

State of New Jersey

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

September 6, 2016

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

Re: Building 1203 Soil Interim Removal Action Letter Fort Monmouth Oceanport, Monmouth County PI G000000032

Dear Mr. Colvin:

The New Jersey Department of Environmental Protection (Department) has completed review of the referenced *Building 1203 Soil Interim Removal Action Letter*, prepared by the Department of the Army, received on July 26, 2016. The Department's comments relative to the submittal are provided below.

Contaminated soil associated with a discharge from one of two transformers located on individual concrete pads near Building 1203 was addressed via excavation. PCB results were non-detect. As indicated in the submittal, EPH compliance was assessed using the Department's *Protocol for Addressing Extractable Petroleum Hydrocarbons (Version 5.0, August 9, 2010)* for Category 2 discharges of petroleum hydrocarbon mixtures other than #2 fuel oil. Although post excavation sampling indicates EPH levels of up to 12,036.9 mg/kg remain, this is below the sample specific EPH Soil Remediation Criterion for non-#2 fuel oil/diesel oil petroleum hydrocarbon mixtures (Category 2), as well as below the default maximum value for all non-#2 fuel oil/diesel oil petroleum hydrocarbon mixtures of 17,000 mg/kg. No additional removal of soil is necessary.

Attached, however, please find an amended version of the sample specific calculations. Although the final results remain below concern, sample EX1-05(B)-34-40 for both residential and non-residential was recalculated, as the incorrect numbers were apparently inadvertently used in the aliphatics portion of the originally submitted calculations.

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CHRIS CHRISTIE Governor

KIM GUADAGNO Lt. Governor This office looks forward to receipt of the backfilling activities and disposal documentation, to be submitted under separate cover.

Please contact this office if you have any questions.

Sincerely, ange_

Linda S. Range

attachment

C: William Colvin, BEC James Moore, USACE Rick Harrison, FMERA Joe Fallon, FMERA

COMPOSITION-SPECIFIC EXTRACTABLE PETROLEUM HYDROCARBON (EPH) SOIL REMEDIATION CRITERION (SRC) CALCULATOR	
FOR NON-#2 FUEL OIL/DIESEL OIL PETROLEUM HYDRCARBON MIXTURES (Version 2.0. August 9. 2010)	

DATA ENTRY CELLS

ENTER ALL CONCENTRATIONS AS MILLIGRAMS/KILOGRAM (mg/kg)

FOR NON DETECT VALUES, ENTER "0" or "ND" (without the quotation marks)

REMEMBER TO ENTER ACTUAL SAMPLE IDENTIFICATION IN PLACE OF "SAMPLE 1", ETC.

REMEMBER TO INDICATE WHETHER THE SAMPLE IS "RESIDENTIAL" (R) OR "NON-RESIDENTIAL" (N) [OR USE DROP-DOWN LIST]

ALL DATA MUST BE ENTERED FOR EACH SAMPLE FOR THE EPH CRITERION TO BE CALCULATED

CLICK ON THE "CALCULATE EPH SRC" BUTTON TO CALCULATE THE SAMPLE-SPECIFIC EPH SOIL REMEDIATION CRITERION

IF YOU CHANGE ANY INPUT DATA, YOU MUST CLICK ON "CALCULATE EPH SRC" AGAIN TO RECALCULATE THE SOIL REMEDIATION CRITERION

IF THE RESULTS FROM THE GC ANALYSIS INDICATE AN EPH CONCENTRATION LESS THAN 1,700 mg/kg, IT IS NOT NECESSARY TO USE THIS CALCULATOR

EC* RANGE / S		ex1-01(N) 30-36	ex-1-02€-29-35	EX1-03-28-34	EX1-04(W)-32-38	EX1-05(B)-34-40
Enter Residential or N	on-Residential	Residential	Residential	Residential	Residential	Residential
ALIPHATICS	EC9-EC12	7.3	9.1	0.6	0.8	7.1
	EC12-EC16	1,970.0	2,280.0	62.8	124.0	1,730.0
	EC16-EC21	5,990.0	6,340.0	269.0	376.0	4,600.0
	EC21-EC40	2,870.0	3,070.0	159.0	202.0	2,570.0
AROMATICS	EC10-EC12	1.2	1.2	1.2	1.1	1.2
	EC12-EC16	7.7	7.6	0.6	0.6	23.0
	EC16-EC21	198.0	163.0	13.8	8.8	632.0
	EC21-EC36	214.0	166.0	34.0	15.8	364.0
Total Concentration	on (mg/kg)	11,258.2	12,036.9	541.0	729.1	9,927.3

Calculated EPH SRC [#] (mg/kg)	18,000	19,000	13,000	18,000	11,000
Allowable [%] EPH SRC (mg/kg)	17,000^	17,000^	13,000	17,000^	11,000
ABOVE/BELOW ALLOWABLE EPH SRC (i.e., PASS or FAIL)	BELOW (PASS)				

* = Equivalent Carbon			
# = Soil Remediation Criterion	Calculate EPH SRC	Print Results	Intro Message
% = Accounts for residual product		And the lot of the lot	
17,000 [^] = Default maximum value for all non-#2 fuel oil/diesel oil	and the second se		
petroleum hydrocarbon mixtures	Reset Data	Instructions	Run Date = 09/06/2016
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COMPOSITION-SPECIFIC EXTRACTABLE PETROLEUM HYDROCARBON (EPH) SOIL REMEDIATION CRITERION (SRC) CALCULATOR FOR NON-#2 FUEL OIL/DIESEL OIL PETROLEUM HYDRCARBON MIXTURES (Version 2.0, August 9, 2010)

DATA ENTRY CELLS

ENTER ALL CONCENTRATIONS AS MILLIGRAMS/KILOGRAM (mg/kg)

FOR NON DETECT VALUES, ENTER "0" or "ND" (without the quotation marks)

REMEMBER TO ENTER ACTUAL SAMPLE IDENTIFICATION IN PLACE OF "SAMPLE 1", ETC.

REMEMBER TO INDICATE WHETHER THE SAMPLE IS "RESIDENTIAL" (R) OR "NON-RESIDENTIAL" (N) [OR USE DROP-DOWN LIST]

ALL DATA MUST BE ENTERED FOR EACH SAMPLE FOR THE EPH CRITERION TO BE CALCULATED

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Enter Residential or N	on-Residential	Non-Residential	Non-Residential	Non-Residential	Non-Residential	Non-Residential
ALIPHATICS	EC9-EC12	7.3	9.1	0.6	0.8	7.1
	EC12-EC16	1,970.0	2,280.0	62.8	124.0	1,730.0
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	EC16-EC21	198.0	163.0	13.8	8.8	632.0
	EC21-EC36	214.0	166.0	34.0	15.8	364.0
Total Concentration	on (mg/kg)	11,258.2	12,036.9	541.0	729.1	9,927.3

Calculated EPH SRC [#] (mg/kg)	190,000	210,000	140,000	200,000	120,000
Allowable [%] EPH SRC (mg/kg)	17,000^	17,000^	17,000^	17,000^	17,000^
ABOVE/BELOW ALLOWABLE EPH SRC (i.e., PASS or FAIL)	BELOW (PASS)				

* = Equivalent Carbon # = Soil Remediation Criterion	Calculate EPH SRC	Print Results	Intro Message
% = Accounts for residual product			
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