



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

11 December 2017

Mr. Ashish Joshi
New Jersey Department of Environmental Protection
Division of Remediation Management & Response
Bureau of Northern Field Operations
7 Ridgedale Avenue (2nd Floor)
Cedar Knolls, NJ 07927-1112

**Subject: Unrestricted Use, No Further Action Request for Parcel 108
Site Investigation Report Addendum
Fort Monmouth, NJ
PI G000000032**

Dear Mr. Joshi:

The Fort Monmouth Team has reviewed existing file information for Parcel 108 and prepared this addendum. The August 2016 *Final Finding of Suitability to Transfer (FOST), Phase 2 Parcels* for Fort Monmouth identified Parcel 108 as the area associated with soil boring P83-SB-6 within Parcel 83 (**Figure 1**). As reported in the *U.S. Army BRAC 2005 Site Investigation Report* (July 2008), the benzo(a)pyrene concentration (0.47 mg/kg) at P83-SB-6 exceeded the May 2012 NJDEP Residential Direct Contact Soil Remediation Standard (RDCSRS) of 0.2 mg/kg. The RDCSRS was updated 18 September 2017 and as a result, as shown on **Table 1**, the benzo(a)pyrene concentration no longer exceeds the RDCSRS (0.5 mg/kg).

The NJDEP Impact to Ground Water screening criteria for benzo(a)pyrene (0.2 mg/kg) is exceeded. No significant risk to groundwater is indicated considering: 1) an increase in this Impact to Ground Water screening criteria is expected commensurate with the increase in the updated RDCSRS; and 2) benzo(a)pyrene is relatively insoluble in water. Based on this addendum, we request Unrestricted Use, No Further Action approval for Parcel 108.

Thank you for reviewing this request; we look forward to the Department's approval and/or comments. Our technical Point of Contact is Kent Friesen at (732) 383-7201; kent.friesen@parsons.com. I can be reached at (732) 380-7064; william.r.colvin18.civ@mail.mil.

Sincerely,

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

Figure 1: Parcel 108 Location

Table 1: Detected Soil Sampling Results – Comparison to 2017 NJDEP Standards, Parcel 108

cc: Ashish Joshi, NJDEP (e-mail and 2 hard copies)
William Colvin, BEC (e-mail and 1 hard copy)
Joseph Pearson, Calibre (e-mail)
James Moore, USACE (e-mail)
Jim Kelly, USACE (e-mail)
Cris Grill, Parsons (e-mail)

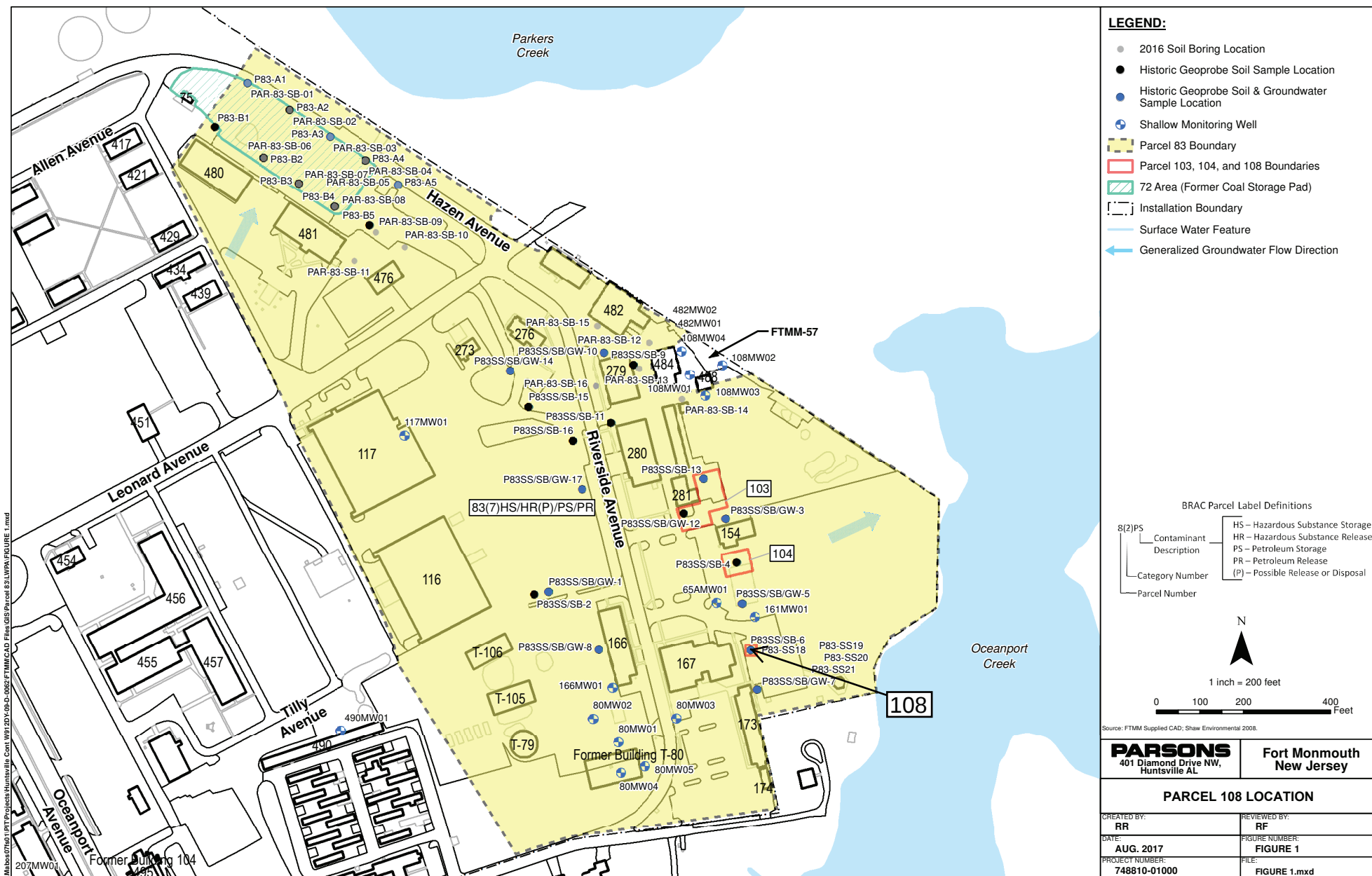


TABLE 1
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO 2017 NJDEP
STANDARDS
PARCEL 108
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non- Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	P83SS/SB-6					
Sample ID				P83-SB6-A		P83-SB6-B		P83-SB6-C	
Sample Depth				0-0.5		1.5-2		3-3.5	
Sample Date				12/18/2007		12/18/2007		12/18/2007	
Volatile Organic Compounds (mg/kg)									
1,2-Dichloroethane	0.9	3	0.005	NA		< 0.25		< 0.27	
Acetone	70,000	NLE	19	NA		0.076 J		< 0.27	
Benzene	2	5	0.005	NA		< 0.25		< 0.27	
Carbon disulfide	7,800	110,000	6	NA		< 0.25		< 0.27	
Ethyl benzene	7,800	110,000	13	NA		< 0.25		< 0.27	
Isopropylbenzene	NLE	NLE	NLE	NA		NA		NA	
Methyl ethyl ketone	3,100	44,000	0.9	NA		NA		NA	
Methylene chloride	46	230	0.01	NA		< 0.25		< 0.27	
Naphthalene	6	17	25	NA		NA		NA	
n-Butylbenzene	NLE	NLE	NLE	NA		NA		NA	
Propylbenzene	NLE	NLE	NLE	NA		NA		NA	
sec-Butylbenzene	NLE	NLE	NLE	NA		NA		NA	
tert-Butylbenzene	NLE	NLE	NLE	NA		NA		NA	
Toluene	6,300	91,000	7	NA		< 0.25		< 0.27	
Total Xylenes	12,000	170,000	19	NA		< 0.76		< 0.82	
Trichloroethene	3	10	0.01	NA		< 0.25		< 0.27	
TIC VOCs (mg/kg)									
Total TIC VOCs (mg/kg)	NLE	NLE	NLE	NA		NA		NA	
Semivolatile Organic Compounds (mg/kg)									
1-Methylnaphthalene	NLE	NLE	NLE	NA		NA		NA	
2-Methylnaphthalene	230	2,400	8	0.37 J		NA		< 1.2	
4-Chloroaniline	NLE	NLE	NLE	< 1.1		NA		< 1.2	
Acenaphthene	3,400	37,000	110	< 1.1		NA		< 1.2	
Acenaphthylene	NLE	300,000	NLE	< 1.1		NA		< 1.2	
Anthracene	17,000	30,000	2,400	< 1.1		NA		< 1.2	
Benzo(a)anthracene	5	17	0.8	< 1.1		NA		< 1.2	
Benzo(a)pyrene	0.5	2	0.2	< 1.1		NA		0.47 J	
Benzo(b)fluoranthene	5	17	2	< 1.1		NA		< 1.2	
Benzo(ghi)perylene	380,000	30,000	NLE	< 1.1		NA		< 1.2	
Benzo(k)fluoranthene	45	170	25	< 1.1		NA		< 1.2	
Bis(2-Chloroethyl)ether	0.4	2	0.2	< 1.1		NA		< 1.2	
Bis(2-Ethylhexyl)phthalate	35	140	1,200	< 1.1		NA		0.41 J	
Butyl benzyl phthalate	1,200	14,000	230	< 1.1		NA		< 1.2	
Chrysene	450	1700	80	< 1.1		NA		< 1.2	
Dibenz(a,h)anthracene	0.5	2	0.8	< 1.1		NA		< 1.2	
Dibenzofuran	NLE	NLE	NLE	< 1.1		NA		< 1.2	
Diethyl phthalate	49,000	550,000	88	< 1.1		NA		< 1.2	
Di-n-butylphthalate	6,100	68,000	760	0.53 JB		NA		0.25 JB	
Di-n-octylphthalate	2,400	27,000	3,300	< 1.1		NA		< 1.2	
Fluoranthene	2,300	24,000	1,300	0.14 J		NA		< 1.2	
Fluorene	2,300	24,000	170	< 1.1		NA		< 1.2	
Indeno(1,2,3-cd)pyrene	5	17	7	< 1.1		NA		< 1.2	
Naphthalene	6	17	25	0.18 J		NA		< 1.2	
Phenanthrene	NLE	300,000	NLE	0.17 J		NA		< 1.2	
Pyrene	1,700	18,000	840	0.28 J		NA		< 1.2	
Total Petroleum Hydrocarbons (mg/kg)									
Total Petroleum Hydrocarbons	5,100	54,000	NLE	NA		NA		NA	
Pesticides & PCBs (mg/kg)									
Aroclor-1254	0.2	1	NLE	NA		NA		NA	
Aroclor-1260	0.2	1	NLE	< 0.0041		NA		< 0.0041	
Inorganics (mg/kg)									
Aluminum	78,000	NLE	6,000	5,070 B		NA		12,900 B	
Antimony	31	450	6	1.85		NA		< 0.492	
Arsenic	19	19	19	5.65		NA		7.41	
Barium	16,000	59,000	2,100	78 B		NA		44.8 B	
Beryllium	16	140	0.7	0.442		NA		0.96	
Cadmium	78	78	2	0.335		NA		0.0591	
Calcium	NLE	NLE	NLE	1,550 B		NA		1,090 B	
Chromium	NLE	NLE	NLE	20.9		NA		54.1	
Cobalt	1,600	590	90	3.33		NA		0.629	
Copper	3,100	45,000	11,000	118 B		NA		6.65 B	
Iron	NLE	NLE	NLE	17,900 B		NA		21,800 B	
Lead	400	800	90	103		NA		14.4	
Magnesium	NLE	NLE	NLE	775 B		NA		2,480 B	
Manganese	11,000	5,900	65	69.5 B		NA		69.5	
Mercury	23	65	0.1	0.16		NA		< 0.11	
Nickel	1,600	23,000	48	11.9		NA		7.61	
Potassium	NLE	NLE	NLE	1,300 B		NA		3,280 B	
Selenium	390	5,700	11	< 0.636		NA		< 0.727	
Sodium	NLE	NLE	NLE	< 37.365		NA		306 B	
Vanadium	78	1,100	NLE	21.9		NA		39.2	
Zinc	23,000	110,000	930	63.2 B		NA		43.7 B	

Footnotes:

NLE = no limit established.

ND = not detected

Chemical detections are bolded

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

U = non-detect, i.e. not detected at or above this value.

J = estimated detected value due to a concentration below the reporting limit or due to discrepancies in meeting certain

U = non-detect, i.e. not detected at or above this value.

B =Compound detected in the sample at a concentration less than or equal to 5 times (10 times for common lab

JN = Tentatively identified compound, estimated concentration.

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 Residential and/or Non-Residential Direct Contact Soil Remediation Standard.

Cell Shade values represent a result that is above the NJ Impact to GW Soil Screening Level

Cell Style values represent a result that is above the Weston 1995 Background (Main Post).

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.

The NJ Residential and Non-Residential Direct Contact Soil Remediation Standards refer to the NJDEP's September 18, 2017 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)