg	0.042	ND		
Benzo[g,h,i]perylene	1	mg/kg	0.011	ND		
Benzo[k]fluoranthene	1	mg/kg	0.042	ND		
Chrysene	1	mg/kg	0.042	ND		
Dibenzo[a,h]anthracene	1	mg/kg	0.011	ND		
Fluoranthene	1	mg/kg	0.042	ND		
Fluorene	1	mg/kg	0.042	ND		
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.042	ND		
Naphthalene	1	mg/kg	0.011	ND		
Phenanthrene	1	mg/kg	0.042	ND		
Pyrene	1	mg/kg	0.042	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	47.32	50	58	148	95	
Phenol-d5	91.96	100	49	129	92	
Nitrobenzene-d5	41.12	50	52	129	82	
2-Fluorophenol	97.02	100	43	128	97	
2-Fluorobiphenyl	45.53	50	58	125	91	
2,4,6-Tribromophenol	121.07	100	54	145	121	

PCB 8082

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.032	ND		
Aroclor-1016	1	mg/kg	0.032	ND		
Aroclor-1221	1	mg/kg	0.032	ND		
Aroclor-1232	1	mg/kg	0.032	ND		
Aroclor-1242	1	mg/kg	0.032	ND		
Aroclor-1248	1	mg/kg	0.032	ND		
Aroclor-1254	1	mg/kg	0.032	ND		
Aroclor-1260	1	mg/kg	0.032	ND		
Aroclor-1262	1	mg/kg	0.032	ND		
Aroclor-1268	1	mg/kg	0.032	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	121.42	100	37	141	121	
TCMX-Surrogate	119.50	100	37	141	120	
DCB-Surrogate	143.36	100	34	146	143	
DCB-Surrogate	129.70	100	34	146	130	

Sample ID: BKG-283-004-001

Lab#: AC98118-004

Matrix: Soil

Collection Date: 5/25/2017

Receipt Date: 5/26/2017

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		81

NJ EPH Category 2

Analyte	DF	Units	RL	Result		
C9-C40	1	mg/kg	74	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
O-Terphenyl	75.25	100	40	140	75	
1-Chlorooctadecane	72.72	100	40	140	73	

PAH Compounds 8270

Analyte	DF	Units	RL	Result		
2-Methylnaphthalene	1	mg/kg	0.041	ND		
Acenaphthene	1	mg/kg	0.041	ND		
Acenaphthylene	1	mg/kg	0.041	ND		
Anthracene	1	mg/kg	0.041	ND		
Benzo[a]anthracene	1	mg/kg	0.041	ND		
Benzo[a]pyrene	1	mg/kg	0.041	ND		
Benzo[b]fluoranthene	1	mg/kg	0.041	ND		
Benzo[g,h,i]perylene	1	mg/kg	0.010	ND		
Benzo[k]fluoranthene	1	mg/kg	0.041	ND		
Chrysene	1	mg/kg	0.041	ND		
Dibenzo[a,h]anthracene	1	mg/kg	0.010	ND		
Fluoranthene	1	mg/kg	0.041	ND		
Fluorene	1	mg/kg	0.041	ND		
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.041	ND		
Naphthalene	1	mg/kg	0.010	ND		
Phenanthrene	1	mg/kg	0.041	ND		
Pyrene	1	mg/kg	0.041	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	51.79	50	58	148	104	
Phenol-d5	93.58	100	49	129	94	
Nitrobenzene-d5	41.60	50	52	129	83	
2-Fluorophenol	97.84	100	43	128	98	
2-Fluorobiphenyl	45.67	50	58	125	91	
2,4,6-Tribromophenol	124.54	100	54	145	125	

PCB 8082

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.031	ND		
Aroclor-1016	1	mg/kg	0.031	ND		
Aroclor-1221	1	mg/kg	0.031	ND		
Aroclor-1232	1	mg/kg	0.031	ND		
Aroclor-1242	1	mg/kg	0.031	ND		
Aroclor-1248	1	mg/kg	0.031	ND		
Aroclor-1254	1	mg/kg	0.031	ND		
Aroclor-1260	1	mg/kg	0.031	ND		
Aroclor-1262	1	mg/kg	0.031	ND		
Aroclor-1268	1	mg/kg	0.031	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	99.78	100	37	141	100	
TCMX-Surrogate	96.75	100	37	141	97	
DCB-Surrogate	110.22	100	34	146	110	
DCB-Surrogate	100.71	100	34	146	101	

Sample ID: BKG-283-004-001-FD

Lab#: AC98118-005

Matrix: Soil

Collection Date: 5/25/2017

Receipt Date: 5/26/2017

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		80

NJ EPH Category 2

Analyte	DF	Units	RL	Result		
C9-C40	1	mg/kg	75	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
O-Terphenyl	75.37	100	40	140	75	
1-Chlorooctadecane	77.49	100	40	140	77	

PAH Compounds 8270

Analyte	DF	Units	RL	Result		
2-Methylnaphthalene	1	mg/kg	0.042	ND		
Acenaphthene	1	mg/kg	0.042	ND		
Acenaphthylene	1	mg/kg	0.042	ND		
Anthracene	1	mg/kg	0.042	ND		
Benzo[a]anthracene	1	mg/kg	0.042	ND		
Benzo[a]pyrene	1	mg/kg	0.042	ND		
Benzo[b]fluoranthene	1	mg/kg	0.042	ND		
Benzo[g,h,i]perylene	1	mg/kg	0.010	ND		
Benzo[k]fluoranthene	1	mg/kg	0.042	ND		
Chrysene	1	mg/kg	0.042	ND		
Dibenzo[a,h]anthracene	1	mg/kg	0.010	ND		
Fluoranthene	1	mg/kg	0.042	ND		
Fluorene	1	mg/kg	0.042	ND		
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.042	ND		
Naphthalene	1	mg/kg	0.010	ND		
Phenanthrene	1	mg/kg	0.042	ND		
Pyrene	1	mg/kg	0.042	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	52.26	50	58	148	105	
Phenol-d5	88.39	100	49	129	88	
Nitrobenzene-d5	40.71	50	52	129	81	
2-Fluorophenol	94.30	100	43	128	94	
2-Fluorobiphenyl	45.98	50	58	125	92	
2,4,6-Tribromophenol	129.87	100	54	145	130	

PCB 8082

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.031	ND		
Aroclor-1016	1	mg/kg	0.031	ND		
Aroclor-1221	1	mg/kg	0.031	ND		
Aroclor-1232	1	mg/kg	0.031	ND		
Aroclor-1242	1	mg/kg	0.031	ND		
Aroclor-1248	1	mg/kg	0.031	ND		
Aroclor-1254	1	mg/kg	0.031	ND		
Aroclor-1260	1	mg/kg	0.031	ND		
Aroclor-1262	1	mg/kg	0.031	ND		
Aroclor-1268	1	mg/kg	0.031	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	95.93	100	37	141	96	
TCMX-Surrogate	91.80	100	37	141	92	
DCB-Surrogate	100.72	100	34	146	101	
DCB-Surrogate	92.95	100	34	146	93	

Sample ID: BKG-551-001

Lab#: AC98118-006

Matrix: Soil

Collection Date: 5/25/2017

Receipt Date: 5/26/2017

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		94

NJ EPH Category 2

Analyte	DF	Units	RL	Result		
C9-C40	1	mg/kg	64	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
O-Terphenyl	91.21	100	40	140	91	
1-Chlorooctadecane	86.70	100	40	140	87	

PCB 8082

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.027	ND		
Aroclor-1016	1	mg/kg	0.027	ND		
Aroclor-1221	1	mg/kg	0.027	ND		
Aroclor-1232	1	mg/kg	0.027	ND		
Aroclor-1242	1	mg/kg	0.027	ND		
Aroclor-1248	1	mg/kg	0.027	ND		
Aroclor-1254	1	mg/kg	0.027	ND		
Aroclor-1260	1	mg/kg	0.027	ND		
Aroclor-1262	1	mg/kg	0.027	ND		
Aroclor-1268	1	mg/kg	0.027	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	146.66	100	37	141	147	S8
TCMX-Surrogate	144.30	100	37	141	144	S8
DCB-Surrogate	164.85	100	34	146	165	S8
DCB-Surrogate	153.71	100	34	146	154	S8

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458

Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054

Ph (Service Center): 856-780-6057 Fax: 856-780-6056



WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only)

7052611

Page 1 of 1

3) Reporting Requirements (Please Circle)

Turnaround

When Available:

- 1 Business Day (100%)*
2 Business Days (75%)*
3 Business Days (50%)*
4 Business Days (35%)*

- 5 Business Days (25%)*
8 Business Days (Stand.)*

Other:

Report Type

Summary

Results + QC (Waste)

Reduced:

☒ NJ ☐ NY

☐ PA ☐ Other

NJ Full / NY ASP CatB

NY ASP CatA

Electronic Data Deliv.

NJ Hazsite

Excel Reg. NJ / NY / PA

EnviroData

EquiS:

☐ 4-File ☐ EZ

☐ NYDEC

☐ Region 2 or 5

Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: Tetra Tech

Address: 1093 Commerce Park Dr. Ste 100

Dak Ridge, TN 37830

1b) Email/Cell/Fax/Ph: Bryn Howze (865) 308-0043

1c) Send Invoice to: Maureen McMyler (865) 220-4762

1d) Send Report to: " "

Project Information

2a) Project: Fort Monmouth

2b) Project Mgr: Mike Spangberg

2c) Project Location (City/State): Fort Monmouth NJ

2d) Quote/PO # (If Applicable):

FOR LAB
USE
ONLY
↓

==== Check If Contingent ====

Matrix Codes

DW - Drinking Water S - Soil A - Air

GW - Ground Water SL - Sludge

WW - Waste Water OL - Oil

OT - Other (please specify under item 9, Comments)

Sample
Type

Composite (C)
Grab (G)

PCB 8082

PAH 8270

NJ EPH CAT2

PAH

7) Analysis (specify methods & parameter lists)

<==== Check If Contingent <====

8) # of Bottles

None MeOH En Core NaOH HCl H2SO4 HNO3 Other:

9) Comments

AC98118

Lab Sample #

4) Customer Sample ID

5) Matrix

6) Sample

Date Time

001 BKG-283-002-001 S 5/24/17 1420

002 BKG-283-001-001 S 5/24/17 1515

003 BKG-283-003-001 S 5/24/17 1645

004 BKG-283-004-001 S 5/25/17 0917

005 BKG-283-004-001-FO S 5/25/17 0917

006 BKG-551-001 S 5/25/17 1025

10) Relinquished by:

Accepted by:

Date

Time

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):

- ☐ BN or BNA (8270D SIM)
☐ VOC (8260C SIM or 8011)
☐ SPLP (BN, BNA, Metals)
☐ 1,4 Dioxane

Check if applicable:

- ☐ Project-Specific Reporting Limits
☐ High Contaminant Concentrations
☐ NJ LSRP Project (also check boxes above/right)

For NJ LSRP projects, indicate which standards need to be met:

- ☐ NJDEP GWQS
☐ NJDEP SRS
☐ NJDEP SPLP
☐ Other (specify):

11) Sampler (print name):

Date:

Additional Notes

Cooler Temperature

2.09

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC ☐ or client ☐ FSP#

Attachment E
Regulatory Correspondence



State of New Jersey

CHRIS CHRISTIE
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Case Management
401 East State Street
P.O. Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028
Phone #: 609-633-1455
Fax #: 609-633-1439

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

May 4, 2017

William Colvin
BRAC Environmental Coordinator
OACSIM – U.S. Army Fort Monmouth
PO Box 148
Oceanport, NJ 07757

Approval

Re: **Remedial Action Type:** *Unrestricted Use*

Scope of Remediation: *Area of Concern: FTMM-61 aka Building 283 Former Gasoline UST*
Monmouth County
SRP PI# G000000032
RPC000001

Dear Mr. Colvin,

The New Jersey Department of Environmental Protection (Department) has completed review of the referenced submittal, received April 10, 2017 prepared by the Department of the Army Office of Assistant Chief of Staff for Installation Management to request determination of no further action for FTMM-61, also known as Building 283 Former Gasoline UST. It is agreed no additional action is necessary at FTMM-61.

Please contact Linda Range at (609) 984-6606 if you have any questions.

Sincerely,

Gwen B. Zervas, P.E.
Section Chief

C: James Moore, USACE
Rich Harrison, FMERA
Joe Fallon, FMERA
Joe Pearson, Calibre



State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Case Management
401 East State Street
P.O. Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028
Phone #: 609-633-1455
Fax #: 609-633-1439

BOB MARTIN
Commissioner

January 10, 2017

William Colvin
BRAC Environmental Coordinator
OACSIM – U.S. Army Fort Monmouth
PO Box 148
Oceanport, NJ 07757

Re: *December 2016 Letter Work Plan Addendum for Parcel 49, Former Squier Laboratory
and other facilities*
Fort Monmouth
Oceanport, Monmouth County
PI G000000032

Dear Mr. Colvin,

The New Jersey Department of Environmental Protection (Department) has completed review of the referenced submittal, received December 30, 2016, prepared by the Department of the Army's Office of Assistant Chief of Staff for Installation Management. The submittal included results of recent sampling efforts, and indicated the need for additional delineation.

The soil sampling for further delineation of PAHs, as proposed in the submittal, is acceptable, with the following comment. The depth of the intermediate sampling interval, currently indicated as 2-3' feet, should be amended if so indicated by field/visual conditions.

Please contact this office if you have any questions.

Sincerely,

Linda S. Range

C: James Moore, USACE
Rich Harrison, FMERA
Joe Fallon, FMERA
Joe Pearson, Calibre



DEPARTMENT OF THE ARMY

OFFICE OF ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
U.S. ARMY FORT MONMOUTH
P.O. 148
OCEANPORT, NEW JERSEY 07757

December 28, 2016

Ms. Linda Range
New Jersey Department of Environmental Protection
Bureau of Case Management
401 East State Street
PO Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028

SUBJECT: December 2016 Letter Work Plan Addendum for Parcel 49, Former Squier Laboratory and other facilities, Fort Monmouth, New Jersey

Dear Ms. Range:

The purpose of this December 2016 Letter Work Plan Addendum (LWPA) is to address PAH exceedances encountered during the August 2016 sampling event. This December 2016 LWPA proposes additional borings to augment previous environmental investigations conducted at Parcel 49, Former Squier Laboratory and other facilities, located within the Main Post (MP) of Fort Monmouth (FTMM).

Work performed under the Rev.1 Environmental Condition of Property (ECP) Work Plan (WP) and approved by NJDEP in a December 2015 letter included the collection and analysis of soil samples from ten borings for PAH analysis, and six borings for PCB analysis, as shown on **Figure 1**. Soil samples were collected as described in the ECP-WP. Based on the results, detections of PAHs and PCBs had been delineated horizontally and vertically at the sampling locations, except for PAHs at PAR-49-SS-07 and PAR-49-SS-09. A single PAH exceeded the Residential Direct Contact Soil Remediation Standard (RDCSRS) and Non-Residential Direct Contact Soil Remediation Standard at PAR-49-SB-02, near Bldg. 283, at 16 ft bgs, however there was no contamination in the interval above it, no evidence of contamination in the boring log, and no reason a release should have occurred at that location at that depth, therefore this exceedance is considered an anomaly.

Building 291 Area

As agreed in the NJDEP July 29, 2016 letter, and outlined in the August 8, 2016 Revised Letter Work Plan Addendum, horizontal delineation of PAHs northwest of building 291 consisted of advancement of three primary borings (PAR-49-SS-13, PAR-49-SS-14 and PAR-49-SS-15) and two contingency borings (PAR-49-SS-16 and PAR-49-SS-17) as shown on **Figure 1**. Three samples were collected from each of these borings but contingency samples were not run for some intervals at PAR-49-SB-16 or PAR-49-SB-17 based on sampling results.

Sampling results are shown on **Figure 2** and **Table 1**. Based on the sampling results further delineation is required west of PAR-49-SB-17 and east of PAR-49-SB-13. Proposed sampling locations are shown on **Figure 3** and **Table 2**. Two primary sampling locations are proposed (PAR-49-SB-28 and 29), and six contingency borings (PAR-49-SB-45 through 50) (locations may change based on actual field conditions). Three samples will be collected from all borings. Surface soil samples (0 to 6-inch interval below the asphalt and asphalt base material) will be collected taking care not to introduce asphalt and/or road base into the samples. In addition, samples will be collected from a 6-inch interval within the 2 to 3-foot range, and at a depth interval immediately above water table to evaluate the vertical PAHs extent. At the primary borings, the surface and 2 to 3-foot sample will be analyzed by the laboratory. The samples just above the water table will be placed on hold pending results of the samples above it. All the contingency boring samples will be placed on hold pending results of the primary samples.

Building 293 Area

Additionally, FTMM performed additional characterization of soil borings near Building 293, as described in the August 8, 2016 Revised Letter Work Plan Addendum, as shown on **Figure 1**. Soil samples were advanced around the area of the exceedances and soil samples were collected. Sampling results are shown on **Figure 2** and **Table 1**. Based on the results, further sampling is required in this area to horizontally and vertically delineate PAHs in soils. Proposed sampling locations are shown on **Figure 4** and **Table 2**. Five primary sampling locations are proposed (PAR-49-SB-30 through 34), and four contingency borings (PAR-49-SB-38 through 41) (locations may change based on actual field conditions). Sample locations were chosen to delineate PAHs both horizontally and vertically, outside of the landfill boundary for FTMM-18. Three samples will be collected from all borings. Surface soil samples (0 to 6-inch interval below the asphalt and asphalt base material) will be collected taking care not to introduce asphalt and/or road base into the samples. In addition, samples will be collected from a 6-inch interval within the 2-3 foot range, and at a depth interval immediately above the water table to evaluate the vertical PAHs extent. At the primary borings, the surface and 2 to 3-foot sample will be analyzed by the laboratory. The samples just above the water table will be placed on hold pending results of the samples above it. All the contingency boring samples will be placed on hold pending results of the primary samples.

We look forward to your review of this proposed sampling plan, and approval or additional comments. The technical Point of Contact (POC) for this matter is Cris Grill at (617) 449-1583 or by email at cris.grill@parsons.com. Should you have any questions or require additional information, please contact me by phone at (732) 380-7064 or by email at william.r.colvin18.civ@mail.mil.

Sincerely,



William R. Colvin, PMP, CHMM, PG
BRAC Environmental Coordinator

Linda S. Range, NJDEP
December Letter Work Plan Addendum
Parcel 49, Former Squier Laboratory and other facilities
December 28, 2016
Page 3 of 3

Attachments:

Figure 1 Parcel 49 Layout and Sampling Locations
Figure 2 Parcel 49 Comparison of Soil Results for PAHs to NJDEP Direct Contact Standards
Figure 3 Parcel 49 Proposed Soil Sample Locations – Building 291
Figure 4 Parcel 49 Proposed Soil Sample Locations – Building 293
Table 1 Detected Soil Sampling Results – Comparison to NJDEP Standards
Table 2 Sampling Summary for Parcel 49 Revised Letter Work Plan Addendum

cc: Linda Range, NJDEP (3 hard copies)
Delight Balducci, HQDA ACSIM (e-mail)
Joseph Pearson, Calibre (e-mail)
James Moore, USACE (e-mail)
Jim Kelly, USACE (e-mail)
Cris Grill, Parsons (e-mail)



State of New Jersey

CHRIS CHRISTIE
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Case Management
401 East State Street
P.O. Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028
Phone #: 609-633-1455
Fax #: 609-633-1439

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

August 15, 2016

William Colvin
BRAC Environmental Coordinator
OACSIM – U.S. Army Fort Monmouth
PO Box 148
Oceanport, NJ 07757

Re: *Response to NJDEP Comments on Parcel 49 – Revised LWPA*
Fort Monmouth
Oceanport, Monmouth County
PI G000000032

Dear Mr. Colvin:

The New Jersey Department of Environmental Protection (Department) has completed review of the referenced submittal, received on August 10, 2016. The Revised Workplan is approved, with comments as below.

North of Building 293

As previously indicated, the Department does not agree the low levels of PAH exceedances found in surficial soils in this area are reflective of diffuse anthropogenic pollutants (DAP); the presence of DAP is not supported by analytical results from previous sampling efforts performed in the area. The Army also posits anthropogenic background, fill, or landfill (SB1 being immediately adjacent to FTMM-18) as possible sources for the PAH exceedances, and further sampling has been proposed. The additional sampling as proposed is acceptable.

Building 283/PAR-49-SS-04

As previously indicated, the proposal was acceptable, with the following comments.

A review of the sample locations and analytical results in the area did not appear to indicate delineation was complete to the south or west of sample location PAR-49-SS-04. However, based upon verbal information provided by Parsons' Cris Grill, horizontal delineation is considered complete due to the presence of a basement at Building 283 in the immediate area of sample PAR-49-SS-04. Based upon this information, it is agreed no additional delineation is

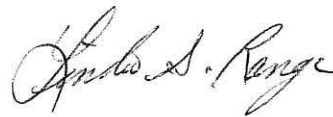
necessary, however, please ensure the subsequent Remedial Investigation Report contains adequate documentation of the decision making process, including sample depths, basement depth, relative locations, as well as a narrative defense of same.

Area to the Northwest of Building 291

The proposal was previously found acceptable.

Please contact this office with any questions.

Sincerely,

A handwritten signature in cursive script, reading "Linda S. Range".

Linda S. Range

C: Joe Pearson, Calibre
James Moore, USACE
Rick Harrison, FMERA
Joe Fallon, FMERA