GRAND AVENUE

PCB AREA 1
(Building Interior)

AOC-1

AOC-2

PCB AREA 6.1

AOC-12N

AOC-12W

AOC-14

AOC-3

PCB AREA 6.2

PCB AREA 2.2

PCB AREA 2.1

PCB AREA 6.1

AOC-12E

PCB AREA 6.2

PCB AREA 2.2

PCB AREA 3.2

PCB AREA 2.1

AOC-5

PCB AREA 6.1

GUARD SHED

END OF TUNNEL

TUNNEL COLLAPSE

ELEVATED DECK

GRATE

MH

TURNTABLE

FORMER ANNEX III PCB STORAGE AREA

SHALLOW CONCRETE REFUSAL AT THIS LOCATION. SOIL BORING NOT ADVANCED.

TUNNEL COLLAPSE

GAS SERVICE

SAMPLE POINTS AT END1

END1

CABLE HOUSE

ELEVATED

RAILROAD TRACKS

FORMER WASTEWATER SURGE BASIN

TRACK A

TRACK C

TRACK D

GH-3

END OF TUNNEL

SUSPECTED DRAIN LINE

CHK BL. 1

CHK BL. 6

BM A

BM B

TENSION CABLE (GH-3)

STREAM GAUGE WEST MARK #1.3 = EL.6.

NO SEDIMENT

APPROXIMATE EXTENT OF EXCAVATION

STEEL BULKHEAD

FLOOD

EBB

WEST BRANCH MILL RIVER

LEGEND:

- W&S SEDIMENT/POROUS MEDIA SAMPLE LOCATION. LEFT SIDE REPRESENTS POROUS MEDIA SAMPLE, RIGHT SIDE REPRESENTS SEDIMENT SAMPLE
- SAMPLE LOCATION WITH NON-DETECT PCB CONCENTRATIONS
- SAMPLE LOCATION WITH PCB CONCENTRATIONS < 1.0 MG/KG
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 MG/KG, BUT < 10.0 MG/KG
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 MG/KG, BUT < 50.0 MG/KG
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 MG/KG
- SAMPLE LOCATION WITH TPH/ETPH CONCENTRATIONS > I/C DEC
- SAMPLE LOCATION WITH TPH/ETPH CONCENTRATIONS < I/C DEC
- SEDIMENT SAMPLE LOCATION
- POROUS MEDIA SAMPLE LOCATION
- W&S 2017 BORING/SOIL SAMPLE LOCATION
- W&S 2017 BORING/SOIL AND POROUS MEDIA SAMPLE LOCATION
- APPROXIMATE LIMIT OF HISTORICAL EXCAVATION
- APPROXIMATE LIMIT OF COOLING TUNNEL

20 10 0 20 40
SCALE: 1"=20'

FIGURE 12-3
UNITED ILLUMINATING ENGLISH STATION POWER PLANT
510 GRAND AVENUE, NEW HAVEN, CONNECTICUT
NORTH SIDE SAMPLE LOCATIONS:
> 4 FOOT DEPTH

OCTOBER, 2017 SCALE: 1" = 20'

Weston & Sampson

Weston & Sampson Engineers, Inc.
273 Dividend Road, Rocky Hill, CT 06067

TABLES

Table 1
AOC-2 Summary of Soil Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	APPLICABLE REMEDIAL CRITERIA[1]		WS-AOC2-SO-1-1	WS-AOC-SO-DUP-46	WS-AOC2-SO-1-1R	WS-AOC2-SO-1-2	WS-AOC2-SO-2-1	WS-AOC2-SO-DUP-45	WS-AOC2-SO-2-2	WS-AOC2-SO-3-1	WS-AOC2-SO-3-2	WS-AOC2-SO-4-1	WS-AOC2-SO-4-2
SAMPLE DEPTH (ft bgs)			(7.0'-8.5')	(7.0'-8.5')	(7.0'-8.5')	(13.0'-14.0')	(7.0'-8.5')	(7.0'-8.5')	(13.0'-14.0')	(7.0'-8.5')	(13.0'-14.0')	(7.0'-8.5')	(13.0'-14.0')
DATE SAMPLED			8/3/17	8/3/17	9/18/17	8/3/17	8/3/17	8/3/17	8/3/17	8/3/17	8/3/17	8/3/17	8/3/17
WORK ORDER NO.			17H0196	17H0196	17I0904	17H0196	17H0196	17H0196	17H0196	17H0196	17H0196	17H0196	17H0196
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	PARENT	DUPLICATE			PARENT	DUPLICATE					
PARAMETER (Units)[2]													
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)													
Total PCBs	10	--	<0.11	<0.11	NA	<0.12	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
Volatile Organic Compounds by EPA method 8260 (mg/kg)													
Benzene	200	0.2	**0.0021**	NA	NA	<0.0013	<0.0014	NA	<0.0014	<0.0014	<0.0013	<0.0015	<0.0013
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)													
Acenaphthene*	2,500	84	<0.19	NA	<0.19	<0.20	<0.18	NA	<0.19	<0.18	<0.19	<0.19	<0.19
Acenaphthylene	2,500	84	**0.58**	NA	**0.45**	<0.20	**0.24**	NA	<0.19	<0.18	<0.19	<0.19	<0.19
Anthracene	2,500	400	**1.1**	NA	**0.6**	<0.20	**0.22**	NA	<0.19	**0.20**	<0.19	<0.19	<0.19
Benzo(a)anthracene	7.8	1	**3.3**	NA	**1.9**	<0.20	**1.3**	NA	<0.19	**0.73**	**0.20**	**0.36**	<0.19
Benzo(a)pyrene	1	1	**3.7**	NA	**2.7**	<0.20	**1.4**	NA	<0.19	**0.82**	**0.33**	**0.47**	<0.19
Benzo(b)fluoranthene	7.8	1	**4.2**	NA	**3.0**	<0.20	**1.6**	NA	<0.19	**1.1**	**0.40**	**0.6**	**0.22**
Benzo(g,h,i)perylene*	78	1	**2.1**	NA	**2.2**	<0.20	**1.0**	NA	<0.19	**0.49**	**0.26**	**0.34**	<0.19
Benzo(k)fluoranthene	78	1	**1.5**	NA	**1.0**	<0.20	**0.62**	NA	<0.19	**0.34**	<0.19	**0.21**	<0.19
Chrysene*	780	1	**3.3**	NA	**1.9**	<0.20	**0.91**	NA	<0.19	**0.63**	<0.19	**0.35**	<0.19
Dibenz(a,h)anthracene*	1	1	**0.52**	NA	**0.40**	<0.20	**0.25**	NA	<0.19	<0.18	<0.19	<0.19	<0.19
Fluoranthene	2,500	56	**7.5**	NA	**3.8**	<0.20	**1.8**	NA	<0.19	**1.6**	**0.30**	**0.67**	**0.30**
Fluorene	2,500	56	<0.19	NA	<0.19	<0.20	<0.18	NA	<0.19	<0.18	<0.19	<0.19	<0.19
Indeno(1,2,3-cd)pyrene*	7.8	1	**2.0**	NA	**2.0**	<0.20	**0.97**	NA	<0.19	**0.53**	**0.26**	**0.31**	<0.19
Naphthalene	2,500	56	<0.19	NA	**0.21**	<0.20	<0.18	NA	<0.19	<0.18	<0.19	<0.19	<0.19
Phenanthrene	2,500	40	**2.1**	NA	**1.7**	<0.20	**0.47**	NA	<0.19	**0.89**	<0.19	**0.29**	<0.19
Pyrene	2,500	40	**7.8**	NA	**5.0**	<0.20	**2.3**	NA	**0.21**	**1.6**	**0.46**	**0.81**	**0.59**
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)													
Acenaphthene*	NE	4200	**0.63**	NA	<0.30	NA	<0.30	NA	NA	<0.30	NA	NA	NA
Acenaphthylene	NE	4200	<0.30	NA	<0.30	NA	<0.30	NA	NA	<0.30	NA	NA	NA
Anthracene*	NE	20,000	**0.32**	NA	**0.24**	NA	<0.20	NA	NA	<0.20	NA	NA	NA
Benzo(a)anthracene	NE	0.6	**0.051**	NA	**0.23**	NA	<0.050	NA	NA	<0.050	NA	NA	NA
Benzo(a)pyrene	NE	2	<0.10	NA	**0.42**	NA	<0.10	NA	NA	<0.10	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	**0.057**	NA	**0.45**	NA	<0.050	NA	NA	**0.058**	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	<0.50	NA	<0.50	NA	<0.50	NA	NA	<0.50	NA	NA	NA
Benzo(k)fluoranthene	NE	5	<0.20	NA	<0.20	NA	<0.20	NA	NA	<0.20	NA	NA	NA
Chrysene*	NE	48	<0.20	NA	**0.27**	NA	<0.20	NA	NA	<0.20	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	<0.20	NA	<0.20	NA	<0.20	NA	NA	<0.20	NA	NA	NA
Fluoranthene	NE	2800	**0.66**	NA	**0.75**	NA	<0.50	NA	NA	<0.50	NA	NA	NA
Fluorene	NE	2800	<1.0	NA	<1.0	NA	<1.0	NA	NA	<1.0	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	<0.20	NA	**0.32**	NA	<0.20	NA	NA	<0.20	NA	NA	NA
Naphthalene	NE	2800	<1.0	NA	<1.0	NA	<1.0	NA	NA	<1.0	NA	NA	NA
Phenanthrene	NE	2000	**0.97**	NA	**0.95**	NA	**0.13**	NA	NA	**0.48**	NA	NA	NA
Pyrene	NE	2000	<1.0	NA	<1.0	NA	<1.0	NA	NA	<1.0	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	**370**	NA	NA	**29**	**210**	NA	**720**	**140**	**29**	**120**	**23**
Total Solids (%)	--	--	**90.0**	**89.3**	**91.1**	**86.1**	**92.5**	**91.7**	**89.6**	**92.1**	**89.2**	**91.0**	**90.2**

NOTES:

1. Analytical results compared to applicable remedial criteria from Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013) and Federal PCB Regulations (40 CFR Part 761).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit shown.

BOLD = compound detected at the concentration shown.

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 2
AOC-5 Summary of Soil Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC5-SO-1-1	WS-AOC5-SO-1-2	WS-AOC5-SO-2-1	WS-AOC5-SO-3-1	WS-AOC5-SO-3-2	WS-AOC5-SO-4-1	WS-AOC5-SO-5-1	WS-AOC5-SO-6-1	WS-AOC5-SO-DUP-16	WS-AOC5-SO-7-1	WS-AOC5-SO-8-1	WS-AOC5-SO-8-2	WS-AOC5-SO-9-1
SAMPLE DEPTH (ft bgs)			(0-0.5')	(12.0'-13.0')	(0-0.25')	(0-0.5')	(12.0'-13.0')	(0-0.5')	(0-0.5')	(0-0.7')	(0-0.7')	(0-0.5')	(0-0.5')	(12.0'-13.0')	(0-0.5')
DATE SAMPLED			7/21/17	7/21/17	7/21/17	7/21/17	7/21/17	7/21/17	7/21/17	7/21/17	7/21/17	7/21/17	7/21/17	7/21/17	7/21/17
WORK ORDER NO.			17G0911	17G0911	17G0911	17G0911	17G0911	17G0911	17G0911	17G0911	17G0913	17G0911	17G0911	17G0911	17G0911
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]								PARENT	DUPLICATE				
PARAMETER (Units)[2]															
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)															
PCB-1260	10	--	<0.10	<0.18	<0.10	**0.13**	<0.10	<0.10	<0.16	<0.10	<0.099	<0.10	<0.10	<0.17	<0.10
Total PCBs	10	--	<0.10	<0.18	<0.10	**0.13**	<0.10	<0.10	<0.16	<0.10	<0.099	<0.10	<0.10	<0.17	<0.10
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)															
Anthracene*	2,500	400	NA	NA	NA	NA	**0.30**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	**0.91**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	**0.90**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	**1.0**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	**0.56**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	**0.37**	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	**0.84**	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	**0.55**	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	**0.30**	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	**0.73**	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	**1.9**	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	**110**	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**97.0**	**54.8**	**97.1**	**98.2**	**97.4**	**98.3**	**62.7**	**98.7**	**98.6**	**98.8**	**98.4**	**58.9**	**99.2**

NOTES:

1. Analytical results compared to applicable remedial criteria from Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013) and Federal PCB Regulations (40 CFR Part 761).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
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mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

Table 3
AOC-6 Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC6-CO-1	WS-AOC6-CO-2	WS-AOC6-CO-3	WS-AOC6-CO-4	WS-AOC6-SO-5-1	WS-AOC6-SO-5-2	WS-AOC6-SO-5-3	WS-AOC6-SO-5-4	WS-AOC6-SO-DUP-55
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5')	(0.5'-1.5')	(2.0'-3.0')	(5.0'-6.0')	(5.0'-6.0')
DATE SAMPLED			8/24/2017	8/24/17	8/24/17	8/24/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17
WORK ORDER NO.			17H1359	17H1359	17H1359	17H1359	17I0317	17I0317	17I0319	17I0319	17I0321
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]								PARENT	DUPLICATE
PARAMETER (Units)[2]											
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)											
PCB-1248	10	--	<0.084	<0.097	<0.078	<0.072	<0.11	<0.088	<0.086	<0.094	<0.093
PCB-1254	10	--	<0.084	<0.097	<0.078	<0.072	<0.11	<0.088	<0.086	<0.094	<0.093
PCB-1260	10	--	<0.084	<0.097	<0.078	<0.072	**0.14**	**0.14**	**0.10**	<0.094	<0.093
PCB 1268	10	--	<0.084	<0.097	<0.078	<0.072	**0.16**	**0.13**	<0.086	<0.094	<0.093
Total PCBs	10	--	<0.084	<0.097	<0.078	<0.072	**0.3**	**0.27**	**0.10**	<0.094	<0.093
SPLP Polychlorinated Biphenyls by EPA method 8082 (ug/L)											
PCB-1248	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1254	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1260	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB 1268	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)											
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)											
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	**160**	NA	NA	NA
Total Solids (%)	--	--	NA	NA	NA	NA	**69.4**	**87.7**	**86.9**	**83.3**	**83.1**

NOTES:

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2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
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A/B labels indicate smaller subintervals for normal samples.

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< = compound not detected above laboratory reporting limit, shown.
BOLD = compound detected at that concentration.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 3
AOC-6 Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC6-SO-6-1	WS-AOC6-SO-6-2	WS-AOC6-SO-6-3	WS-AOC6-SO-6-4	WS-AOC6-SO-7-1	WS-AOC6-SO-7-2	WS-AOC6-SO-7-3	WS-AOC6-SO-7-4	WS-AOC6-SO-8-1
SAMPLE DEPTH (ft bgs)			(0-0.5')	(0.5'-1.5')	(2.0'-3.0')	(5.0'-6.0')	(0-0.5')	(0.5'-1.5')	(2.0'-3.0')	(5.0'-6.0')	(0-0.5')
DATE SAMPLED			9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17
WORK ORDER NO.			17I0317	17I0317	17I0317	17I0317	17I0319	17I0319	17I0319	17I0319	17I0319
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]									
PARAMETER (Units)[2]											
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)											
PCB-1248	10	--	<0.13	<0.086	<0.085	<0.095	<0.094	<0.089	<0.090	<0.090	<0.12
PCB-1254	10	--	**0.14**	<0.086	<0.085	<0.095	<0.094	<0.089	<0.090	<0.090	<0.12
PCB-1260	10	--	<0.13	**0.12**	<0.085	<0.095	**0.10**	**0.22**	<0.090	<0.090	**0.31**
PCB 1268	10	--	<0.13	**0.13**	<0.085	<0.095	<0.094	<0.089	<0.090	<0.090	**0.28**
Total PCBs	10	--	**0.14**	**0.25**	<0.085	<0.095	**0.10**	**0.22**	<0.090	<0.090	**0.59**
SPLP Polychlorinated Biphenyls by EPA method 8082 (ug/L)											
PCB-1248	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1254	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1260	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB 1268	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)											
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)											
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	**460**	NA	NA	NA	**200**	NA	NA	NA
Total Solids (%)	--	--	**59.2**	**88.1**	**89.5**	**81.9**	**83.4**	**86.9**	**87.2**	**83.5**	**62.9**

NOTES:
1. Analytical results compared to applicable remedial criteria from Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013) and Federal PCB Regulations (40 CFR Part 761).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit, shown.
BOLD = compound detected at that concentration.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 3
AOC-6 Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC6-SO-8-2	WS-AOC6-SO-8-3	WS-AOC6-SO-8-4	WS-AOC6-SO-9-1	WS-AOC6-SO-9-2	WS-AOC6-SO-9-3	WS-AOC6-SO-9-4	WS-AOC6-SO-10-1	WS-AOC6-SO-10-2
SAMPLE DEPTH (ft bgs)			(0.5'-1.5')	(2.0'-3.0')	(5.0'-6.0')	(0-0.5')	(0.5'-1.5')	(2.0'-3.0')	(5.0'-6.0')	(0-0.5')	(0.5'-1.5')
DATE SAMPLED			9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17
WORK ORDER NO.			17I0319	17I0319	17I0319	17I0320	17I0320	17I0320	17I0320	17I0320	17I0320
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]									
PARAMETER (Units)[2]											
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)											
PCB-1248	10	--	<0.094	<0.082	<0.096	<0.089	<0.093	<0.092	<0.086	<0.12	<0.095
PCB-1254	10	--	<0.094	<0.082	<0.096	<0.089	<0.093	<0.092	<0.086	<0.12	<0.095
PCB-1260	10	--	<0.094	<0.082	<0.096	**0.10**	<0.093	<0.092	<0.086	**0.34**	<0.095
PCB 1268	10	--	<0.094	<0.082	<0.096	**0.20**	<0.093	<0.092	<0.086	<0.12	<0.095
Total PCBs	10	--	<0.094	<0.082	<0.096	**0.30**	<0.093	<0.092	<0.086	**0.34**	<0.095
SPLP Polychlorinated Biphenyls by EPA method 8082 (ug/L)											
PCB-1248	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1254	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1260	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB 1268	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)											
Acenaphthene*	2,500	84	**0.29**	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	**0.38**	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	**1.4**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	**4.6**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	**4.0**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	**4.6**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	**2.1**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	**1.8**	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	**4.5**	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	**0.65**	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	**10**	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	**0.39**	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	**2.4**	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	**0.21**	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	**0.80**	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	**7.1**	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	**8.6**	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)											
Acenaphthene*	NE	4200	<0.30	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	<0.30	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	<0.050	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	<0.10	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	<0.050	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	<0.50	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	<0.50	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	7.4	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	**0.091**	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	**230**	NA	NA	NA	**170**	NA	NA	NA	**58**
Total Solids (%)	--	--	**83.7**	**92.0**	**77.9**	**87.5**	**86.2**	**85.5**	**86.6**	**67.0**	**81.6**

NOTES:

1. Analytical results compared to applicable remedial criteria from Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013) and Federal PCB Regulations (40 CFR Part 761).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit, shown.
BOLD = compound detected at that concentration.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 3
AOC-6 Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC6-SO-10-3	WS-AOC6-SO-10-4	WS-AOC6-SO-DUP-58	WS-AOC6-SO-11-1	WS-AOC6-SO-11-2	WS-AOC6-SO-11-3	WS-AOC6-SO-11-4	WS-AOC6-SO-12-1	WS-AOC6-SO-12-2
SAMPLE DEPTH (ft bgs)			(2.0'-3.0')	(5.0'-6.0')	(5.0'-6.0')	(0-0.5')	(0.5'-1.5')	(2.0'-3.0')	(5.0'-6.0')	(0-0.5')	(0.5'-1.5')
DATE SAMPLED			9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17
WORK ORDER NO.			17I0320	17I0320	17I0321	17I0317	17I0317	17I0317	17I0317	17I0317	17I0317
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]		PARENT	DUPLICATE						
PARAMETER (Units)[2]											
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)											
PCB-1248	10	--	<0.086	<0.10	<0.096	<0.091	<0.093	<0.089	<0.090	<0.43	<0.088
PCB-1254	10	--	<0.086	<0.10	<0.096	<0.091	<0.093	<0.089	<0.090	<0.43	<0.088
PCB-1260	10	--	<0.086	<0.10	<0.096	**0.18**	<0.093	<0.089	<0.090	**0.78**	<0.088
PCB 1268	10	--	<0.086	<0.10	<0.096	**0.15**	<0.093	<0.089	<0.090	**2.7**	<0.088
Total PCBs	10	--	<0.086	<0.10	<0.096	**0.33**	<0.093	<0.089	<0.090	**3.48**	<0.088
SPLP Polychlorinated Biphenyls by EPA method 8082 (ug/L)											
PCB-1248	--	5	NA	NA	NA	NA	NA	NA	NA	<0.20	NA
PCB-1254	--	5	NA	NA	NA	NA	NA	NA	NA	<0.20	NA
PCB-1260	--	5	NA	NA	NA	NA	NA	NA	NA	<0.20	NA
PCB 1268	--	5	NA	NA	NA	NA	NA	NA	NA	<0.20	NA
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	<0.20	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)											
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)											
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	**210**	NA	NA	NA	**430**
Total Solids (%)	--	--	**89.6**	**77.1**	**79.1**	**85.4**	**86.1**	**88.8**	**87.7**	**88.0**	**88.6**

NOTES:

1. Analytical results compared to applicable remedial criteria from Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013) and Federal PCB Regulations (40 CFR Part 761).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
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BOLD = compound detected at that concentration.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 3
AOC-6 Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC6-SO-12-3	WS-AOC6-SO-DUP-54	WS-AOC6-SO-12-4	WS-AOC6-SO-13-1	WS-AOC6-SO-13-2	WS-AOC6-SO-13-3	WS-AOC6-SO-13-4	WS-AOC6-SO-DUP-56	WS-AOC6-SO-14-1
SAMPLE DEPTH (ft bgs)			(2.0'-3.0')	(2.0'-3.0')	(5.0'-6.0')	(0-0.5')	(0.5'-1.5')	(2.0'-3.0')	(5.0'-6.0')	(5.0'-6.0')	(0-0.5')
DATE SAMPLED			9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17
WORK ORDER NO.			17I0317	17I0321	17I0317	17I0319	17I0319	17I0319	17I0319	17I0321	17I0320
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	PARENT	DUPLICATE					PARENT	DUPLICATE	
PARAMETER (Units)[2]											
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)											
PCB-1248	10	--	<0.088	<0.086	<0.10	<0.87	<0.088	<0.099	<0.11	<0.083	**0.90**
PCB-1254	10	--	<0.088	<0.086	<0.10	<0.87	<0.088	<0.099	<0.11	<0.083	<0.17
PCB-1260	10	--	<0.088	<0.086	<0.10	**2.3**	<0.088	<0.099	<0.11	<0.083	**0.98**
PCB 1268	10	--	<0.088	<0.086	**0.13**	**9.6**	**0.13**	<0.099	<0.11	<0.083	<0.17
Total PCBs	10	--	<0.088	<0.086	**0.13**	**11.9**	**0.13**	<0.099	<0.11	<0.083	**1.88**
SPLP Polychlorinated Biphenyls by EPA method 8082 (ug/L)											
PCB-1248	--	5	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
PCB-1254	--	5	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
PCB-1260	--	5	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
PCB 1268	--	5	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Total PCBs	--	5	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)											
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)											
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	**820**	NA	NA	NA	NA
Total Solids (%)	--	--	**85.3**	**88.2**	**76.2**	**87.0**	**87.8**	**75.6**	**67.4**	**89.7**	**92.4**

NOTES:

1. Analytical results compared to applicable remedial criteria from Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013) and Federal PCB Regulations (40 CFR Part 761).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit, shown.
BOLD = compound detected at that concentration.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 3
AOC-6 Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION			WS-AOC6-SO-14-2	WS-AOC6-SO-14-3	WS-AOC6-SO-14-4	WS-AOC6-SO-15-1	WS-AOC6-SO-15-2	WS-AOC6-SO-15-3	WS-AOC6-SO-15-4	WS-AOC6-SO-16-1	WS-AOC6-SO-16-2
SAMPLE DEPTH (ft bgs)	REMEDIATION STANDARD REGULATIONS[1]		(0.5'-1.5')	(2.0'-3.0')	(5.0'-6.0')	(0-0.5')	(0.5'-1.5')	(2.0'-3.0')	(5.0'-6.0')	(0-0.5')	(0.5'-1.5')
DATE SAMPLED			9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17
WORK ORDER NO.			17I0320	17I0320	17I0320	17I0320	17I0320	17I0320	17I0320	17I0319	17I0319
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]									
PARAMETER (Units)[2]											
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)											
PCB-1248	10	--	**0.38**	<0.11	<0.098	<0.46	<0.10	<0.099	<0.087	<0.089	<0.093
PCB-1254	10	--	<0.16	<0.11	<0.098	<0.46	<0.10	<0.099	<0.087	<0.089	<0.093
PCB-1260	10	--	**1.4**	<0.11	<0.098	**2.9**	**0.51**	<0.099	<0.087	**0.16**	<0.093
PCB 1268	10	--	<0.16	<0.11	<0.098	<0.46	<0.10	<0.099	<0.087	<0.089	<0.093
Total PCBs	10	--	**1.78**	<0.11	<0.098	**2.9**	**0.51**	<0.099	<0.087	**0.16**	<0.093
SPLP Polychlorinated Biphenyls by EPA method 8082 (ug/L)											
PCB-1248	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1254	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1260	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB 1268	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)											
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	**0.28**	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	**0.32**	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	<0.22	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	**0.41**	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	**0.24**	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)											
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	**89**	NA	NA	NA	**260**	NA	NA	NA	**100**
Total Solids (%)	--	--	**91.4**	**74.3**	**81.1**	**82.2**	**75.4**	**77.8**	**85.6**	**86.8**	**80.8**

NOTES:

1. Analytical results compared to applicable remedial criteria from Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013) and Federal PCB Regulations (40 CFR Part 761).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth resampled.
mg/kg = milligrams per kilogram
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< = compound not detected above laboratory reporting limit, shown.
BOLD = compound detected at that concentration.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 3
AOC-6 Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION			WS-AOC6-SO-16-3	WS-AOC6-SO-16-4	WS-AOC6-SO-17-1	WS-AOC6-SO-17-2	WS-AOC6-SO-17-3	WS-AOC6-SO-17-4	WS-AOC6-SO-DUP-57
SAMPLE DEPTH (ft bgs)	REMEDIATION STANDARD REGULATIONS[1]		(2.0'-3.0')	(5.0'-6.0')	(0-0.5')	(0.5'-1.5')	(2.0'-3.0')	(5.0'-6.0')	(5.0'-6.0')
DATE SAMPLED			9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/8/17
WORK ORDER NO.			17I0320	17I0320	17I0319	17I0319	17I0319	17I0319	17I0321
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]						PARENT	DUPLICATE
PARAMETER (Units)[2]									
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)									
PCB-1248	10	--	<0.097	<0.098	**0.35**	<0.087	<0.093	<0.091	<0.092
PCB-1254	10	--	<0.097	<0.098	<0.085	<0.087	<0.093	<0.091	<0.092
PCB-1260	10	--	<0.097	<0.098	**0.17**	**0.20**	<0.093	<0.091	<0.092
PCB 1268	10	--	<0.097	<0.098	**0.13**	<0.087	<0.093	<0.091	<0.092
Total PCBs	10	--	<0.097	<0.098	**0.65**	**0.2**	<0.093	<0.091	<0.092
SPLP Polychlorinated Biphenyls by EPA method 8082 (ug/L)									
PCB-1248	--	5	NA	NA	NA	NA	NA	NA	NA
PCB-1254	--	5	NA	NA	NA	NA	NA	NA	NA
PCB-1260	--	5	NA	NA	NA	NA	NA	NA	NA
PCB 1268	--	5	NA	NA	NA	NA	NA	NA	NA
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)									
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)									
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	7.4	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	NA	**65**	NA	NA	NA
Total Solids (%)	--	--	**77.9**	**81.4**	**90.8**	**87.1**	**80.8**	**84.4**	**81.8**

NOTES:
1. Analytical results compared to applicable remedial criteria from Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013) and Federal PCB Regulations (40 CFR Part 761).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
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BOLD = compound detected at that concentration.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12E-AS-1	WS-AOC12E-SO-1-1	WS-AOC12E-SO-1-2	WS-AOC-12E-AS-2	WS-AOC12E-SO-2-1	WS-AOC12E-SO-2-2	WS-AOC-12E-AS-3	WS-AOC12E-SO-3-1	WS-AOC12E-SO-3-2	WS-AOC-12E-AS-4
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.5')	(5.0'-6.0')	(0-0.5")	(0.5'-1.5')	(5.0'-6.0')	(0-0.5")	(0.5'-1.5')	(5.0'-6.0')	(0-0.5")
DATE SAMPLED			8/3/17	7/21/17	7/21/17	8/3/17	7/21/17	7/21/17	8/3/17	7/21/17	7/21/17	8/3/17
WORK ORDER NO.			17H0197	17G0911	17G0911	17H0197	17G0911	17G0911	17H0197	17G0911	17G0911	17H0197
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.99	<0.11	<0.12	<0.92	<0.11	<0.11	<0.96	<0.11	<0.11	<1.0
PCB-1248	10	--	<0.99	<0.11	<0.12	<0.92	<0.11	<0.11	<0.96	<0.11	<0.11	<1.0
PCB-1260	10	--	<0.99	<0.11	<0.12	<0.92	<0.11	<0.11	<0.96	<0.11	<0.11	<1.0
PCB 1268	10	--	<0.99	<0.11	<0.12	<0.92	<0.11	<0.11	<0.96	<0.11	<0.11	<1.0
Total PCBs	10	--	<0.99	<0.11	<0.12	<0.92	<0.11	<0.11	<0.96	<0.11	<0.11	<1.0
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	<0.18	<0.21	NA	<0.37	<0.77	NA	<0.36	<0.19	NA
Acenaphthylene	2,500	84	NA	<0.18	<0.21	NA	<0.37	<0.77	NA	<0.36	<0.19	NA
Anthracene*	2,500	400	NA	**0.58**	<0.21	NA	<0.37	<0.77	NA	<0.36	**0.28**	NA
Benzo(a)anthracene	7.8	1	NA	**2.5**	**0.29**	NA	<0.37	<0.77	NA	<0.36	**1.1**	NA
Benzo(a)pyrene	1	1	NA	**2.4**	**0.27**	NA	<0.37	<0.77	NA	<0.36	**0.97**	NA
Benzo(b)fluoranthene	7.8	1	NA	**3.1**	**0.32**	NA	<0.37	<0.77	NA	<0.36	**1.2**	NA
Benzo(g,h,i)perylene*	78	1	NA	**2.0**	<0.21	NA	<0.37	<0.77	NA	<0.36	**0.84**	NA
Benzo(k)fluoranthene	78	1	NA	**1.1**	<0.21	NA	<0.37	<0.77	NA	<0.36	**0.44**	NA
Chrysene*	780	1	NA	**2.4**	**0.24**	NA	<0.37	<0.77	NA	<0.36	**1.0**	NA
Dibenz(a,h)anthracene*	1	1	NA	**0.20**	<0.21	NA	<0.37	<0.77	NA	<0.36	**0.21**	NA
Fluoranthene	2,500	56	NA	**3.6**	**0.45**	NA	<0.37	<0.77	NA	<0.36	**2.2**	NA
Fluorene	2,500	56	NA	<0.18	<0.21	NA	<0.37	<0.77	NA	<0.36	<0.19	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	**1.7**	<0.21	NA	<0.37	<0.77	NA	<0.36	**0.72**	NA
2-Methylnaphthalene*	1,000	5.6	NA	<0.18	<0.21	NA	<0.37	<0.77	NA	<0.36	<0.19	NA
Naphthalene	2,500	56	NA	<0.18	<0.21	NA	<0.37	<0.77	NA	<0.36	<0.19	NA
Phenanthrene	2,500	40	NA	**2.8**	**0.29**	NA	<0.37	<0.77	NA	<0.36	**1.5**	NA
Pyrene	2,500	40	NA	**3.4**	**0.54**	NA	<0.37	<0.77	NA	<0.36	**2.3**	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	**180**	**26**	NA	**120**	**2700**	NA	**380**	**170**	NA
Total Solids (%)	--	--	NA	**93.1**	**82.5**	NA	**92.8**	**88**	NA	**94.2**	**88.9**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-4-1	WS-AOC12E-SO-4-2	WS-AOC12E-SO-DUP-17	WS-AOC12E-CO-5	WS-AOC12E-CO-DUP-18	WS-AOC12E-SO-5-1	WS-AOC12E-SO-5-2	WS-AOC-12E-AS-6	WS-AOC12E-SO-6-1A	WS-AOC12E-SO-6-1B
SAMPLE DEPTH (ft bgs)			(0-1.0')	(5.0'-6.0')	(5.0'-6.0')	(0-0.5")	(0-0.5")	(3.0'-3.5')	(5.0'-6.0')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')
DATE SAMPLED			7/21/17	7/21/17	7/21/17	8/24/17	8/24/17	9/5/17	9/5/17	8/2/17	7/25/17	7/25/17
WORK ORDER NO.			17G0911	17G0911	17G0913	17H1359	17H1359	17I0112	17I0112	17H0114	17G1169	17G1169
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]		PARENT	DUPLICATE	PARENT	DUPLICATE					
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.11	<0.13	<0.12	<0.074	<0.082	<0.098	<0.096	<0.46	<0.11	NA
PCB-1248	10	--	<0.11	<0.13	<0.12	<0.074	<0.082	<0.098	<0.096	<0.46	<0.11	NA
PCB-1260	10	--	<0.11	<0.13	<0.12	<0.074	<0.082	<0.098	<0.096	<0.46	<0.11	NA
PCB 1268	10	--	<0.11	<0.13	<0.12	**0.47**	**0.40**	<0.098	<0.096	<0.46	<0.11	NA
Total PCBs	10	--	<0.11	<0.13	<0.12	**0.47**	**0.40**	<0.098	<0.096	<0.46	<0.11	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	<0.19	<0.21	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Acenaphthylene	2,500	84	<0.19	<0.21	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Anthracene*	2,500	400	<0.19	<0.21	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Benzo(a)anthracene	7.8	1	**0.70**	**0.45**	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Benzo(a)pyrene	1	1	**0.71**	**0.35**	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Benzo(b)fluoranthene	7.8	1	**0.97**	**0.48**	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Benzo(g,h,i)perylene*	78	1	**0.57**	**0.36**	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Benzo(k)fluoranthene	78	1	**0.35**	<0.21	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Chrysene*	780	1	**0.81**	**0.5**	<0.21	NA	NA	NA	NA	NA	NA	**0.31**
Dibenz(a,h)anthracene*	1	1	<0.19	<0.21	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Fluoranthene	2,500	56	**1.1**	**0.91**	**0.27**	NA	NA	NA	NA	NA	NA	**0.21**
Fluorene	2,500	56	<0.19	<0.21	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Indeno(1,2,3-cd)pyrene*	7.8	1	**0.51**	**0.33**	<0.21	NA	NA	NA	NA	NA	NA	<0.21
2-Methylnaphthalene*	1,000	5.6	<0.19	<0.21	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Naphthalene	2,500	56	<0.19	<0.21	<0.21	NA	NA	NA	NA	NA	NA	<0.21
Phenanthrene	2,500	40	**0.62**	**0.78**	<0.21	NA	NA	NA	NA	NA	NA	**0.28**
Pyrene	2,500	40	**1.2**	**0.95**	**0.42**	NA	NA	NA	NA	NA	NA	**1.2**
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	**250**	**360**	**1000**	NA	NA	**110**	NA	NA	NA	**240**
Total Solids (%)	--	--	**91.6**	**79.6**	**80.4**	NA	NA	**81.9**	**83.0**	NA	**91.6**	**81.0**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-6-2	WS-AOC12E-SO-6-3	WS-AOC-12E-AS-7	WS-AOC12E-SO-7-1	WS-AOC12E-SO-7-2	WS-AOC12E-SO-DUP-24	WS-AOC12E-SO-7-3	WS-AOC-12E-AS-8	WS-AOC12E-SO-8-1A	WS-AOC12E-SO-8-1B
SAMPLE DEPTH (ft bgs)			(2.0'-2.5')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(1.5'-2.0')	(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')
DATE SAMPLED			7/25/17	7/25/17	8/2/17	7/25/17	7/25/17	7/25/17	7/25/17	8/2/17	7/25/17	7/25/17
WORK ORDER NO.			17G1169	17G1169	17H0114	17G1077	17G1077	17G1079	17G1077	17H0114	17G1077	17G1077
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]					PARENT	DUPLICATE				
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.12	<0.12	<0.46	<0.11	<0.12	<0.11	<0.14	<0.46	<0.11	NA
PCB-1248	10	--	<0.12	<0.12	<0.46	<0.11	<0.12	<0.11	<0.14	<0.46	<0.11	NA
PCB-1260	10	--	<0.12	<0.12	<0.46	<0.11	<0.12	<0.11	<0.14	<0.46	<0.11	NA
PCB 1268	10	--	<0.12	<0.12	<0.46	<0.11	<0.12	<0.11	<0.14	<0.46	<0.11	NA
Total PCBs	10	--	<0.12	<0.12	<0.46	<0.11	<0.12	<0.11	<0.14	<0.46	<0.11	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	<11
Total Solids (%)	--	--	**84.7**	**80.8**	NA	**91.1**	**84.3**	**87.1**	**72.7**	NA	**93.0**	**88.8**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
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< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-8-2	WS-AOC12E-SO-8-3	WS-AOC-12E-AS-9	WS-AOC12E-SO-9-1	WS-AOC12E-SO-9-2	WS-AOC12E-SO-9-3	WS-AOC-12E-AS-10	WS-AOC12E-SO-10-1	WS-AOC12E-SO-DUP-23	WS-AOC12E-SO-10-2
SAMPLE DEPTH (ft bgs)			(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(1.0'-1.5')	(1.0'-1.5')	(2.0'-2.5')
DATE SAMPLED			7/25/17	7/25/17	8/2/17	7/25/17	7/25/17	7/25/17	8/2/17	7/25/17	7/25/17	7/25/17
WORK ORDER NO.			17G1077	17G1077	17H0114	17G1169	17G1169	17G1169	17H0114	17G1075	17G1079	17G1075
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]								PARENT	DUPLICATE	
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.13	<0.15	<0.47	<0.10	<0.11	<0.13	<0.49	<0.12	<0.12	<0.12
PCB-1248	10	--	<0.13	<0.15	<0.47	<0.10	<0.11	<0.13	<0.49	<0.12	<0.12	<0.12
PCB-1260	10	--	<0.13	<0.15	<0.47	<0.10	<0.11	<0.13	<0.49	<0.12	<0.12	<0.12
PCB 1268	10	--	<0.13	<0.15	<0.47	<0.10	<0.11	<0.13	<0.49	<0.12	<0.12	<0.12
Total PCBs	10	--	<0.13	<0.15	<0.47	<0.10	<0.11	<0.13	<0.49	<0.12	<0.12	<0.12
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**74.1**	**65.5**	NA	**97.6**	**94.0**	**76.3**	NA	**83.5**	**85.1**	**85.0**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-10-3	WS-AOC-12E-AS-11	WS-AOC12E-SO-11-1A	WS-AOC12E-SO-11-1B	WS-AOC12E-SO-11-2	WS-AOC12E-SO-11-3	WS-AOC-12E-AS-12	WS-AOC12E-SO-12-1	WS-AOC12E-SO-12-2	WS-AOC12E-SO-12-3
SAMPLE DEPTH (ft bgs)			(5.0'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.0')	(2.5'-3.0')	(4.0'-4.5')	(0-0.5")	(0.5'-1.0')	(1.2'-2.0')	(5.0'-5.5')
DATE SAMPLED			7/25/17	8/2/17	7/25/17	7/25/17	7/25/17	7/25/17	8/2/17	7/24/17	7/24/17	7/24/17
WORK ORDER NO.			17G1077	17H0114	17G1075	17G1075	17G1075	17G1075	17H0114	17G0987	17G0987	17G0989
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.14	<0.44	<0.14	NA	<0.13	<0.12	<0.45	<0.10	<0.11	<0.11
PCB-1248	10	--	<0.14	<0.44	<0.14	NA	<0.13	<0.12	<0.45	<0.10	<0.11	<0.11
PCB-1260	10	--	<0.14	<0.44	<0.14	NA	<0.13	<0.12	<0.45	<0.10	<0.11	**0.20**
PCB 1268	10	--	<0.14	<0.44	<0.14	NA	<0.13	<0.12	<0.45	<0.10	<0.11	**0.19**
Total PCBs	10	--	<0.14	<0.44	<0.14	NA	<0.13	<0.12	<0.45	<0.10	<0.11	**0.39**
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	**1.1**	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	<0.80	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	**1.7**	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	**3.0**	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	**2.4**	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	**2.8**	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	**1.8**	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	**1.2**	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	**2.7**	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	<0.80	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	**7.6**	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	**1.1**	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	**1.9**	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	<0.80	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	<0.80	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	**7.7**	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	**7.1**	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	**410**	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**73.8**	NA	**69.5**	**85.3**	**75.9**	**83.3**	NA	**95.6**	**87.3**	**90.3**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12E-AS-13	WS-AOC12E-SO-13-1A	WS-AOC12E-SO-13-1B	WS-AOC12E-SO-13-2	WS-AOC12E-SO-13-3	WS-AOC-12E-AS-14	WS-AOC12E-SO-14-1	WS-AOC12E-SO-DUP-22	WS-AOC12E-SO-14-2	WS-AOC12E-SO-14-3
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(1.0'-1.5')	(1.0'-1.5')	(2.0'-2.5')	(5.0'-5.5')
DATE SAMPLED			8/2/17	7/25/17	7/25/17	7/25/17	7/25/17	8/2/17	7/25/17	7/25/17	7/25/17	7/25/17
WORK ORDER NO.			17H0114	17G1169	17G1169	17G1169	17G1169	17H0114	17G1074	17G1079	17G1074	17G1074
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]							PARENT	DUPLICATE		
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.50	<0.11	NA	<0.11	<0.12	<0.49	<0.11	<0.11	<0.15	<0.17
PCB-1248	10	--	<0.50	<0.11	NA	<0.11	<0.12	<0.49	<0.11	<0.11	<0.15	<0.17
PCB-1260	10	--	<0.50	<0.11	NA	<0.11	<0.12	<0.49	<0.11	<0.11	<0.15	<0.17
PCB 1268	10	--	<0.50	<0.11	NA	<0.11	<0.12	<0.49	<0.11	<0.11	<0.15	<0.17
Total PCBs	10	--	<0.50	<0.11	NA	<0.11	<0.12	<0.49	<0.11	<0.11	<0.15	<0.17
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	**67**	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**94.7**	**88.0**	**87.8**	**84.4**	NA	**88.2**	**89.4**	**65.2**	**59.4**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12E-AS-15	WS-AOC-12E-AS-DUP-4	WS-AOC12E-SO-15-1	WS-AOC12E-SO-15-2	WS-AOC12E-SO-15-3	WS-AOC-12E-AS-16	WS-AOC12E-SO-16-1	WS-AOC12E-SO-16-2	WS-AOC12E-SO-16-3	WS-AOC12E-CO-17
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0-0.5")	(1.0'-2.0')	(2.5'-3.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(5.0'-5.5')	(0-0.5")
DATE SAMPLED			8/2/17	8/2/17	7/25/17	7/25/17	7/25/17	8/2/17	7/25/17	7/25/17	7/25/17	8/24/17
WORK ORDER NO.			17H0114	17H0114	17G1075	17G1075	17G1075	17H0114	17G1077	17G1077	17G1077	17H1359
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	PARENT	DUPLICATE								
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.45	<0.098	<0.11	<0.14	<0.18	<0.49	<0.11	<0.12	<0.19	<0.087
PCB-1248	10	--	<0.45	<0.098	<0.11	<0.14	<0.18	<0.49	<0.11	<0.12	<0.19	<0.087
PCB-1260	10	--	<0.45	**0.14**	<0.11	<0.14	<0.18	<0.49	<0.11	<0.12	<0.19	<0.087
PCB 1268	10	--	<0.45	**0.11**	<0.11	<0.14	<0.18	<0.49	<0.11	<0.12	<0.19	<0.087
Total PCBs	10	--	<0.45	**0.25**	<0.11	<0.14	<0.18	<0.49	<0.11	<0.12	<0.19	<0.087
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	**360**	NA	NA	NA
Total Solids (%)	--	--	NA	NA	**91.3**	**72.5**	**57.0**	NA	**87.2**	**84.8**	**53.5**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
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< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-17-1	WS-AOC12E-SO-17-2	WS-AOC12E-SO-17-3	WS-AOC-12E-AS-18	WS-AOC12E-SO-18-1	WS-AOC12E-SO-18-2	WS-AOC12E-SO-18-3	WS-AOC-12E-AS-19	WS-AOC12E-SO-19-1A	WS-AOC12E-SO-19-1B
SAMPLE DEPTH (ft bgs)			(1.5'-2.0')	(2.0'3.0')	(5.0'-6.0')	(0-0.5")	(0.5'-1.0')	(1.5'-2.0')	(4.5'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.0')
DATE SAMPLED			9/5/17	9/5/17	9/5/17	8/2/17	7/25/17	7/25/17	7/25/17	8/2/17	7/25/17	7/25/17
WORK ORDER NO.			17I0112	17I0112	17I0112	17H0114	17G1169	17G1169	17G1169	17H0114	17G1074	17G1074
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.090	<0.093	<0.090	<0.50	<0.11	<0.13	<0.12	<0.093	<0.11	NA
PCB-1248	10	--	<0.090	<0.093	<0.090	<0.50	<0.11	<0.13	<0.12	<0.093	<0.11	NA
PCB-1260	10	--	<0.090	<0.093	<0.090	<0.50	<0.11	<0.13	<0.12	<0.093	<0.11	NA
PCB 1268	10	--	<0.090	<0.093	<0.090	<0.50	<0.11	<0.13	<0.12	<0.093	<0.11	NA
Total PCBs	10	--	<0.090	<0.093	<0.090	<0.50	<0.11	<0.13	<0.12	<0.093	<0.11	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.53**
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.45**
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.57**
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.51**
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.92**
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.61**
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.87**
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	**260**	NA	NA	NA	NA	NA	NA	NA	NA	**210**
Total Solids (%)	--	--	**89.3**	**85.9**	**87.9**	NA	**88.3**	**74.6**	**80.9**	NA	**91.7**	**88.5**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-19-2	WS-AOC12E-SO-19-3	WS-AOC-12E-AS-20	WS-AOC12E-SO-20-1	WS-AOC12E-SO-20-2	WS-AOC12E-SO-20-3	WS-AOC12E-AS-21	WS-AOC12E-SO-21-1	WS-AOC12E-SO-21-2	WS-AOC12E-SO-21-3
SAMPLE DEPTH (ft bgs)			(2.5'-3.0')	(5.0'-5.5')	(0-0.5")	(1.0'-1.5')	(2.0'-2.5')	(5.0'-5.5')	(0-0.5")	(1.0'-1.5')	(2.5'-3.5')	(5.0'-6.0')
DATE SAMPLED			7/25/17	7/25/17	8/2/17	7/25/17	7/25/17	7/25/17	8/24/17	9/5/17	9/5/17	9/5/17
WORK ORDER NO.			17G1074	17G1074	17H0112	17G1074	17G1074	17G1074	17H1359	17I0112	17I0112	17I0112
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.13	<0.13	<0.49	<0.12	<0.11	<0.14	<0.080	<0.094	<0.097	<0.094
PCB-1248	10	--	<0.13	<0.13	<0.49	<0.12	<0.11	<0.14	<0.080	<0.094	<0.097	<0.094
PCB-1260	10	--	<0.13	<0.13	<0.49	<0.12	<0.11	<0.14	**0.16**	<0.094	<0.097	<0.094
PCB 1268	10	--	<0.13	<0.13	<0.49	<0.12	<0.11	<0.14	**0.20**	<0.094	<0.097	<0.094
Total PCBs	10	--	<0.13	<0.13	<0.49	<0.12	<0.11	<0.14	**0.36**	<0.094	<0.097	<0.094
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	**0.32**	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	**0.27**	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	**0.41**	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	**0.45**	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	**0.68**	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	**0.47**	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	**0.56**	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	**200**	NA
Total Solids (%)	--	--	**74.4**	**77.8**	NA	**86.6**	**91.8**	**73.8**	NA	**83.3**	**80.8**	**83.2**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12E-AS-22	WS-AOC12E-SO-22-1A	WS-AOC12E-SO-22-1B	WS-AOC12E-SO-22-2	WS-AOC12E-SO-22-3	WS-AOC12E-AS-23	WS-AOC12E-SO-23-1	WS-AOC12E-SO-23-2	WS-AOC12E-SO-23-3	WS-AOC12E-AS-24
SAMPLE DEPTH (ft bgs)			(0-0.5")	(1.0'-1.5')	(1.5'-2.0')	(2.0'-2.5')	(5.0'-5.5')	(0-0.5")	(1.0'-1.5')	(2.5'-3.0')	(5-6')	(0-0.5")
DATE SAMPLED			8/2/17	7/25/17	7/25/17	7/25/17	7/25/17	8/2/17	7/25/17	7/25/17	7/25/17	8/24/17
WORK ORDER NO.			17H0112	17G1077	17G1079	17G1079	17G1079	17H0112	17G1073	17G1073	17G1073	17H1359
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.46	<0.12	NA	<0.11	<0.12	<0.49	<0.11	<0.12	<0.12	<0.078
PCB-1248	10	--	<0.46	<0.12	NA	<0.11	<0.12	<0.49	<0.11	<0.12	<0.12	<0.078
PCB-1260	10	--	<0.46	<0.12	NA	<0.11	<0.12	<0.49	<0.11	<0.12	<0.12	**0.14**
PCB 1268	10	--	<0.46	<0.12	NA	<0.11	<0.12	<0.49	<0.11	<0.12	<0.12	<0.078
Total PCBs	10	--	<0.46	<0.12	NA	<0.11	<0.12	<0.49	<0.11	<0.12	<0.12	**0.14**
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	**280**	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**86.1**	**88.4**	**88.8**	**84.8**	NA	**88.9**	**81.6**	**83.3**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

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mg/kg = milligrams per kilogram
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I/C DEC = Industrial/Commercial Direct Exposure Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-AS-25	WS-AOC12E-SO-25-1	WS-AOC12E-SO-25-2	WS-AOC12E-SO-25-3	WS-AOC-12E-AS-26	WS-AOC12E-SO-26-1A	WS-AOC12E-SO-26-1B	WS-AOC12E-SO-DUP-25	WS-ACO12E-SO-26-2	WS-AOC12E-SO-26-3
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(5.0-6.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.0')	(1.5'-2.0')	(2.0'-2.5')	(5.0'-5.5')
DATE SAMPLED			8/24/17	9/5/17	9/5/17	9/5/17	8/2/17	7/25/17	7/25/17	7/25/17	7/25/17	7/25/17
WORK ORDER NO.			17H1359	17I0112	17I0112	17I0112	17H0112	17G1077	17G1077	17G1079	17G1077	17G1077
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]							PARENT	DUPLICATE		
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.080	<0.082	<0.098	<0.10	<0.46	<0.14	NA	NA	<0.12	<0.13
PCB-1248	10	--	<0.080	<0.082	<0.098	<0.10	<0.46	<0.14	NA	NA	<0.12	<0.13
PCB-1260	10	--	**0.10**	<0.082	<0.098	<0.10	<0.46	<0.14	NA	NA	<0.12	<0.13
PCB 1268	10	--	**0.087**	<0.082	<0.098	<0.10	<0.46	<0.14	NA	NA	<0.12	<0.13
Total PCBs	10	--	**0.187**	<0.082	<0.098	<0.10	<0.46	<0.14	NA	NA	<0.12	<0.13
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	<0.19	<0.37	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	**23**	NA	NA	NA	**200**	**440**	NA	NA
Total Solids (%)	--	--	NA	**93.6**	**81.8**	**72.8**	NA	**70.3**	**91.8**	**91.1**	**84.4**	**74.9**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12E-AS-27	WS-AOC12E-SO-27-1	WS-AOC12E-SO-27-2	WS-AOC12E-SO-27-3	WS-AOC-12E-AS-28	WS-AOC12E-SO-28-1	WS-AOC12E-SO-28-2	WS-AOC12E-SO-28-3	WS-AOC-12E-AS-29	WS-AOC-12E-AS-DUP-5
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.0')	(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(1.2'-2.0')	(2.0'-2.5')	(4.0-4.5')	(0-0.5")	(0-0.5")
DATE SAMPLED			8/2/17	7/24/17	7/24/17	7/24/17	8/2/17	7/25/17	7/25/17	7/25/17	8/2/17	8/2/17
WORK ORDER NO.			17H0114	17G0987	17G0987	17G0987	17H0112	17G1073	17G1073	17G1073	17H0112	17H0112
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]									PARENT	DUPLICATE
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	**0.13**	<0.11	<0.11	<0.12	<0.46	<0.11	<0.12	<0.11	<0.48	<0.48
PCB-1248	10	--	<0.085	<0.11	<0.11	<0.12	<0.46	<0.11	<0.12	<0.11	<0.48	<0.48
PCB-1260	10	--	**0.14**	<0.11	<0.11	<0.12	<0.46	<0.11	<0.12	<0.11	<0.48	<0.48
PCB 1268	10	--	<0.085	<0.11	<0.11	<0.12	<0.46	<0.11	<0.12	<0.11	<0.48	<0.48
Total PCBs	10	--	**0.27**	<0.11	<0.11	<0.12	<0.46	<0.11	<0.12	<0.11	<0.48	<0.48
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**93.2**	**90.3**	**80.4**	NA	**94.1**	**82.8**	**89.3**	NA	NA

NOTES:

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3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-29-1A	WS-AOC12E-SO-DUP-21A	WS-AOC12E-SO-29-1B	WS-AOC12E-SO-DUP-21B	WS-AOC12E-SO-29-2	WS-AOC12E-SO-29-3	WS-AOC-12E-AS-30	WS-AOC12E-SO-30-1	WS-AOC12E-SO-30-2A	WS-AOC12E-SO-30-2B
SAMPLE DEPTH (ft bgs)			(1.0'-1.5')	(1.0'-1.5')	(1.5'-2.0')	(1.5'-2.0')	(2.3'-3.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(2.0'-3.0')
DATE SAMPLED			7/25/17	7/25/17	7/25/17	7/25/17	7/25/17	7/25/17	8/2/17	7/25/17	7/25/17	7/25/17
WORK ORDER NO.			17G1073	17G1079	17G1073	17G1079	17G1073	17G1073	17H0112	17G1079	17G1079	17G1079
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	PARENT	DUPLICATE	PARENT	DUPLICATE						
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.12	<0.11	NA	NA	<0.12	<0.12	<0.50	<0.10	<0.12	NA
PCB-1248	10	--	<0.12	<0.11	NA	NA	<0.12	<0.12	<0.50	<0.10	<0.12	NA
PCB-1260	10	--	<0.12	<0.11	NA	NA	<0.12	<0.12	<0.50	<0.10	<0.12	NA
PCB 1268	10	--	<0.12	<0.11	NA	NA	<0.12	<0.12	<0.50	<0.10	<0.12	NA
Total PCBs	10	--	<0.12	<0.11	NA	NA	<0.12	<0.12	<0.50	<0.10	<0.12	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	<0.21	<0.41	NA	NA	NA	NA	NA	<0.48
Acenaphthylene	2,500	84	NA	NA	<0.21	<0.41	NA	NA	NA	NA	NA	<0.48
Anthracene*	2,500	400	NA	NA	<0.21	<0.41	NA	NA	NA	NA	NA	<0.48
Benzo(a)anthracene	7.8	1	NA	NA	**0.69**	**0.55**	NA	NA	NA	NA	NA	**0.63**
Benzo(a)pyrene	1	1	NA	NA	**0.70**	**0.49**	NA	NA	NA	NA	NA	**0.52**
Benzo(b)fluoranthene	7.8	1	NA	NA	**0.93**	**0.66**	NA	NA	NA	NA	NA	**0.63**
Benzo(g,h,i)perylene*	78	1	NA	NA	**0.41**	<0.41	NA	NA	NA	NA	NA	<0.48
Benzo(k)fluoranthene	78	1	NA	NA	**0.31**	<0.41	NA	NA	NA	NA	NA	<0.48
Chrysene*	780	1	NA	NA	**0.68**	**0.65**	NA	NA	NA	NA	NA	**0.56**
Dibenz(a,h)anthracene*	1	1	NA	NA	<0.21	<0.41	NA	NA	NA	NA	NA	<0.48
Fluoranthene	2,500	56	NA	NA	**1.4**	**0.98**	NA	NA	NA	NA	NA	**1.2**
Fluorene	2,500	56	NA	NA	<0.21	<0.41	NA	NA	NA	NA	NA	<0.48
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	**0.42**	<0.41	NA	NA	NA	NA	NA	<0.48
2-Methylnaphthalene*	1,000	5.6	NA	NA	<0.21	<0.41	NA	NA	NA	NA	NA	<0.48
Naphthalene	2,500	56	NA	NA	<0.21	<0.41	NA	NA	NA	NA	NA	<0.48
Phenanthrene	2,500	40	NA	NA	**0.74**	**0.53**	NA	NA	NA	NA	NA	**1.2**
Pyrene	2,500	40	NA	NA	**1.6**	**1.1**	NA	NA	NA	NA	NA	**1.2**
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	**160**	**140**	NA	NA	NA	NA	NA	**88**
Total Solids (%)	--	--	**85.8**	**87.3**	**82.8**	**82.8**	**85.6**	**85.2**	NA	**96.4**	**86.0**	**70.8**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

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mg/kg = milligrams per kilogram
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-30-3	WS-AOC12E-SO-31-1	WS-AOC12E-SO-31-2A	WS-AOC12E-SO-31-2AR	WS-AOC12E-SO-31-2B	WS-AOC12E-SO-31-2BR	WS-AOC12E-SO-31-3	WS-AOC12E-SO-31-4	WS-AOC-12E-AS-32	WS-AOC12E-SO-32-1A
SAMPLE DEPTH (ft bgs)			(5.0'-5.5')	(0-0.5')	(0.5'-1.0')	(0.5'-1.0')	(1.0'-1.5')	(1.0'-1.5')	(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(1.0'-1.5')
DATE SAMPLED			7/25/17	7/24/17	7/24/17	9/14/17	7/24/17	9/14/17	7/24/17	7/24/17	8/2/17	7/25/17
WORK ORDER NO.			17G1079	17G0987	17G0987	17I0642	17G0987	17I0642	17G0987	17G0987	17H0112	17G1077
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.13	<0.11	<0.11	<0.089	NA	NA	<0.11	<0.12	<0.49	<0.12
PCB-1248	10	--	<0.13	**0.24**	**0.68**	<0.089	NA	NA	<0.11	**0.42**	**1.0**	<0.12
PCB-1260	10	--	<0.13	<0.11	<0.11	<0.089	NA	NA	<0.11	<0.12	**0.64**	<0.12
PCB 1268	10	--	<0.13	**0.69**	**1.1**	**0.70**	NA	NA	<0.11	**0.19**	<0.49	<0.12
Total PCBs	10	--	<0.13	**0.93**	**1.78**	**0.70**	NA	NA	<0.11	**0.61**	**1.64**	<0.12
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	**4.2**	<0.19	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	<0.19	<0.19	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	**4.8**	<0.19	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	**20**	**0.48**	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	**13**	**0.39**	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	**14**	**0.56**	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	**9.9**	**0.26**	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	**5.7**	**0.20**	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	**21**	**0.61**	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	**3.1**	<0.19	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	**30**	**0.94**	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	**2.9**	<0.19	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	**8.4**	**0.27**	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	**2.8**	<0.19	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	**1.6**	<0.19	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	**38**	**0.55**	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	**47**	**0.96**	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	<0.30	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	<0.30	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	<0.050	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	<0.10	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	<0.050	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	<0.50	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	<0.50	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	**0.15**	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	**810**	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**75.4**	**88.7**	**94.1**	**87.4**	**89.5**	**89.7**	**88.2**	**83.3**	NA	**83.7**

NOTES:

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NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-32-1B	WS-AOC12E-SO-32-2	WS-AOC12E-SO-32-3	WS-AOC-12E-AS-33	WS-AOC12E-SO-33-1	WS-AOC12E-SO-33-2	WS-AOC12E-SO-33-3	WS-AOC-12E-AS-34	WS-AOC12E-SO-34-1	WS-AOC12E-SO-34-2
SAMPLE DEPTH (ft bgs)			(1.5'-2.0')	(2.0'-2.5')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(1.0'-1.5')	(1.5'-2.0')
DATE SAMPLED			7/25/17	7/25/17	7/25/17	8/2/17	7/25/17	7/25/17	7/25/17	8/2/17	7/25/17	7/25/17
WORK ORDER NO.			17G1077	17G1077	17G1077	17H0112	17G1075	17G1075	17G1075	17H0112	17G1073	17G1073
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	NA	<0.11	<0.14	<0.46	<0.11	<0.11	<0.16	<0.50	<0.11	<0.12
PCB-1248	10	--	NA	<0.11	<0.14	<0.46	<0.11	<0.11	<0.16	<0.50	<0.11	<0.12
PCB-1260	10	--	NA	<0.11	<0.14	<0.46	<0.11	<0.11	<0.16	<0.50	<0.11	<0.12
PCB 1268	10	--	NA	<0.11	<0.14	<0.46	<0.11	<0.11	<0.16	<0.50	<0.11	<0.12
Total PCBs	10	--	NA	<0.11	<0.14	<0.46	<0.11	<0.11	<0.16	<0.50	<0.11	<0.12
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	**73**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**91.6**	**89.1**	**69.6**	NA	**92.0**	**90.0**	**61.7**	NA	**90.5**	**83.4**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-34-3	WS-AOC12E-AS-35	WS-AOC12E-SO-35-1	WS-AOC12E-SO-35-2	WS-AOC12E-SO-35-3	WS-AOC-12E-AS-36	WS-AOC12E-SO-36-1	WS-AOC12E-SO-36-2A	WS-AOC12E-SO-36-2B	WS-AOC12E-SO-36-3
SAMPLE DEPTH (ft bgs)			(5.0'-5.5')	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(5.0'-6.0')	(0-0.5")	(0.5'-1.0')	(1.5'-2.0')	(2.0'-3.0')	(5.0'-5.5')
DATE SAMPLED			7/25/17	8/24/17	9/5/17	9/5/17	9/5/17	8/2/17	7/25/17	7/25/17	7/25/17	7/25/17
WORK ORDER NO.			17G1073	17H1359	17I0112	17I0112	17I0112	17H0112	17G1075	17G1075	17G1075	17G1075
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.12	<0.080	<0.094	<0.088	<0.095	<0.49	<0.11	<0.11	NA	<0.14
PCB-1248	10	--	<0.12	<0.080	<0.094	<0.088	<0.095	<0.49	<0.11	<0.11	NA	<0.14
PCB-1260	10	--	<0.12	**0.14**	<0.094	<0.088	<0.095	<0.49	<0.11	<0.11	NA	<0.14
PCB 1268	10	--	<0.12	<0.080	<0.094	<0.088	<0.095	<0.49	<0.11	<0.11	NA	<0.14
Total PCBs	10	--	<0.12	**0.14**	<0.094	<0.088	<0.095	<0.49	<0.11	<0.11	NA	<0.14
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	**0.39**	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	**0.40**	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	**0.49**	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	**0.40**	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	**0.68**	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	**0.67**	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	**1100**	NA	NA	NA	NA	NA	**510**	NA
Total Solids (%)	--	--	**81.1**	NA	**84.2**	**90.4**	**83.9**	NA	**92.3**	**91.1**	**81.8**	**69.8**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-AS-37	WS-AOC12E-S0-37-1	WS-AOC12E-S0-37-2	WS-AOC12E-S0-37-3	WS-AOC-12E-AS-38	WS-AOC12E-SO-38-1	WS-AOC12E-SO-38-2	WS-AOC12E-SO-38-3	WS-AOC12E-AS-39	WS-AOC12E-S0-39-1
SAMPLE DEPTH (ft bgs)			(0-0.5")	(1.0'-1.5')	(1.5'-2.5')	(5.0'-6.0')	(0-0.5")	(0.5'-1.0')	(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.5')
DATE SAMPLED			8/24/17	9/6/17	9/6/17	9/6/17	8/2/17	7/25/17	7/25/17	7/25/17	8/24/17	9/6/17
WORK ORDER NO.			17H1359	17I0177	17I0177	17I0177	17H0112	17G1075	17G1075	17G1075	17H1359	17I0177
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.078	<0.092	<0.10	<0.096	<0.44	<0.11	<0.11	<0.21	<0.080	<0.086
PCB-1248	10	--	<0.078	<0.092	<0.10	<0.096	<0.44	<0.11	<0.11	<0.21	<0.080	<0.086
PCB-1260	10	--	**0.098**	<0.092	<0.10	<0.096	<0.44	<0.11	<0.11	<0.21	**0.13**	<0.086
PCB 1268	10	--	<0.078	<0.092	<0.10	<0.096	<0.44	<0.11	<0.11	<0.21	<0.080	<0.086
Total PCBs	10	--	**0.098**	<0.092	<0.10	<0.096	<0.44	<0.11	<0.11	<0.21	**0.13**	<0.086
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	**1100**	**150**	NA	NA	NA	NA	NA	NA	690
Total Solids (%)	--	--	NA	**86.6**	**80.1**	**83.7**	NA	**92.6**	**88.6**	**48.3**	NA	**93.5**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

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mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-S0-39-2	WS-AOC12E-S0-39-3	WS-AOC-12E-AS-40	WS-AOC12E-SO-40-1A	WS-AOC12E-SO-40-1B	WS-AOC12E-SO-40-2	WS-AOC12E-SO-40-3	WS-AOC12E-AS-41	WS-AOC12E-S0-41-1	WS-AOC12E-S0-41-2
SAMPLE DEPTH (ft bgs)			(1.5'-2.5')	(5.0'-6.0')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')
DATE SAMPLED			9/6/17	9/6/17	8/2/17	7/25/17	7/25/17	7/25/17	7/25/17	8/24/17	9/6/17	9/6/17
WORK ORDER NO.			17I0177	17I0177	17H0112	17G1074	17G1074	17G1074	17G1075	17H1359	17I0177	17I0177
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.090	<0.11	<0.48	<0.11	NA	<0.12	<0.13	<0.080	<0.090	<0.090
PCB-1248	10	--	<0.090	<0.11	<0.48	<0.11	NA	<0.12	<0.13	<0.080	<0.090	<0.090
PCB-1260	10	--	<0.090	<0.11	<0.48	<0.11	NA	<0.12	<0.13	<0.080	<0.090	<0.090
PCB 1268	10	--	<0.090	<0.11	<0.48	<0.11	NA	<0.12	<0.13	<0.080	<0.090	<0.090
Total PCBs	10	--	<0.090	<0.11	<0.48	<0.11	NA	<0.12	<0.13	<0.080	<0.090	<0.090
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	**34**	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**89.2**	**73.3**	NA	**92.1**	**86.0**	**85.6**	**76.1**	NA	**88.8**	**88.9**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-S0-41-3	WS-AOC12E-SO-42-1	WS-AOC12E-SO-42-2	WS-AOC12E-SO-42-3	WS-AOC12E-SO-DUP-47	WS-AOC-12E-AS-43	WS-AOC12E-SO-43-1	WS-AOC12E-SO-DUP-18	WS-AOC12E-SO-43-2	WS-AOC12E-SO-43-3
SAMPLE DEPTH (ft bgs)			(5.0'-6.0')	(0.5'-1.5')	(1.5'-2.5')	(5.0'-6.0')	(5.0'-6.0')	(0-0.5")	(0.5'-1.0')	(0.5'-1.0')	(1.5'-2.0')	(5.0'-5.5')
DATE SAMPLED			9/6/17	9/5/17	9/5/17	9/5/17	9/5/17	8/2/17	7/21/17	7/21/17	7/21/17	7/21/17
WORK ORDER NO.			17I0177	17I0112	17I0112	17I0112	17I0112	17H0112	17G0912	17G0913	17G0912	17G0912
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]				PARENT	DUPLICATE		PARENT	DUPLICATE		
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.10	<0.085	<0.085	<0.10	<0.10	<0.47	<0.11	<0.11	<0.11	<0.14
PCB-1248	10	--	<0.10	<0.085	<0.085	<0.10	<0.10	<0.47	<0.11	<0.11	<0.11	<0.14
PCB-1260	10	--	<0.10	<0.085	<0.085	<0.10	<0.10	<0.47	<0.11	<0.11	<0.11	<0.14
PCB 1268	10	--	<0.10	<0.085	<0.085	<0.10	<0.10	<0.47	<0.11	<0.11	<0.11	<0.14
Total PCBs	10	--	<0.10	<0.085	<0.085	<0.10	<0.10	<0.47	<0.11	<0.11	<0.11	<0.14
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	**120**	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**78.3**	**93.6**	**93.0**	**75.4**	**76.9**	NA	**89.2**	**91.5**	**94.3**	**69.4**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12E-AS-44	WS-AOC12E-SO-44-1	WS-AOC12E-SO-44-2	WS-AOC12E-SO-44-3	WS-AOC12E-SO-45-1	WS-AOC12E-SO-45-2	WS-AOC12E-SO-45-3	WS-AOC-12E-AS-46	WS-AOC12E-SO-46-1	WS-AOC12E-SO-46-2
SAMPLE DEPTH (ft bgs)			(0-0.5")	(1.0'-1.5')	(2.0'-2.5')	(5.0'-5.5')	(1.0'-1.5')	(1.5'-2.5')	(5.0'-6.0')	(0-0.5")	(0.5'-1.0')	(1.5'-2.0')
DATE SAMPLED			8/2/17	7/25/17	7/25/17	7/25/17	9/5/17	9/5/17	9/5/17	8/2/17	7/21/17	7/21/17
WORK ORDER NO.			17H0112	17G1074	17G1074	17G1074	17I0175	17I0175	17I0175	17H0112	17G0912	17G0912
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.49	<0.11	<0.12	<0.11	<0.089	<0.090	<0.12	<0.48	<0.11	<0.11
PCB-1248	10	--	<0.49	<0.11	<0.12	<0.11	<0.089	<0.090	<0.12	<0.48	<0.11	<0.11
PCB-1260	10	--	<0.49	<0.11	<0.12	<0.11	<0.089	<0.090	<0.12	<0.48	<0.11	<0.11
PCB 1268	10	--	<0.49	<0.11	<0.12	<0.11	<0.089	<0.090	<0.12	<0.48	<0.11	<0.11
Total PCBs	10	--	<0.49	<0.11	<0.12	<0.11	<0.089	<0.090	<0.12	<0.48	<0.11	<0.11
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	<11	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**89.4**	**84.0**	**87.3**	**89.5**	**89.3**	**66.5**	NA	**92.2**	**88.3**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-46-3	WS-AOC-12E-AS-47	WS-AOC12E-SO-47-1	WS-AOC12E-SO-47-2A	WS-AOC12E-SO-47-2B	WS-AOC12E-SO-47-3	WS-AOC12E-S0-48-1	WS-AOC12E-S0-48-2	WS-AOC12E-S0-48-3	WS-AOC12E-S0-49-1
SAMPLE DEPTH (ft bgs)			(5.0'-5.5')	(0-0.5")	(1.0'-1.5')	(1.5'-2.0')	(2.0'-3.0')	(5.0'-5.5')	(0.5'-1.5')	(1.5'-2.5')	(5.0'-6.0')	(1.0'-1.5')
DATE SAMPLED			7/21/17	8/2/17	7/25/17	7/25/17	7/25/17	7/25/17	9/6/17	9/6/17	9/6/17	9/6/17
WORK ORDER NO.			17G0912	17H0112	17G1074	17G1074	17G1074	17G1074	17I0177	17I0177	17I0177	17I0177
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.13	<0.50	<0.12	<0.12	NA	<0.12	<0.084	<0.096	<0.098	<0.091
PCB-1248	10	--	<0.13	<0.50	<0.12	<0.12	NA	<0.12	<0.084	<0.096	<0.098	<0.091
PCB-1260	10	--	<0.13	<0.50	<0.12	<0.12	NA	<0.12	<0.084	<0.096	<0.098	<0.091
PCB 1268	10	--	<0.13	<0.50	<0.12	<0.12	NA	<0.12	<0.084	<0.096	<0.098	<0.091
Total PCBs	10	--	<0.13	<0.50	<0.12	<0.12	NA	<0.12	<0.084	<0.096	<0.098	<0.091
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	<0.23	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	<0.23	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	**0.44**	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	**1.2**	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	**0.77**	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	**1.2**	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	**0.54**	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	**0.40**	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	**1.5**	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	<0.23	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	**3.5**	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	**0.42**	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	**0.49**	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	**0.48**	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	**0.96**	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	**2.9**	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	**2.7**	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	**930**	NA	NA	**360**	NA	NA
Total Solids (%)	--	--	**79.5**	NA	**81.2**	**86.8**	**74.7**	**81.5**	**94.8**	**83.7**	**81.4**	**87.7**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-S0-49-2	WS-AOC12E-S0-49-3	WS-AOC-12E-AS-50	WS-AOC12E-SO-50-1A	WS-AOC12E-SO-50-1B	WS-AOC12E-SO-50-2	WS-AOC12E-SO-50-3	WS-AOC12E-S0-51-1	WS-AOC12E-S0-51-2	WS-AOC12E-S0-DUP-48
SAMPLE DEPTH (ft bgs)			(1.5'-2.5')	(5.0'-6.0')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(1.5'-2.0')	(5.0'-5.5')	(0.5'-1.5')	(1.5'-2.5')	(1.5'-2.5')
DATE SAMPLED			9/6/17	9/6/17	8/2/17	7/21/17	7/21/17	7/21/17	7/21/17	9/6/17	9/6/17	9/6/17
WORK ORDER NO.			17I0177	17I0177	17H0112	17G0912	17G0912	17G0912	17G0912	17I0177	17I0177	17I0177
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]									PARENT	DUPLICATE
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.090	<0.11	<0.49	<0.10	NA	<0.11	<0.12	<0.088	<0.094	<0.097
PCB-1248	10	--	<0.090	<0.11	<0.49	<0.10	NA	<0.11	<0.12	<0.088	<0.094	<0.097
PCB-1260	10	--	<0.090	<0.11	<0.49	<0.10	NA	<0.11	<0.12	<0.088	<0.094	<0.097
PCB 1268	10	--	<0.090	<0.11	<0.49	<0.10	NA	<0.11	<0.12	<0.088	<0.094	<0.097
Total PCBs	10	--	<0.090	<0.11	<0.49	<0.10	NA	<0.11	<0.12	<0.088	<0.094	<0.097
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	**0.24**	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	**0.29**	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	**57**	NA	NA	NA	**110**	**260**
Total Solids (%)	--	--	**89.2**	**70.7**	NA	**93.2**	**87.0**	**89.2**	**80.7**	**90.9**	**84.7**	**82.2**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-S0-51-3	WS-AOC12E-SO-52-1	WS-AOC12E-SO-52-2	WS-AOC-12E-AS-53	WS-AOC12E-SO-53-1	WS-AOC12E-SO-53-2	WS-AOC12E-SO-53-3	WS-AOC-12E-AS-54	WS-AOC12E-SO-54-1	WS-AOC12E-SO-54-2
SAMPLE DEPTH (ft bgs)			(5.0'-6.0')	(1.0'-1.5')	(1.5'-2.5')	(0-0.5")	(0.5-1.0')	(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')
DATE SAMPLED			9/6/17	9/5/17	9/5/17	8/2/17	7/21/17	7/21/17	7/21/17	8/3/17	7/21/17	7/21/17
WORK ORDER NO.			17I0177	17I0175	17I0175	17H0112	17G0912	17G0912	17G0912	17H0197	17G0913	17G0913
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.11	<0.085	<0.084	<0.48	<0.11	<0.11	<0.13	<0.93	<0.10	<0.11
PCB-1248	10	--	<0.11	<0.085	<0.084	<0.48	<0.11	<0.11	<0.13	<0.93	<0.10	<0.11
PCB-1260	10	--	<0.11	<0.085	<0.084	<0.48	<0.11	<0.11	<0.13	**3.2**	<0.10	<0.11
PCB 1268	10	--	<0.11	<0.085	<0.084	<0.48	<0.11	<0.11	<0.13	<0.93	<0.10	<0.11
Total PCBs	10	--	<0.11	<0.085	<0.084	<0.48	<0.11	<0.11	<0.13	**3.2**	<0.10	<0.11
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**74.7**	**94.1**	**95.2**	NA	**90.1**	**89.4**	**76.5**	NA	**91.3**	**88.7**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-54-3	WS-AOC-12E-AS-55	WS-AOC12E-SO-55-1	WS-AOC12E-SO-55-2A	WS-AOC12E-SO-55-2B	WS-AOC12E-SO-55-3	WS-AOC-12E-AS-56	WS-AOC12E-SO-56-1	WS-AOC12E-SO-56-2	WS-AOC12E-SO-56-3
SAMPLE DEPTH (ft bgs)			(5.0'-5.5')	(0-0.5")	(1.0'-1.5')	(1.5'-2.0')	(2.0'-3.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(1.5'-2.0')	(5.0'-5.5')
DATE SAMPLED			7/21/17	8/3/17	7/25/17	7/25/17	7/25/17	7/25/17	8/3/17	7/24/17	7/24/17	7/24/17
WORK ORDER NO.			17G0913	17H0197	17G1073	17G1073	17G1073	17G1073	17H0197	17G0987	17G0987	17G0987
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.12	<0.92	<0.11	<0.11	NA	<0.12	<0.95	<0.11	<0.11	<0.13
PCB-1248	10	--	<0.12	<0.92	<0.11	<0.11	NA	<0.12	<0.95	<0.11	<0.11	<0.13
PCB-1260	10	--	<0.12	<0.92	<0.11	<0.11	NA	<0.12	<0.95	<0.11	<0.11	<0.13
PCB 1268	10	--	<0.12	<0.92	<0.11	<0.11	NA	<0.12	<0.95	<0.11	<0.11	<0.13
Total PCBs	10	--	<0.12	<0.92	<0.11	<0.11	NA	<0.12	<0.95	<0.11	<0.11	<0.13
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	**0.22**	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	**0.23**	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	**0.49**	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	<0.22	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	**0.26**	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	**0.70**	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	**0.40**	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	**140**	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**81.8**	NA	**89.6**	**89.5**	**78.2**	**85.0**	NA	**91.5**	**88.3**	**78.0**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12E-AS-57	WS-AOC12E-SO-57-1A	WS-AOC12E-SO-57-1B	WS-AOC12E-SO-57-2	WS-AOC12E-SO-57-3	WS-AOC-12E-AS-58	WS-AOC12E-SO-58-1	WS-AOC12E-SO-58-2	WS-AOC12E-SO-58-3	WS-AOC-12E-AS-59
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(1.2'-2.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(5.0'-5.5')	(0-0.5")
DATE SAMPLED			8/3/17	7/24/17	7/24/17	7/24/17	7/24/17	8/3/17	7/21/17	7/21/17	7/21/17	8/3/17
WORK ORDER NO.			17H0197	17G0987	17G0987	17G0987	17G0987	17H0197	17G0913	17G0913	17G0913	17H0197
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.98	<0.11	NA	<0.12	<0.12	<0.92	<0.10	<0.12	<0.12	<1.0
PCB-1248	10	--	<0.98	<0.11	NA	<0.12	<0.12	<0.92	<0.10	<0.12	<0.12	<1.0
PCB-1260	10	--	<0.98	<0.11	NA	<0.12	<0.12	<0.92	<0.10	<0.12	<0.12	<1.0
PCB 1268	10	--	<0.98	<0.11	NA	<0.12	<0.12	<0.92	<0.10	<0.12	<0.12	<1.0
Total PCBs	10	--	<0.98	<0.11	NA	<0.12	<0.12	<0.92	<0.10	<0.12	<0.12	<1.0
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	**21**	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**92.2**	**90.6**	**86.7**	**83.8**	NA	**92.8**	**82.1**	**83.6**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-59-1	WS-AOC12E-SO-59-2	WS-AOC12E-SO-59-3	WS-AOC-12E-AS-60	WS-AOC12E-SO-60-1	WS-AOC12E-SO-60-2	WS-AOC12E-SO-60-3	WS-AOC-12E-AS-61	WS-AOC12E-SO-61-1	WS-AOC12E-SO-61-2
SAMPLE DEPTH (ft bgs)			(0.5'-1.0')	(1.2'-2.0')	(5.0'-5.5')	(0-0.5")	(1.0'-1.5')	(2.0'-2.5')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(1.5'-2.0')
DATE SAMPLED			7/24/17	7/24/17	7/24/17	8/3/17	7/25/17	7/25/17	7/25/17	8/3/17	7/21/17	7/21/17
WORK ORDER NO.			17G0989	17G0989	17G0989	17H0197	17G1073	17G1073	17G1073	17H0197	17G0912	17G0912
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										PARENT
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.12	<0.11	<0.11	<0.90	<0.12	<0.12	<0.12	<0.96	<0.11	<0.11
PCB-1248	10	--	<0.12	<0.11	<0.11	<0.90	<0.12	<0.12	<0.12	<0.96	<0.11	<0.11
PCB-1260	10	--	<0.12	<0.11	<0.11	<0.90	<0.12	<0.12	<0.12	<0.96	<0.11	<0.11
PCB 1268	10	--	<0.12	<0.11	<0.11	<0.90	<0.12	<0.12	<0.12	<0.96	<0.11	<0.11
Total PCBs	10	--	<0.12	<0.11	<0.11	<0.90	<0.12	<0.12	<0.12	<0.96	<0.11	<0.11
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**86.8**	**88.3**	**92.0**	NA	**82.7**	**85.2**	**81.4**	NA	**91.1**	**87.8**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-DUP-19	WS-AOC12E-SO-61-3	WS-AOC12E-AS-62	WS-AOC12E-SO-62-1A	WS-AOC12E-SO-62-1B	WS-AOC12E-SO-62-2	WS-AOC12E-SO-62-3	WS-AOC12E-AS-63	WS-AOC12E-SO-63-1	WS-AOC12E-SO-63-2
SAMPLE DEPTH (ft bgs)			(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(1.5'-2.0')	(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(2.0'-2.5')
DATE SAMPLED			7/21/17	7/21/17	8/3/17	7/21/17	7/21/17	7/21/17	7/21/17	8/3/17	7/24/17	7/24/17
WORK ORDER NO.			17G0913	17G0912	17H0199	17G0912	17G0912	17G0912	17G0912	17H0199	17G0987	17G0987
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	DUPLICATE									
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1242	10	--	<0.12	<0.12	<0.99	<0.11	NA	<0.12	<0.13	<0.98	<0.14	<0.11
PCB-1248	10	--	<0.12	<0.12	<0.99	<0.11	NA	<0.12	<0.13	<0.98	<0.14	<0.11
PCB-1260	10	--	<0.12	<0.12	<0.99	<0.11	NA	<0.12	<0.13	<0.98	<0.14	<0.11
PCB 1268	10	--	<0.12	<0.12	<0.99	<0.11	NA	<0.12	<0.13	<0.98	<0.14	<0.11
Total PCBs	10	--	<0.12	<0.12	<0.99	<0.11	NA	<0.12	<0.13	<0.98	<0.14	<0.11
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	**46**	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**85.8**	**84.4**	NA	**90.7**	**86.9**	**81.8**	**71.9**	NA	**70.7**	**93.0**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 4
AOC-12E Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12E-SO-63-3	WS-AOC12E-AS-64	WS-AOC12E-SO-64-1	WS-AOC12E-SO-DUP-20	WS-AOC12E-SO-64-2	WS-AOC12E-SO-64-3
SAMPLE DEPTH (ft bgs)			(5.0'-5.5')	(0-0.5")	(0.5'-1.0')	(0.5'-1.0')	(1.2'-2.0')	(5.0'-5.5')
DATE SAMPLED			7/24/17	8/3/17	7/24/17	7/24/17	7/24/17	7/24/17
WORK ORDER NO.			17G0987	17H0199	17G0989	17G0989	17G0989	17G0989
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]			PARENT	DUPLICATE		
PARAMETER (Units)[2]								
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)								
PCB-1242	10	--	<0.13	<0.99	<0.11	<0.11	<0.11	<0.16
PCB-1248	10	--	<0.13	<0.99	<0.11	<0.11	<0.11	<0.16
PCB-1260	10	--	<0.13	<0.99	<0.11	<0.11	<0.11	<0.16
PCB 1268	10	--	<0.13	<0.99	<0.11	<0.11	<0.11	<0.16
Total PCBs	10	--	<0.13	<0.99	<0.11	<0.11	<0.11	<0.16
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)								
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)								
Acenaphthene*	NE	4200	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4200	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20000	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2800	NA	NA	NA	NA	NA	NA
Fluorene	NE	2800	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2800	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA
Pyrene	NE	2000	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**75.6**	NA	**91.5**	**91.2**	**93.8**	**61.9**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval of a Request for Approval by CT DEEP of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at the concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 5
AOC-12N Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12N-AS-1	WS-AOC-12N-SO-1-1	WS-AOC12N-AS-2	WS-AOC12N-AS-3	WS-AOC12N-AS-DUP-21	WS-AOC-12N-SO-3-1	WS-AOC-12N-SO-DUP-61	WS-AOC-12N-SO-3-2	WS-AOC12N-AS-4	WS-AOC-12N-SO-4-1
SAMPLE DEPTH (ft bgs)			(0-0.5")	(3.0'-4.0')	(0-0.5")	(0-0.5")	(0-0.5")	(6.0'-7.0')	(6.0'-7.0')	(10.0'-11.0')	(0-0.5")	(3.0'-4.0')
DATE SAMPLED			9/12/17	9/11/17	9/12/17	9/12/17	9/12/17	9/11/17	9/11/17	9/11/17	9/12/17	9/11/17
WORK ORDER NO.			17I0465	17I0380	17I0465	17I0465	17I0465	17I0380	17I0380	17I0380	17I0465	17I0380
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]						PARENT	DUPLICATE			
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
Total PCBs	10	--	<1.0	<0.11	<1.0	<1.0	<1.0	<0.11	<0.10	<0.093	<1.0	<0.10
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.35**
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.5**
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.1**
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.5**
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.62**
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.59**
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.6**
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3.0**
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.71**
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.5**
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.5**
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	**67**	NA	NA	NA	**390**	**710**	**88**	NA	**240**
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	**14**	**22**	NA	NA	NA
Total Solids (%)	--	--	NA	**75.5**	NA	NA	NA	**75.7**	**73.4**	**86.4**	NA	**79.9**

NOTES:

1. Analytical results compared to applicable remedial criteria from Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013) and Federal PCB Regulations (40 CFR Part 761).

2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.

3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = loction depth was resampled

mg/kg = milligrams per kilogram

< = compound not detected above laboratory reporting limit, shown.

BOLD = compound detected at that concentration.

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

-- = Not Applicable

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-AS-1	WS-AOC12W-SO-1-1	WS-AOC12W-SO-1-2	WS-AOC12W-SO-1-3	WS-AOC-12W-AS-2	WS-AOC12W-SO-2-1A	WS-AOC12W-SO-2-1B	WS-AOC12W-SO-2-2	WS-AOC12W-SO-2-3	WS-AOC-12W-AS-3
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0-0.5')	(5.0'-7.0)	(7.0'-10.0')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")
DATE SAMPLED			7/31/17	7/17/17	7/17/17	7/17/17	7/31/17	7/18/17	7/18/17	7/18/17	7/18/17	7/31/17
WORK ORDER NO.			17G1437	17G0626	17G0626	17G0626	17G1437	17G0681	17G0681	17G0681	17G0681	17G1437
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.97	<0.11	<0.12	<0.17	<0.97	<0.12	NA	<0.14	<0.19	<1.0
PCB-1242	10	--	<0.97	<0.11	<0.12	<0.17	<0.97	<0.12	NA	<0.14	<0.19	<1.0
PCB-1248	10	--	<0.97	<0.11	<0.12	<0.17	<0.97	<0.12	NA	<0.14	<0.19	<1.0
PCB-1260	10	--	<0.97	<0.11	<0.12	<0.17	<0.97	<0.12	NA	<0.14	<0.19	<1.0
PCB 1268	10	--	<0.97	<0.11	<0.12	<0.17	<0.97	<0.12	NA	<0.14	<0.19	<1.0
Total PCBs	10	--	<0.97	<0.11	<0.12	<0.17	<0.97	<0.12	NA	<0.14	<0.19	<1.0
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	**0.36**	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	**0.27**	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	**0.42**	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	**0.26**	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	**0.59**	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	**0.64**	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	**0.25**	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	**0.57**	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	**0.69**	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**93.3**	**82.7**	**58.9**	NA	**85.3**	**88.2**	**71.4**	**52.3**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

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I/C DEC = Industrial/Commercial Direct Exposure Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-3-1A	WS-AOC12W-SO-3-1B	WS-AOC12W-SO-3-2	WS-AOC12W-SO-3-3	WS-AOC-12W-AS-4	WS-AOC12W-SO-4-1	WS-AOC12W-SO-4-2	WS-AOC12W-SO-4-3	WS-AOC-12W-AS-5	WS-AOC12W-SO-5-1A
SAMPLE DEPTH (ft bgs)			(0.5'-1.0')	(0.5'-2.0')	(3.0'-4.0')	(7.0'-8.0')	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')
DATE SAMPLED			7/17/17	7/17/17	7/17/17	7/17/17	7/31/17	7/17/17	7/17/17	7/17/17	7/31/17	7/18/17
WORK ORDER NO.			17G0626	17G0626	17G0626	17G0626	17G1437	17G0626	17G0626	17G0626	17G1437	17G0681
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	NA	<0.12	<0.14	<1.0	<0.11	<0.12	<0.17	<0.97	<0.11
PCB-1242	10	--	<0.11	NA	<0.12	<0.14	<1.0	<0.11	<0.12	<0.17	<0.97	<0.11
PCB-1248	10	--	<0.11	NA	<0.12	<0.14	<1.0	<0.11	<0.12	<0.17	<0.97	<0.11
PCB-1260	10	--	<0.11	NA	<0.12	<0.14	<1.0	<0.11	<0.12	<0.17	<0.97	<0.11
PCB 1268	10	--	<0.11	NA	<0.12	<0.14	<1.0	<0.11	<0.12	<0.17	<0.97	<0.11
Total PCBs	10	--	<0.11	NA	<0.12	<0.14	<1.0	<0.11	<0.12	<0.17	<0.97	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	**550**	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	**120**	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**92.5**	**83.2**	**80.6**	**70.9**	NA	**90.1**	**80.3**	**57.9**	NA	**93.3**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

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mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-5-1B	WS-AOC12W-SO-5-2	WS-AOC12W-SO-5-3	WS-AOC-12W-AS-6	WS-AOC12W-SO-6-1	WS-AOC12W-SO-DUP-1	WS-AOC12W-SO-6-2	WS-AOC12W-SO-6-3	WS-AOC-12W-AS-7	WS-AOC12W-SO-7-1
SAMPLE DEPTH (ft bgs)			(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')
DATE SAMPLED			7/18/17	7/18/17	7/18/17	7/31/17	7/17/17	7/17/17	7/17/17	7/17/17	7/31/17	7/18/17
WORK ORDER NO.			17G0681	17G0681	17G0681	17G1437	17G0626-11	17G0629-22	17G0626-12	17G0626-13	17G1437	17G0683
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]					PARENT	DUPLICATE				MS-MSD
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	NA	<0.12	<0.15	<0.99	<0.11	<0.11	<0.12	<0.16	<0.99	<0.11
PCB-1242	10	--	NA	<0.12	<0.15	<0.99	<0.11	<0.11	<0.12	<0.16	<0.99	<0.11
PCB-1248	10	--	NA	<0.12	<0.15	<0.99	<0.11	<0.11	<0.12	<0.16	<0.99	<0.11
PCB-1260	10	--	NA	<0.12	<0.15	<0.99	<0.11	<0.11	<0.12	<0.16	<0.99	<0.11
PCB 1268	10	--	NA	<0.12	<0.15	<0.99	<0.11	<0.11	<0.12	<0.16	<0.99	<0.11
Total PCBs	10	--	NA	<0.12	<0.15	<0.99	<0.11	<0.11	<0.12	<0.16	<0.99	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	**700**	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	**220**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**85.2**	**85.9**	**68.3**	NA	**92.6**	**91.1**	**82.4**	**61.3**	NA	**91.4**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-7-2	WS-AOC12W-SO-7-3	WS-AOC-12W-AS-8	WS-AOC12W-SO-8-1A	WS-AOC12W-SO-8-1B	WS-AOC12W-SO-8-2	WS-AOC12W-SO-8-3	WS-AOC-12W-AS-9	WS-AOC12W-SO-9-1	WS-AOC12W-SO-9-2
SAMPLE DEPTH (ft bgs)			(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(1.0'-1.5')	(3.0'-3.5')
DATE SAMPLED			7/18/17	7/18/17	7/31/17	7/17/17	7/17/17	7/17/17	7/17/17	7/31/17	7/18/17	7/18/17
WORK ORDER NO.			17G0683	17G0683	17G1437	17G0626	17G0626	17G0626	17G0626	17G1437	17G0679	17G0679
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.12	<0.16	<0.99	<0.12	NA	<0.12	<0.15	<0.99	<0.11	<0.12
PCB-1242	10	--	<0.12	<0.16	<0.99	<0.12	NA	<0.12	<0.15	<0.99	<0.11	<0.12
PCB-1248	10	--	<0.12	<0.16	<0.99	<0.12	NA	<0.12	<0.15	<0.99	<0.11	<0.12
PCB-1260	10	--	<0.12	<0.16	<0.99	<0.12	NA	<0.12	<0.15	<0.99	<0.11	<0.12
PCB 1268	10	--	<0.12	<0.16	<0.99	<0.12	NA	<0.12	<0.15	<0.99	<0.11	<0.12
Total PCBs	10	--	<0.12	<0.16	<0.99	<0.12	NA	<0.12	<0.15	<0.99	<0.11	<0.12
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	**0.44**	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	**1.1**	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	**0.49**	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	**0.28**	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	**0.32**	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	**1**	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	**0.35**	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**84.0**	**61.5**	NA	**83.8**	**81.1**	**80**	**66**	NA	**95.0**	**82.9**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-9-3	WS-AOC-12W-AS-10	WS-AOC12W-SO-10-1	WS-AOC12W-SO-10-2	WS-AOC12W-SO-10-3	WS-AOC-12W-AS-11	WS-AOC12W-SO-11-1A	WS-AOC12W-SO-11-1B	WS-AOC12W-SO-11-2	WS-AOC12W-SO-11-3
SAMPLE DEPTH (ft bgs)			(7.0'-7.5)	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0-7.5)	(0-0.5")	(0.5'-1.0')	(1.0'-2.0')	(3.0'-3.5')	(7.0'-7.5')
DATE SAMPLED			7/18/17	7/31/17	7/17/17	7/17/17	7/17/17	7/31/17	7/18/17	7/18/17	7/18/17	7/18/17
WORK ORDER NO.			17G0679	17G1437	17G0628	17G0628	17G0628	17G1438	17G0681	17G0681	17G0683	17G0683
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.15	<0.97	<0.11	<0.11	<0.12	<0.93	<0.11	NA	<0.12	<0.12
PCB-1242	10	--	<0.15	<0.97	<0.11	<0.11	<0.12	<0.93	<0.11	NA	<0.12	<0.12
PCB-1248	10	--	<0.15	<0.97	<0.11	<0.11	<0.12	<0.93	<0.11	NA	<0.12	<0.12
PCB-1260	10	--	<0.15	<0.97	<0.11	<0.11	<0.12	<0.93	<0.11	NA	<0.12	<0.12
PCB 1268	10	--	<0.15	<0.97	<0.11	<0.11	<0.12	<0.93	<0.11	NA	<0.12	<0.12
Total PCBs	10	--	<0.15	<0.97	<0.11	<0.11	<0.12	<0.93	<0.11	NA	<0.12	<0.12
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	**0.21**	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	**0.63**	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	**0.30**	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	**0.97**	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	**0.50**	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	**1.3**	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	**0.38**	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	**790**	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	**15**	NA	NA
Total Solids (%)	--	--	**66.9**	NA	**93.6**	**87.4**	**82.2**	NA	**94.9**	**90.3**	**83.5**	**81.9**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-AS-12	WS-AOC12W-SO-12-1	WS-AOC12W-SO-DUP-5	WS-AOC12W-SO-12-2	WS-AOC12W-SO-12-3	WS-AOC-12W-AS-13	WS-AOC12W-SO-13-1A	WS-AOC12W-SO-13-1B	WS-AOC12W-SO-13-2	WS-AOC12W-SO-13-3
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.5')	(0.5'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')
DATE SAMPLED			7/31/17	7/18/17	7/18/17	7/18/17	7/18/17	7/31/17	7/18/17	7/18/17	7/18/17	7/18/17
WORK ORDER NO.			17G1438	17G0683	17G0683	17G0683	17G0683	17G1438	17G0679	17G0679	17G0679	17G0679
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]		PARENT	DUPLICATE							
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.98	<0.11	<0.12	<0.13	<0.14	<0.77	<0.10	NA	<0.12	<0.15
PCB-1242	10	--	<0.98	<0.11	<0.12	<0.13	<0.14	<0.77	<0.10	NA	<0.12	<0.15
PCB-1248	10	--	<0.98	<0.11	<0.12	<0.13	<0.14	<0.77	<0.10	NA	<0.12	<0.15
PCB-1260	10	--	<0.98	<0.11	<0.12	<0.13	<0.14	<0.77	<0.10	NA	<0.12	<0.15
PCB 1268	10	--	<0.98	<0.11	<0.12	<0.13	<0.14	<0.77	<0.10	NA	<0.12	<0.15
Total PCBs	10	--	<0.98	<0.11	<0.12	<0.13	<0.14	<0.77	<0.10	NA	<0.12	<0.15
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	**750**	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	**15**	NA	NA
Total Solids (%)	--	--	NA	**92.3**	**82.6**	**79.5**	**70.7**	NA	**96.3**	**88.6**	**84.0**	**65.6**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-AS-14	WS-AOC12W-SO-14-1	WS-AOC12W-SO-14-2	WS-AOC12W-SO-14-3	WS-AOC-12W-AS-15	WS-AOC12W-SO-15-1	WS-AOC12W-SO-15-2	WS-AOC12W-SO-15-3	WS-AOC-12W-AS-16	WS-AOC12W-SO-16-1A
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0-0.5')
DATE SAMPLED			7/31/17	7/17/17	7/17/17	7/17/17	7/31/17	7/18/17	7/18/17	7/18/17	7/31/17	7/18/17
WORK ORDER NO.			17G1438	17G0626-18	17G0626-19	17G0626-20	17G1438	17G0681	17G0681	17G0681	17G1438	17G0687
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.72	<0.11	<0.12	<0.14	<0.74	<0.10	<0.12	<0.14	<0.98	<0.11
PCB-1242	10	--	<0.72	<0.11	<0.12	<0.14	<0.74	<0.10	<0.12	<0.14	<0.98	<0.11
PCB-1248	10	--	<0.72	<0.11	<0.12	<0.14	<0.74	<0.10	<0.12	<0.14	<0.98	<0.11
PCB-1260	10	--	<0.72	<0.11	<0.12	<0.14	<0.74	<0.10	<0.12	<0.14	<0.98	<0.11
PCB 1268	10	--	<0.72	<0.11	<0.12	<0.14	<0.74	<0.10	<0.12	<0.14	<0.98	<0.11
Total PCBs	10	--	<0.72	<0.11	<0.12	<0.14	<0.74	<0.10	<0.12	<0.14	<0.98	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**94.5**	**86.5**	**71.3**	NA	**95.6**	**81.8**	**72.8**	NA	**92.9**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-16-1B	WS-AOC12W-SO-16-2	WS-AOC12W-SO-16-3	WS-AOC-12W-AS-17	WS-AOC12W-SO-17-1	WS-AOC12W-SO-17-2	WS-AOC12W-SO-17-3	WS-AOC-12W-AS-18	WS-AOC12W-SO-18-1A	WS-AOC12W-SO-18-1B
SAMPLE DEPTH (ft bgs)			(1.0'-2.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5)	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')
DATE SAMPLED			7/18/17	7/18/17	7/18/17	7/31/17	7/18/17	7/18/17	7/18/17	7/31/17	7/17/17	7/17/17
WORK ORDER NO.			17G0687	17G0687	17G0687	17G1438	17G0679	17G0679	17G0679	17G1438	17G0628	17G0628
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]					MS					
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	NA	<0.12	<0.13	<0.81	<0.11	<0.12	<0.16	<0.68	<0.11	NA
PCB-1242	10	--	NA	<0.12	<0.13	<0.81	<0.11	<0.12	<0.16	<0.68	<0.11	NA
PCB-1248	10	--	NA	<0.12	<0.13	<0.81	<0.11	<0.12	<0.16	<0.68	<0.11	NA
PCB-1260	10	--	NA	<0.12	<0.13	<0.81	<0.11	<0.12	<0.16	<0.68	<0.11	NA
PCB 1268	10	--	NA	<0.12	<0.13	<0.81	<0.11	<0.12	<0.16	<0.68	<0.11	NA
Total PCBs	10	--	NA	<0.12	<0.13	<0.81	<0.11	<0.12	<0.16	<0.68	<0.11	NA
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Acenaphthylene	2,500	84	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Anthracene*	2,500	400	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Benzo(a)anthracene	7.8	1	**0.38**	NA	NA	NA	NA	NA	NA	NA	NA	**0.81**
Benzo(a)pyrene	1	1	**0.21**	NA	NA	NA	NA	NA	NA	NA	NA	**0.46**
Benzo(b)fluoranthene	7.8	1	**0.64**	NA	NA	NA	NA	NA	NA	NA	NA	**0.75**
Benzo(g,h,i)perylene*	78	1	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	**0.44**
Benzo(k)fluoranthene	78	1	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	**0.24**
Chrysene*	780	1	**0.83**	NA	NA	NA	NA	NA	NA	NA	NA	**1.5**
Dibenz(a,h)anthracene*	1	1	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Fluoranthene	2,500	56	**0.80**	NA	NA	NA	NA	NA	NA	NA	NA	**1.4**
Fluorene	2,500	56	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	<0.21
Indeno(1,2,3-cd)pyrene*	7.8	1	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	**0.36**
2-Methylnaphthalene*	1,000	5.6	**0.93**	NA	NA	NA	NA	NA	NA	NA	NA	**1.2**
Naphthalene	2,500	56	**0.68**	NA	NA	NA	NA	NA	NA	NA	NA	**0.69**
Phenanthrene	2,500	40	**2.3**	NA	NA	NA	NA	NA	NA	NA	NA	**2.6**
Pyrene	2,500	40	**0.66**	NA	NA	NA	NA	NA	NA	NA	NA	**1.6**
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	**610**	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	**0.12**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	**13**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**91.1**	**86.3**	**76.2**	NA	**93.7**	**80.2**	**64.0**	NA	**94.9**	**80**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
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3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-18-2	WS-AOC12W-SO-18-3	WS-AOC-12W-AS-19	WS-AOC12W-SO-19-1	WS-AOC12W-SO-19-2	WS-AOC12W-SO-19-3	WS-AOC-12W-AS-20	WS-AOC12W-AS-DUP-1	WS-AOC12W-SO-20-1	WS-AOC12W-SO-20-2
SAMPLE DEPTH (ft bgs)			(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.2')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')
DATE SAMPLED			7/17/17	7/17/17	7/31/17	7/18/17	7/18/17	7/18/17	7/31/17	7/31/17	7/17/17	7/17/17
WORK ORDER NO.			17G0628	17G0628	17G1438	17G0681	17G0681	17G0681	17G1438	17G1438	17G0629	17G0629
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]				MS			PARENT	DUPLICATE		
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	<0.13	<0.97	<0.11	<0.12	<0.13	<0.78	<0.79	<0.11	<0.12
PCB-1242	10	--	<0.11	<0.13	<0.97	<0.11	<0.12	<0.13	<0.78	<0.79	<0.11	<0.12
PCB-1248	10	--	<0.11	<0.13	<0.97	<0.11	<0.12	<0.13	<0.78	<0.79	<0.11	<0.12
PCB-1260	10	--	<0.11	<0.13	<0.97	<0.11	<0.12	<0.13	<0.78	<0.79	<0.11	<0.12
PCB 1268	10	--	<0.11	<0.13	<0.97	<0.11	<0.12	<0.13	<0.78	<0.79	<0.11	<0.12
Total PCBs	10	--	<0.11	<0.13	<0.97	<0.11	<0.12	<0.13	<0.78	<0.79	<0.11	<0.12
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**88.6**	**79.4**	NA	**94.5**	**86.6**	**77**	NA	NA	**94.9**	**82.8**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-20-3	WS-AOC-12W-AS-21	WS-AOC12W-SO-21-1	WS-AOC12W-SO-21-2	WS-AOC12W-SO-21-3	WS-AOC-12W-AS-22	WS-AOC12W-SO-22-1	WS-AOC12W-SO-DUP-4	WS-AOC12W-SO-22-2	WS-AOC12W-SO-22-3
SAMPLE DEPTH (ft bgs)			(7.0-7.5)	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0-7.5)	(0-0.5")	(0.5'-1.2')	(0.5'-1.2')	(3.0'-3.5')	(7.0'-7.5')
DATE SAMPLED			7/17/17	7/31/17	7/17/17	7/17/17	7/17/17	7/31/17	7/18/17	7/18/17	7/18/17	7/18/17
WORK ORDER NO.			17G0629	17G1438	17G0629	17G0629	17G0629	17G1438	17G0681	17G0681	17G0681	17G0681
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]							PARENT	DUPLICATE		
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.13	<0.79	<0.12	<0.12	<0.14	<0.75	<0.10	<0.10	<0.12	<0.22
PCB-1242	10	--	<0.13	<0.79	<0.12	<0.12	<0.14	<0.75	<0.10	<0.10	<0.12	<0.22
PCB-1248	10	--	<0.13	<0.79	<0.12	<0.12	<0.14	<0.75	<0.10	<0.10	<0.12	<0.22
PCB-1260	10	--	<0.13	<0.79	<0.12	<0.12	<0.14	<0.75	<0.10	<0.10	<0.12	<0.22
PCB 1268	10	--	<0.13	<0.79	<0.12	<0.12	<0.14	<0.75	<0.10	<0.10	<0.12	<0.22
Total PCBs	10	--	<0.13	<0.79	<0.12	<0.12	<0.14	<0.75	<0.10	<0.10	<0.12	<0.22
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**77**	NA	**84**	**84.6**	**72.3**	NA	**95.5**	**95.8**	**85.1**	**46.2**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-AS-23	WS-AOC12W-SO-23-1A	WS-AOC12W-SO-23-1B	WS-AOC12W-SO-23-2	WS-AOC12W-SO-23-3	WS-AOC-12W-AS-24	WS-AOC12W-SO-24-1	WS-AOC12W-SO-24-2	WS-AOC12W-SO-24-3	WS-AOC-12W-AS-25
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0-7.5)	(0-0.5")
DATE SAMPLED			7/31/17	7/17/17	7/17/17	7/17/17	7/17/17	7/31/17	7/17/17	7/17/17	7/17/17	7/31/17
WORK ORDER NO.			17G1438	17G0628-01	17G0628-02	17G0628-03	17G0628-04	17G1438	17G0629-11	17G0629-12	17G0629-13	17G1438
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.77	<0.11	NA	<0.12	<0.12	<0.75	<0.11	<0.12	<0.12	<0.90
PCB-1242	10	--	<0.77	<0.11	NA	<0.12	<0.12	<0.75	<0.11	<0.12	<0.12	<0.90
PCB-1248	10	--	<0.77	<0.11	NA	<0.12	<0.12	<0.75	<0.11	<0.12	<0.12	<0.90
PCB-1260	10	--	<0.77	<0.11	NA	<0.12	<0.12	<0.75	<0.11	<0.12	<0.12	<0.90
PCB 1268	10	--	<0.77	<0.11	NA	<0.12	<0.12	<0.75	<0.11	<0.12	<0.12	<0.90
Total PCBs	10	--	<0.77	<0.11	NA	<0.12	<0.12	<0.75	<0.11	<0.12	<0.12	<0.90
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	**98**	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	**210**	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**89.9**	**89.5**	**84.7**	**81.7**	NA	**95.2**	**86.3**	**84.5**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
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BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
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NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-25-1	WS-AOC12W-SO-25-2	WS-AOC12W-SO-25-3	WS-AOC-12W-AS-26	WS-AOC12W-SO-26-1A	WS-AOC12W-SO-26-1B	WS-AOC12W-SO-26-2	WS-AOC12W-SO-26-3	WS-AOC-12W-AS-27	WS-AOC12W-SO-27-1
SAMPLE DEPTH (ft bgs)			(0.5'-1.0')	(3.0'-3.5')	(7.0-7.5)	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')
DATE SAMPLED			7/17/17	7/17/17	7/17/17	7/31/17	7/18/17	7/18/17	7/18/17	7/18/17	8/1/17	7/17/17
WORK ORDER NO.			17G0629-04	17G0629-05	17G0629-06	17G1438	17G0679	17G0679	17G0679	17G0679	17H0062	17G0628-05
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	<0.12	<0.15	<0.96	<0.11	NA	<0.12	<0.15	<0.50	<0.10
PCB-1242	10	--	<0.11	<0.12	<0.15	<0.96	<0.11	NA	<0.12	<0.15	<0.50	<0.10
PCB-1248	10	--	<0.11	<0.12	<0.15	<0.96	<0.11	NA	<0.12	<0.15	<0.50	<0.10
PCB-1260	10	--	<0.11	<0.12	<0.15	<0.96	<0.11	NA	<0.12	<0.15	<0.50	<0.10
PCB 1268	10	--	<0.11	<0.12	<0.15	<0.96	<0.11	NA	<0.12	<0.15	<0.50	<0.10
Total PCBs	10	--	<0.11	<0.12	<0.15	<0.96	<0.11	NA	<0.12	<0.15	<0.50	<0.10
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	<2.7	NA	NA	NA	NA
Total Solids (%)	--	--	**93.2**	**86.8**	**65.1**	NA	**90.1**	**93.5**	**82.6**	**67.6**	NA	**97**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-27-2	WS-AOC12W-SO-27-3	WS-AOC-12W-AS-28	WS-AOC12W-SO-28-1A	WS-AOC12W-SO-28-1B	WS-AOC12W-SO-28-2	WS-AOC12W-SO-28-3	WS-AOC-12W-AS-29	WS-AOC12W-SO-29-1	WS-AOC12W-SO-DUP-3
SAMPLE DEPTH (ft bgs)			(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(0.5'-1.0')
DATE SAMPLED			7/17/17	7/17/17	8/1/17	7/17/17	7/17/17	7/17/17	7/17/17	8/1/17	7/17/17	7/17/17
WORK ORDER NO.			17G0628-06	17G0628-07	17H0062	17G0629-07	17G0629-08	17G0629-09	17G0629-10	17H0062	17G0629-17	17G0629-24
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]									PARENT	DUPLICATE
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	<0.12	<0.50	<0.10	NA	<0.12	<0.13	<0.50	<0.11	<0.11
PCB-1242	10	--	<0.11	<0.12	<0.50	<0.10	NA	<0.12	<0.13	<0.50	<0.11	<0.11
PCB-1248	10	--	<0.11	<0.12	<0.50	<0.10	NA	<0.12	<0.13	<0.50	<0.11	<0.11
PCB-1260	10	--	<0.11	<0.12	<0.50	<0.10	NA	<0.12	<0.13	<0.50	<0.11	<0.11
PCB 1268	10	--	<0.11	<0.12	<0.50	<0.10	NA	<0.12	<0.13	<0.50	<0.11	<0.11
Total PCBs	10	--	<0.11	<0.12	<0.50	<0.10	NA	<0.12	<0.13	<0.50	<0.11	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	**0.48**	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	**0.27**	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	**0.48**	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	**0.25**	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	**0.94**	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	**0.77**	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	**0.23**	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	**0.81**	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	**0.39**	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	**1.6**	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	**0.83**	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**88.5**	**85.6**	NA	**96.3**	**90.3**	**85.6**	**77.8**	NA	**93.5**	**93.2**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
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NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-29-2	WS-AOC12W-SO-29-3	WS-AOC-12W-AS-30	WS-AOC12W-SO-30-1	WS-AOC12W-SO-30-2	WS-AOC12W-SO-30-3	WS-AOC-12W-AS-31	WS-AOC12W-SO-31-1	WS-AOC12W-SO-31-2	WS-AOC12W-SO-31-3
SAMPLE DEPTH (ft bgs)			(3.0'-3.5')	(7.0-7.5)	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5)	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0-7.5)
DATE SAMPLED			7/17/17	7/17/17	8/1/17	7/18/17	7/18/17	7/18/17	8/1/17	7/17/17	7/17/17	7/17/17
WORK ORDER NO.			17G0629-18	17G0629-19	17H0062	17G0679	17G0679	17G0679	17H0062	17G0628-15	17G0628-16	17G0628-17
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.12	<0.13	<0.50	<0.11	<0.11	<0.14	<0.50	<0.11	<0.12	<0.12
PCB-1242	10	--	<0.12	<0.13	<0.50	<0.11	<0.11	<0.14	<0.50	<0.11	<0.12	<0.12
PCB-1248	10	--	<0.12	<0.13	<0.50	<0.11	<0.11	<0.14	<0.50	<0.11	<0.12	<0.12
PCB-1260	10	--	<0.12	<0.13	<0.50	<0.11	<0.11	<0.14	<0.50	<0.11	<0.12	<0.12
PCB 1268	10	--	<0.12	<0.13	<0.50	<0.11	<0.11	<0.14	<0.50	<0.11	<0.12	<0.12
Total PCBs	10	--	<0.12	<0.13	<0.50	<0.11	<0.11	<0.14	<0.50	<0.11	<0.12	<0.12
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**85.4**	**79.6**	NA	**93.0**	**89.3**	**69.5**	NA	**91.6**	**85.2**	**86.1**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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mg/kg = milligrams per kilogram
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BOLD = Compound detected at the concentration shown
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-AS-32	WS-AOC12W-SO-32-1	WS-AOC12W-SO-DUP-2	WS-AOC12W-SO-32-2	WS-AOC12W-SO-32-3	WS-AOC-12W-AS-33	WS-AOC12W-SO-33-1A	WS-AOC12W-SO-33-1B	WS-AOC12W-SO-33-2	WS-AOC12W-SO-33-3
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.0')	(0.5'-1.0')	(3.0'-3.5')	(7.0-7.5)	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')
DATE SAMPLED			8/1/17	7/17/17	7/17/17	7/17/17	7/17/17	8/1/17	7/17/17	7/17/17	7/17/17	7/17/17
WORK ORDER NO.			17H0062	17G0628-18	17G0629-23	17G0628-19	17G0628-20	17H0062	17G0629-20	17G0629-21	17G0629-25	17G0629-26
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]		PARENT	DUPLICATE							
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50	<0.11	NA	<0.12	<0.15
PCB-1242	10	--	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50	<0.11	NA	<0.12	<0.15
PCB-1248	10	--	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50	<0.11	NA	<0.12	<0.15
PCB-1260	10	--	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50	<0.11	NA	<0.12	<0.15
PCB 1268	10	--	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50	<0.11	NA	<0.12	<0.15
Total PCBs	10	--	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50	<0.11	NA	<0.12	<0.15
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	**6600**	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	**1.4**	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	**16**	NA	NA
Total Solids (%)	--	--	NA	**93.2**	**95.6**	**90.2**	**78.6**	NA	**93.2**	**87.5**	**83.3**	**65.5**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-AS-34	WS-AOC12W-SO-34-1	WS-AOC12W-SO-34-2	WS-AOC12W-SO-34-3	WS-AOC12W-SO-35-1	WS-AOC12W-SO-35-2A	WS-AOC12W-SO-35-2B	WS-AOC12W-SO-35-3	WS-AOC12W-SO-35-4	WS-AOC12W-SO-36-1
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5)	(0-0.5')	(0.5'-1.0')	(1.0'-1.5')	(3.0-3.5')	(7.0-7.5')	(0-1.0')
DATE SAMPLED			8/1/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17
WORK ORDER NO.			17H0062	17G0679	17G0679	17G0679	17G0683	17G0683	17G0683	17G0683	17G0683	17G0685
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										PARENT
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.50	<0.10	<0.14	<0.12	<0.10	<0.11	NA	<0.12	<0.12	<0.11
PCB-1242	10	--	<0.50	<0.10	<0.14	<0.12	<0.10	<0.11	NA	<0.12	<0.12	<0.11
PCB-1248	10	--	<0.50	<0.10	<0.14	<0.12	<0.10	<0.11	NA	<0.12	<0.12	<0.11
PCB-1260	10	--	<0.50	<0.10	<0.14	<0.12	<0.10	<0.11	NA	<0.12	<0.12	<0.11
PCB 1268	10	--	<0.50	<0.10	<0.14	<0.12	<0.10	<0.11	NA	<0.12	<0.12	<0.11
Total PCBs	10	--	<0.50	<0.10	<0.14	<0.12	<0.10	<0.11	NA	<0.12	<0.12	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	**0.33**	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	**0.57**	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	**0.47**	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	**1.5**	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	**0.69**	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	**1.6**	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	**0.37**	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	**720**	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	**12**	NA	NA	NA
Total Solids (%)	--	--	NA	**96.2**	**71.1**	**81.9**	**95.4**	**91.4**	**89.1**	**84.3**	**82.7**	**94.2**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-DUP-6	WS-AOC12W-SO-36-2	WS-AOC12W-SO-36-3	WS-AOC12W-SO-36-4	WS-AOC12W-SO-37-1	WS-AOC12W-SO-37-2A	WS-AOC12W-SO-37-2B	WS-AOC12W-SO-37-3	WS-AOC12W-SO-37-4	WS-AOC12W-SO-38-1
SAMPLE DEPTH (ft bgs)			(0-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0-7.5')	(0-0.5')	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')
DATE SAMPLED			7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17
WORK ORDER NO.			17G0687	17G0685	17G0685	17G0685	17G0685	17G0685	17G0685	17G0685	17G0685	17G0685
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	DUPLICATE									
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	<0.11	<0.12	<0.13	<0.10	<0.11	NA	<0.12	<0.25	<0.10
PCB-1242	10	--	<0.11	<0.11	<0.12	<0.13	<0.10	<0.11	NA	<0.12	<0.25	<0.10
PCB-1248	10	--	<0.11	<0.11	<0.12	<0.13	<0.10	<0.11	NA	<0.12	<0.25	<0.10
PCB-1260	10	--	<0.11	<0.11	<0.12	<0.13	<0.10	<0.11	NA	<0.12	<0.25	<0.10
PCB 1268	10	--	<0.11	<0.11	<0.12	<0.13	<0.10	<0.11	NA	<0.12	<0.25	<0.10
Total PCBs	10	--	<0.11	<0.11	<0.12	<0.13	<0.10	<0.11	NA	<0.12	<0.25	<0.10
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	**0.47**	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	**0.41**	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	**0.87**	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	**0.26**	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	**0.26**	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	**0.89**	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	**1.3**	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	**0.30**	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	**0.67**	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	**0.53**	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	**1.3**	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	**0.83**	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**93.4**	**90.5**	**86.4**	**72.3**	**94.3**	**89.2**	**86.3**	**86.1**	**40.1**	**97.1**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
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3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-38-2	WS-AOC12W-SO-38-3	WS-AOC12W-SO-38-4	WS-AOC12W-SO-39-1	WS-AOC12W-SO-DUP-7	WS-AOC12W-SO-39-2	WS-AOC12W-SO-39-3	WS-AOC12W-SO-39-4	WS-AOC12W-SO-39-4R	WS-AOC12W-SO-40-1
SAMPLE DEPTH (ft bgs)			(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(7.0'-7.5')	(0-0.75')
DATE SAMPLED			7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	9/14/17	7/18/17
WORK ORDER NO.			17G0685	17G0685	17G0685	17G0687	17G0687	17G0687	17G0687	17G0687	17I0642	17G0685
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]				PARENT	DUPLICATE					MS
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	<0.12	<0.13	<0.11	<0.10	<0.11	<0.12	<0.64	<0.11	<0.10
PCB-1242	10	--	<0.11	<0.12	<0.13	<0.11	<0.10	<0.11	<0.12	<0.64	<0.11	<0.10
PCB-1248	10	--	<0.11	<0.12	<0.13	<0.11	<0.10	<0.11	<0.12	<0.64	<0.11	<0.10
PCB-1260	10	--	<0.11	<0.12	<0.13	<0.11	<0.10	<0.11	<0.12	**4.4**	<0.11	<0.10
PCB 1268	10	--	<0.11	<0.12	<0.13	<0.11	<0.10	<0.11	<0.12	<0.64	<0.11	<0.10
Total PCBs	10	--	<0.11	<0.12	<0.13	<0.11	<0.10	<0.11	<0.12	**4.4**	<0.11	<0.10
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	<0.20	<0.20	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**86.7**	**85.3**	**72.9**	**95.0**	**96.2**	**93.9**	**81.3**	**78.0**	**73.6**	**95.3**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-40-2	WS-AOC12W-SO-40-3	WS-AOC12W-SO-40-4	WS-AOC12W-SO-41-1	WS-AOC12W-SO-41-2	WS-AOC12W-SO-41-3	WS-AOC12W-SO-41-4	WS-AOC12W-SO-42-1	WS-AOC12W-SO-42-2A	WS-AOC12W-SO-42-2B
SAMPLE DEPTH (ft bgs)			(0.75'-1.25')	(3.0'-3.5')	(7.0-7.5')	(0-0.75')	(0.75'-1.25')	(3.0'-3.5')	(7.0-7.5')	(0-0.5')	(0.5'-1.0')	(1.0'-2.0')
DATE SAMPLED			7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17
WORK ORDER NO.			17G0685	17G0685	17G0685	17G0683	17G0685	17G0685	17G0685	17G0683	17G0683	17G0683
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	<0.11	<0.13	<0.10	<0.11	<0.13	<0.12	<0.12	<0.12	NA
PCB-1242	10	--	<0.11	<0.11	<0.13	<0.10	<0.11	<0.13	<0.12	<0.12	<0.12	NA
PCB-1248	10	--	<0.11	<0.11	<0.13	<0.10	<0.11	<0.13	<0.12	<0.12	<0.12	NA
PCB-1260	10	--	<0.11	**0.38**	<0.13	<0.10	<0.11	**0.37**	<0.12	**0.19**	**0.45**	NA
PCB 1268	10	--	<0.11	<0.11	<0.13	<0.10	<0.11	<0.13	<0.12	<0.12	<0.12	NA
Total PCBs	10	--	<0.11	**0.38**	<0.13	<0.10	<0.11	**0.37**	<0.12	**0.19**	**0.45**	NA
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.43
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.43**
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.52**
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.4**
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.6**
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.3**
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.94**
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.80**
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.6**
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.43
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3.1**
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.43
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.99**
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.54**
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.78**
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.6**
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.5**
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2100**
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	**120**
Total Solids (%)	--	--	**92.7**	**84.0**	**72.7**	**95.6**	**90.5**	**75.8**	**78.3**	**85.5**	**83.0**	**79.7**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-42-3	WS-AOC12W-SO-42-4	WS-AOC12W-SO-43-1	WS-AOC12W-SO-43-2	WS-AOC12W-SO-43-3	WS-AOC12W-SO-43-4	WS-AOC12W-SO-44-1	WS-AOC12W-SO-44-2	WS-AOC12W-SO-44-3	WS-AOC12W-SO-44-4
SAMPLE DEPTH (ft bgs)			(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')
DATE SAMPLED			7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17
WORK ORDER NO.			17G0683	17G0683	17G0687	17G0687	17G0687	17G0687	17G0687	17G0687	17G0687	17G0687
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.12	<0.12	<0.10	<0.11	<0.13	<0.14	<0.10	<0.10	<0.10	<0.14
PCB-1242	10	--	<0.12	<0.12	<0.10	<0.11	<0.13	<0.14	<0.10	<0.10	<0.10	<0.14
PCB-1248	10	--	<0.12	<0.12	<0.10	<0.11	<0.13	<0.14	<0.10	<0.10	<0.10	<0.14
PCB-1260	10	--	**0.60**	<0.12	<0.10	<0.11	**0.28**	<0.14	<0.10	**0.36**	**0.17**	<0.14
PCB 1268	10	--	<0.12	<0.12	<0.10	<0.11	<0.13	<0.14	<0.10	<0.10	<0.10	<0.14
Total PCBs	10	--	**0.60**	<0.12	<0.10	<0.11	**0.28**	<0.14	<0.10	**0.36**	**0.17**	<0.14
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	**0.19**	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	**0.47**	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	**0.53**	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	**0.77**	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	**0.31**	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	**0.29**	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	**0.52**	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	**1.1**	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	**0.32**	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	**0.21**	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	**0.77**	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	**0.85**	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**83.1**	**83.7**	**95.7**	**94.0**	**79.7**	**71.3**	**96.0**	**97.4**	**95.8**	**73.9**

NOTES:

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3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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mg/kg = milligrams per kilogram
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-45-1	WS-AOC12W-SO-45-2A	WS-AOC12W-SO-45-2B	WS-AOC12W-SO-45-3	WS-AOC12W-SO-45-4	WS-AOC12W-SO-46-1	WS-AOC12W-SO-46-2	WS-AOC12W-SO-46-3	WS-AOC12W-SO-46-4	WS-AOC-12W-AS-47
SAMPLE DEPTH (ft bgs)			(0-0.5')	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.7')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")
DATE SAMPLED			7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	7/18/17	8/1/17
WORK ORDER NO.			17G0687	17G0687	17G0687	17G0687	17G0687	17G0687	17G0687	17G0687	17G0687	17H0062
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]						MS				
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.10	<0.10	NA	<0.12	<0.14	<0.11	<0.13	<0.13	<0.13	<0.50
PCB-1242	10	--	<0.10	<0.10	NA	<0.12	<0.14	<0.11	<0.13	<0.13	<0.13	<0.50
PCB-1248	10	--	<0.10	<0.10	NA	<0.12	<0.14	<0.11	<0.13	<0.13	<0.13	<0.50
PCB-1260	10	--	<0.10	<0.10	NA	**0.33**	<0.14	**0.22**	**0.28**	<0.13	<0.13	<0.50
PCB 1268	10	--	<0.10	<0.10	NA	<0.12	<0.14	<0.11	<0.13	<0.13	<0.13	<0.50
Total PCBs	10	--	<0.10	<0.10	NA	**0.33**	<0.14	**0.22**	**0.28**	<0.13	<0.13	<0.50
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	**230**	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	**5.4**	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**97.9**	**97.8**	**89.9**	**80.0**	**71.4**	**93.6**	**79.3**	**75.0**	**75.9**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-47-1	WS-AOC12W-SO-DUP-8	WS-AOC12W-SO-47-2	WS-AOC12W-SO-47-3	WS-AOC-12W-AS-48	WS-AOC12W-SO-48-1	WS-AOC12W-SO-DUP-14	WS-AOC12W-SO-48-2	WS-AOC12W-SO-48-3	WS-AOC-12W-AS-49
SAMPLE DEPTH (ft bgs)			(0.5'-1.2')	(0.5'-1.2')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")
DATE SAMPLED			7/19/17	7/19/17	7/19/17	7/19/17	8/1/17	7/20/17	7/20/17	7/20/17	7/20/17	8/1/17
WORK ORDER NO.			17G0774	17G0779	17G0774	17G0774	17H0062	17G0866	17G0869	17G0867	17G0867	17H0062
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	PARENT	DUPLICATE				PARENT	DUPLICATE			
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.10	<0.10	<0.11	<0.16	<0.50	<0.11	<0.11	<0.11	<0.19	<0.50
PCB-1242	10	--	<0.10	<0.10	<0.11	<0.16	<0.50	<0.11	<0.11	<0.11	<0.19	<0.50
PCB-1248	10	--	<0.10	<0.10	<0.11	<0.16	<0.50	<0.11	<0.11	<0.11	<0.19	<0.50
PCB-1260	10	--	<0.10	**0.12**	<0.11	<0.16	<0.50	**0.19**	**0.12**	<0.11	<0.19	<0.50
PCB 1268	10	--	<0.10	<0.10	<0.11	<0.16	<0.50	<0.11	<0.11	<0.11	<0.19	<0.50
Total PCBs	10	--	<0.10	**0.12**	<0.11	<0.16	<0.50	**0.19**	**0.12**	<0.11	<0.19	<0.50
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**96.6**	**96.6**	**87.8**	**60.9**	NA	**92.7**	**93.7**	**90.8**	**53.8**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-49-1A	WS-AOC12W-SO-49-1B	WS-AOC12W-SO-49-2	WS-AOC12W-SO-49-3	WS-AOC12W-SO-50-1	WS-AOC12W-SO-50-2A	WS-AOC12W-SO-50-2B	WS-AOC12W-SO-50-3	WS-AOC12W-SO-50-4	WS-AOC-12W-AS-51
SAMPLE DEPTH (ft bgs)			(0.5'-1.0')	(1.0'-2.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(1.0'-2.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")
DATE SAMPLED			7/19/17	7/19/17	7/19/17	7/19/17	7/26/17	7/26/17	7/26/17	7/26/17	7/26/17	8/1/17
WORK ORDER NO.			17G0774	17G0774	17G0774	17G0775	17G1169	17G1169	17G1169	17G1169	17G1169	17H0062
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	NA	<0.12	<0.14	<0.11	<0.10	NA	<0.10	<0.12	<0.50
PCB-1242	10	--	<0.11	NA	<0.12	<0.14	<0.11	<0.10	NA	<0.10	<0.12	<0.50
PCB-1248	10	--	<0.11	NA	<0.12	<0.14	<0.11	<0.10	NA	<0.10	<0.12	<0.50
PCB-1260	10	--	<0.11	NA	<0.12	<0.14	<0.11	<0.10	NA	<0.10	<0.12	<0.50
PCB 1268	10	--	<0.11	NA	<0.12	<0.14	<0.11	<0.10	NA	<0.10	<0.12	<0.50
Total PCBs	10	--	<0.11	NA	<0.12	<0.14	<0.11	<0.10	NA	<0.10	<0.12	<0.50
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Acenaphthylene	2,500	84	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Anthracene*	2,500	400	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Benzo(a)pyrene	1	1	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Chrysene*	780	1	NA	**0.40**	NA	NA	NA	NA	<0.18	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Fluoranthene	2,500	56	NA	**0.24**	NA	NA	NA	NA	<0.18	NA	NA	NA
Fluorene	2,500	56	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	**0.34**	NA	NA	NA	NA	<0.18	NA	NA	NA
Naphthalene	2,500	56	NA	<0.19	NA	NA	NA	NA	<0.18	NA	NA	NA
Phenanthrene	2,500	40	NA	**0.66**	NA	NA	NA	NA	<0.18	NA	NA	NA
Pyrene	2,500	40	NA	**0.27**	NA	NA	NA	NA	<0.18	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	**290**	NA	NA	NA	NA	**18**	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	**16**	NA	NA	NA	NA	<2.6	NA	NA	NA
Total Solids (%)	--	--	**94.7**	**89.5**	**85.1**	**72.7**	**95.1**	**96.8**	**96.4**	**96.8**	**81.9**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-51-1	WS-AOC12W-SO-51-2	WS-AOC12W-SO-51-3	WS-AOC-12W-AS-52	WS-AOC12W-SO-52-1	WS-AOC12W-SO-52-2	WS-AOC12W-SO-52-3	WS-AOC-12W-AS-53	WS-AOC12W-SO-53-1	WS-AOC12W-SO-53-2
SAMPLE DEPTH (ft bgs)			(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')
DATE SAMPLED			7/20/17	7/20/17	7/20/17	8/1/17	7/19/17	7/19/17	7/19/17	8/1/17	7/20/17	7/20/17
WORK ORDER NO.			17G0866	17G0866	17G0866	17H0062	17G0775	17G0775	17G0775	17H0062	17G0866	17G0866
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.10	<0.11	<0.15	<0.50	<0.11	<0.11	<0.14	<0.50	<0.12	<0.11
PCB-1242	10	--	<0.10	<0.11	<0.15	<0.50	<0.11	<0.11	<0.14	<0.50	<0.12	<0.11
PCB-1248	10	--	<0.10	<0.11	<0.15	<0.50	<0.11	<0.11	<0.14	<0.50	<0.12	<0.11
PCB-1260	10	--	<0.10	<0.11	<0.15	<0.50	<0.11	<0.11	<0.14	<0.50	<0.12	<0.11
PCB 1268	10	--	<0.10	<0.11	<0.15	<0.50	<0.11	<0.11	<0.14	<0.50	<0.12	<0.11
Total PCBs	10	--	<0.10	<0.11	<0.15	<0.50	<0.11	<0.11	<0.14	<0.50	<0.12	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**97.1**	**91.1**	**66.7**	NA	**93.1**	**88.1**	**71.0**	NA	**86.7**	**90.3**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-53-3	WS-AOC-12W-AS-54	WS-AOC-12W-AS-DUP-2	WS-AOC12W-SO-54-1	WS-AOC12W-SO-54-2	WS-AOC12W-SO-54-3	WS-AOC-12W-AS-55	WS-AOC12W-SO-55-1	WS-AOC12W-SO-55-2	WS-AOC12W-SO-55-3
SAMPLE DEPTH (ft bgs)			(7.0'-7.5')	(0-0.5")	(0-0.5")	(0.5'-1.2')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')
DATE SAMPLED			7/20/17	8/1/17	8/1/17	7/19/17	7/19/17	7/19/17	8/1/17	7/20/17	7/20/17	7/20/17
WORK ORDER NO.			17G0866	17H0062	17H0062	17G0774	17G0774	17G0774	17H0062	17G0866	17G0866	17G0866
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.14	<0.50	<0.50	<0.10	<0.13	<0.13	<0.50	<0.11	<0.11	<0.15
PCB-1242	10	--	<0.14	**0.88**	**0.94**	<0.10	<0.13	<0.13	<0.50	<0.11	<0.11	<0.15
PCB-1248	10	--	<0.14	<0.50	<0.50	<0.10	<0.13	<0.13	<0.50	<0.11	<0.11	<0.15
PCB-1260	10	--	<0.14	<0.50	<0.50	<0.10	<0.13	<0.13	<0.50	<0.11	<0.11	<0.15
PCB 1268	10	--	<0.14	<0.50	<0.50	<0.10	<0.13	<0.13	<0.50	<0.11	<0.11	<0.15
Total PCBs	10	--	<0.14	**0.88**	**0.94**	<0.10	<0.13	<0.13	<0.50	<0.11	<0.11	<0.15
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**71.1**	NA	NA	**95.7**	**79.5**	**78.9**	NA	**94.4**	**93.5**	**68.3**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit shown.

BOLD = Compound detected at the concentration shown

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-AS-56	WS-AOC12W-SO-56-1A	WS-AOC12W-SO-56-1B	WS-AOC12W-SO-56-2	WS-AOC12W-SO-56-3	WS-AOC-12W-AS-57	WS-AOC12W-SO-57-1A	WS-AOC12W-SO-57-1B	WS-AOC12W-SO-57-2	WS-AOC12W-SO-57-3
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(1.0'-2.0')	(3.0'-3.5')	(7.0'-7.5')
DATE SAMPLED			8/1/17	7/19/17	7/19/17	7/19/17	7/19/17	8/1/17	7/20/17	7/20/17	7/20/17	7/20/17
WORK ORDER NO.			17H0062	17G0775	17G0775	17G0775	17G0775	17H0062	17G0866	17G0866	17G0866	17G0866
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.50	<0.11	NA	<0.11	<0.13	<0.50	<0.10	NA	<0.11	<0.13
PCB-1242	10	--	<0.50	<0.11	NA	<0.11	<0.13	<0.50	<0.10	NA	<0.11	<0.13
PCB-1248	10	--	<0.50	<0.11	NA	<0.11	<0.13	<0.50	<0.10	NA	<0.11	<0.13
PCB-1260	10	--	<0.50	<0.11	NA	<0.11	<0.13	<0.50	<0.10	NA	<0.11	<0.13
PCB 1268	10	--	<0.50	<0.11	NA	<0.11	<0.13	<0.50	<0.10	NA	<0.11	<0.13
Total PCBs	10	--	<0.50	<0.11	NA	<0.11	<0.13	<0.50	<0.10	NA	<0.11	<0.13
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	**0.55**	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	**0.22**	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	**0.36**	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	**0.64**	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	**0.27**	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	**430**	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	**6.5**	NA	NA
Total Solids (%)	--	--	NA	**93.7**	**88.6**	**91.1**	**74.4**	NA	**96.1**	**81.9**	**91.3**	**79.1**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-AS-58	WS-AOC12W-SO-58-1A	WS-AOC12W-SO-58-1B	WS-AOC12W-SO-58-2	WS-AOC12W-SO-58-3	WS-AOC-12W-AS-59	WS-AOC12W-SO-59-1	WS-AOC12W-SO-59-2	WS-AOC12W-SO-59-3	WS-AOC-12W-AS-60
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.0')	(1.0'-2.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")
DATE SAMPLED			8/1/17	7/19/17	7/19/17	7/19/17	7/19/17	8/1/17	7/20/17	7/20/17	7/20/17	8/1/17
WORK ORDER NO.			17H0063	17G0774	17G0774	17G0774	17G0774	17H0063	17G0865	17G0865	17G0865	17H0063
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.50	<0.11	NA	<0.12	<0.16	<0.50	<0.11	<0.12	<0.17	<0.50
PCB-1242	10	--	<0.50	<0.11	NA	<0.12	<0.16	<0.50	<0.11	<0.12	<0.17	<0.50
PCB-1248	10	--	<0.50	<0.11	NA	<0.12	<0.16	<0.50	<0.11	<0.12	<0.17	<0.50
PCB-1260	10	--	<0.50	<0.11	NA	<0.12	<0.16	<0.50	<0.11	<0.12	<0.17	<0.50
PCB 1268	10	--	<0.50	<0.11	NA	<0.12	<0.16	<0.50	<0.11	<0.12	<0.17	<0.50
Total PCBs	10	--	<0.50	<0.11	NA	<0.12	<0.16	<0.50	<0.11	<0.12	<0.17	<0.50
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	**58**	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	<2.6	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**95.2**	**94.9**	**84.3**	**62.1**	NA	**92.7**	**86.7**	**57.8**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-60-1A	WS-AOC12W-SO-60-1B	WS-AOC12W-SO-60-2	WS-AOC12W-SO-60-3	WS-AOC-12W-AS-61	WS-AOC12W-SO-61-1	WS-AOC12W-SO-61-2	WS-AOC12W-SO-61-3	WS-AOC-12W-AS-62	WS-AOC12W-SO-62-1
SAMPLE DEPTH (ft bgs)			(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(3.5'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')
DATE SAMPLED			7/19/17	7/19/17	7/19/17	7/19/17	8/1/17	7/20/17	7/20/17	7/20/17	8/1/17	7/19/17
WORK ORDER NO.			17G0775	17G0775	17G0775	17G0775	17H0063	17G0866	17G0866	17G0866	17H0063	17G0776
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	NA	<0.11	<0.13	<0.50	<0.11	<0.11	<0.17	<0.50	<0.11
PCB-1242	10	--	<0.11	NA	<0.11	<0.13	<0.50	<0.11	<0.11	<0.17	<0.50	<0.11
PCB-1248	10	--	<0.11	NA	<0.11	<0.13	<0.50	<0.11	<0.11	<0.17	<0.50	<0.11
PCB-1260	10	--	<0.11	NA	<0.11	<0.13	<0.50	<0.11	<0.11	<0.17	<0.50	<0.11
PCB 1268	10	--	<0.11	NA	<0.11	<0.13	<0.50	<0.11	<0.11	<0.17	<0.50	<0.11
Total PCBs	10	--	<0.11	NA	<0.11	<0.13	<0.50	<0.11	<0.11	<0.17	<0.50	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	**0.24**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	**0.38**	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	**0.29**	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	**0.21**	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	**0.49**	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	**0.31**	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	**250**	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	**17**	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**93.3**	**88.7**	**92.7**	**78.6**	NA	**94.3**	**91.0**	**59.4**	NA	**94.7**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-62-2	WS-AOC12W-SO-62-3	WS-AOC-12W-AS-63	WS-AOC12W-SO-63-1A	WS-AOC12W-SO-63-1B	WS-AOC12W-SO-63-2	WS-AOC12W-SO-63-3	WS-AOC-12W-AS-64	WS-AOC12W-SO-64-1A	WS-AOC12W-SO-64-1B
SAMPLE DEPTH (ft bgs)			(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5-1.0')	(1.0'-1.5')
DATE SAMPLED			7/19/17	7/19/17	8/1/17	7/20/17	7/20/17	7/20/17	7/20/17	8/1/17	7/19/17	7/19/17
WORK ORDER NO.			17G0776	17G0776	17H0063	17G0865	17G0866	17G0866	17G0866	17H0063	17G0774	17G0774
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	<0.14	<0.50	<0.11	NA	<0.11	<0.18	<0.50	<0.10	NA
PCB-1242	10	--	<0.11	<0.14	<0.50	<0.11	NA	<0.11	<0.18	<0.50	<0.10	NA
PCB-1248	10	--	<0.11	<0.14	**0.75**	<0.11	NA	<0.11	<0.18	<0.50	<0.10	NA
PCB-1260	10	--	<0.11	<0.14	<0.50	<0.11	NA	<0.11	<0.18	<0.50	<0.10	NA
PCB 1268	10	--	<0.11	<0.14	<0.50	<0.11	NA	<0.11	<0.18	<0.50	<0.10	NA
Total PCBs	10	--	<0.11	<0.14	**0.75**	<0.11	NA	<0.11	<0.18	<0.50	<0.10	NA
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	**0.19**	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	**0.35**	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	**270**
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	**9.1**
Total Solids (%)	--	--	**93.7**	**72.3**	NA	**93.0**	**90.4**	**93.2**	**54.2**	NA	**95.9**	**91.7**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-64-2	WS-AOC12W-SO-64-3	WS-AOC-12W-AS-65	WS-AOC12W-SO-65-1	WS-AOC12W-SO-DUP-13	WS-AOC12W-SO-65-2	WS-AOC12W-SO-65-3	WS-AOC-12W-AS-66	WS-AOC12W-SO-66-1	WS-AOC12W-SO-66-2
SAMPLE DEPTH (ft bgs)			(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.2')	(3.0'-3.5')
DATE SAMPLED			7/19/17	7/19/17	8/1/17	7/20/17	7/20/17	7/20/17	7/20/17	8/1/17	7/19/17	7/19/17
WORK ORDER NO.			17G0774	17G0774	17H0063	17G0865	17G0869	17G0865	17G0865	17H0063	17G0776	17G0776
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]				PARENT	DUPLICATE					
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.12	<0.14	<0.50	<0.11	<0.10	<0.11	<0.14	<0.50	<0.11	<0.11
PCB-1242	10	--	<0.12	<0.14	<0.50	<0.11	<0.10	<0.11	<0.14	<0.50	<0.11	<0.11
PCB-1248	10	--	<0.12	<0.14	<0.50	<0.11	<0.10	<0.11	<0.14	<0.50	<0.11	<0.11
PCB-1260	10	--	<0.12	<0.14	<0.50	<0.11	<0.10	<0.11	<0.14	<0.50	<0.11	<0.11
PCB 1268	10	--	<0.12	<0.14	<0.50	<0.11	<0.10	<0.11	<0.14	<0.50	<0.11	<0.11
Total PCBs	10	--	<0.12	<0.14	<0.50	<0.11	<0.10	<0.11	<0.14	<0.50	<0.11	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**80.6**	**69.8**	NA	**92.5**	**95.7**	**90.5**	**71.6**	NA	**94.6**	**90.3**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-66-3	WS-AOC-12W-AS-67	WS-AOC-12W-AS-DUP-3	WS-AOC12W-SO-67-1	WS-AOC12W-SO-67-2	WS-AOC12W-SO-67-3	WS-AOC-12W-AS-68	WS-AOC12W-SO-68-1A	WS-AOC12W-SO-68-1B	WS-AOC12W-SO-68-2
SAMPLE DEPTH (ft bgs)			(7.0'-7.5')	(0-0.5")	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')
DATE SAMPLED			7/19/17	8/1/17	8/1/17	7/19/17	7/19/17	7/19/17	8/1/17	7/20/17	7/20/17	7/20/17
WORK ORDER NO.			17G0776	17H0063	17H0063	17G0774	17G0774	17G0774	17H0063	17G0865	17G0865	17G0865
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.13	<0.50	<0.50	<0.11	<0.11	<0.13	<0.50	<0.11	NA	<0.11
PCB-1242	10	--	<0.13	<0.50	<0.50	<0.11	<0.11	<0.13	<0.50	<0.11	NA	<0.11
PCB-1248	10	--	<0.13	<0.50	<0.50	<0.11	<0.11	<0.13	<0.50	<0.11	NA	<0.11
PCB-1260	10	--	<0.13	<0.50	<0.50	<0.11	<0.11	<0.13	<0.50	<0.11	NA	<0.11
PCB 1268	10	--	<0.13	<0.50	<0.50	<0.11	<0.11	<0.13	<0.50	<0.11	NA	<0.11
Total PCBs	10	--	<0.13	<0.50	<0.50	<0.11	<0.11	<0.13	<0.50	<0.11	NA	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.25**	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	**0.21**	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	**0.33**	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	**0.54**	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**74.6**	NA	NA	**93.8**	**91.9**	**78.2**	NA	**93.1**	**91.1**	**92.0**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit shown.

BOLD = Compound detected at the concentration shown

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-68-3	WS-AOC-12W-AS-69	WS-AOC12W-SO-69-1	WS-AOC12W-SO-69-2	WS-AOC12W-SO-69-3	WS-AOC12W-SO-70-1	WS-AOC12W-SO-70-2A	WS-AOC12W-SO-70-2B	WS-AOC12W-SO-70-3	WS-AOC12W-SO-70-4
SAMPLE DEPTH (ft bgs)			(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(1.0'-2.0')	(3.0'-3.5')	(7.0'-7.5')
DATE SAMPLED			7/20/17	8/1/17	7/19/17	7/19/17	7/19/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17
WORK ORDER NO.			17G0865	17H0063	17G0776	17G0777	17G0777	17G0865	17G0865	17G0865	17G0865	17G0865
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.18	<0.50	<0.10	<0.10	<0.12	<0.11	<0.12	NA	<0.12	<0.14
PCB-1242	10	--	<0.18	<0.50	<0.10	<0.10	<0.12	<0.11	<0.12	NA	<0.12	<0.14
PCB-1248	10	--	<0.18	**0.56**	<0.10	<0.10	<0.12	<0.11	<0.12	NA	<0.12	<0.14
PCB-1260	10	--	<0.18	<0.50	<0.10	<0.10	<0.12	<0.11	<0.12	NA	<0.12	<0.14
PCB 1268	10	--	<0.18	<0.50	<0.10	<0.10	<0.12	<0.11	<0.12	NA	<0.12	<0.14
Total PCBs	10	--	<0.18	**0.56**	<0.10	<0.10	<0.12	<0.11	<0.12	NA	<0.12	<0.14
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	**380**	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	**15**	NA	NA
Total Solids (%)	--	--	**55.0**	NA	**97.1**	**95.4**	**82.2**	**91.6**	**83.9**	**90.8**	**84.1**	**70.0**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-AS-71	WS-AOC12W-SO-71-1	WS-AOC12W-SO-71-2	WS-AOC12W-SO-71-3	WS-AOC-12W-AS-72	WS-AOC12W-SO-72-1	WS-AOC12W-SO-DUP-12	WS-AOC12W-SO-72-2	WS-AOC12W-SO-72-3	WS-AOC-12W-AS-73
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")	(0.5'-1.0')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5")
DATE SAMPLED			8/1/17	7/19/17	7/19/17	7/19/17	8/1/17	7/19/17	7/19/17	7/19/17	7/19/17	8/1/17
WORK ORDER NO.			17H0063	17G0775	17G0775	17G0775	17H0063	17G0778	17G0779	17G0778	17G0778	17H0063
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]						PARENT	DUPLICATE			
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.50	<0.11	<0.13	<0.13	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50
PCB-1242	10	--	<0.50	<0.11	<0.13	<0.13	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50
PCB-1248	10	--	<0.50	<0.11	<0.13	<0.13	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50
PCB-1260	10	--	<0.50	<0.11	<0.13	<0.13	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50
PCB 1268	10	--	<0.50	<0.11	<0.13	<0.13	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50
Total PCBs	10	--	<0.50	<0.11	<0.13	<0.13	<0.50	<0.11	<0.10	<0.11	<0.13	<0.50
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**94.2**	**78.4**	**74.7**	NA	**92.2**	**92.3**	**90.9**	**76.3**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
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NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-73-1A	WS-AOC12W-SO-73-1B	WS-AOC12W-SO-73-2	WS-AOC12W-SO-73-3	WS-AOC12W-SO-74-1	WS-AOC12W-SO-74-2	WS-AOC12W-SO-74-3	WS-AOC12W-SO-74-4	WS-AOC12W-SO-75-1	WS-AOC12W-SO-75-2A
SAMPLE DEPTH (ft bgs)			(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')
DATE SAMPLED			7/19/17	7/19/17	7/19/17	7/19/17	7/20/17	7/20/17	7/20/17	7/20/17	7/19/17	7/19/17
WORK ORDER NO.			17G0777	17G0777	17G0777	17G0777	17G0865	17G0865	17G0865	17G0865	17G0775	17G0775
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										PARENT
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.10	NA	<0.12	<0.14	<0.11	<0.11	<0.12	<0.14	<0.10	<0.11
PCB-1242	10	--	<0.10	NA	<0.12	<0.14	<0.11	<0.11	<0.12	<0.14	<0.10	<0.11
PCB-1248	10	--	<0.10	NA	<0.12	<0.14	<0.11	<0.11	<0.12	<0.14	<0.10	<0.11
PCB-1260	10	--	<0.10	NA	<0.12	<0.14	<0.11	<0.11	<0.12	<0.14	<0.10	<0.11
PCB 1268	10	--	<0.10	NA	<0.12	<0.14	<0.11	<0.11	<0.12	<0.14	<0.10	<0.11
Total PCBs	10	--	<0.10	NA	<0.12	<0.14	<0.11	<0.11	<0.12	<0.14	<0.10	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	**0.30**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	**0.43**	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	**0.31**	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	**0.98**	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	**0.39**	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	**1.2**	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	**0.30**	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	**260**	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	**4.7**	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**95.5**	**90.5**	**84.4**	**69.9**	**91.5**	**92.8**	**84.7**	**73.1**	**96.1**	**92.0**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-DUP-9A	WS-AOC12W-SO-75-2B	WS-AOC12W-SO-DUP-9B	WS-AOC12W-SO-75-3	WS-AOC12W-SO-75-4	WS-AOC12W-SO-76-1	WS-AOC12W-SO-76-2	WS-AOC12W-SO-76-3	WS-AOC12W-SO-76-4	WS-AOC12W-SO-77-1
SAMPLE DEPTH (ft bgs)			(0.5'-1.0')	(1.0'-1.5')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')
DATE SAMPLED			7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17
WORK ORDER NO.			17G0779	17G0775	17G0779	17G0775	17G0775	17G0778	17G0778	17G0778	17G0778	17G0777
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	DUPLICATE	PARENT	DUPLICATE							
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	NA	NA	<0.12	<0.13	<0.098	<0.10	<0.11	<0.13	<0.11
PCB-1242	10	--	<0.11	NA	NA	<0.12	<0.13	<0.098	<0.10	<0.11	<0.13	<0.11
PCB-1248	10	--	<0.11	NA	NA	<0.12	<0.13	<0.098	<0.10	<0.11	<0.13	<0.11
PCB-1260	10	--	<0.11	NA	NA	<0.12	<0.13	<0.098	<0.10	<0.11	<0.13	<0.11
PCB 1268	10	--	<0.11	NA	NA	<0.12	<0.13	<0.098	<0.10	<0.11	<0.13	<0.11
Total PCBs	10	--	<0.11	NA	NA	<0.12	<0.13	<0.098	<0.10	<0.11	<0.13	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	**0.46**	**0.37**	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	**0.22**	<0.21	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	**0.41**	**0.33**	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	<0.20	<0.21	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	**180**	**1000**	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	**27**	**42**	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**91.4**	**86.4**	**82.3**	**81.8**	**78.8**	**94.9**	**92.3**	**93.1**	**74.9**	**93.8**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit shown.

BOLD = Compound detected at the concentration shown

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-77-2	WS-AOC12W-SO-DUP-11	WS-AOC12W-SO-77-3	WS-AOC12W-SO-77-4	WS-AOC12W-SO-78-1	WS-AOC12W-SO-78-2	WS-AOC12W-SO-78-3	WS-AOC12W-SO-78-4	WS-AOC12W-SO-79-1	WS-AOC12W-SO-79-2A
SAMPLE DEPTH (ft bgs)			(0.5'-1.0')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')
DATE SAMPLED			7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17
WORK ORDER NO.			17G0777	17G0779	17G0777	17G0777	17G0776	17G0776	17G0776	17G0776	17G0777	17G0778
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	PARENT	DUPLICATE								
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	<0.11	<0.11	<0.14	<0.10	<0.11	<0.12	<0.14	<0.10	<0.11
PCB-1242	10	--	<0.11	<0.11	<0.11	<0.14	<0.10	<0.11	<0.12	<0.14	<0.10	<0.11
PCB-1248	10	--	<0.11	<0.11	<0.11	<0.14	<0.10	<0.11	<0.12	<0.14	<0.10	<0.11
PCB-1260	10	--	<0.11	<0.11	<0.11	<0.14	<0.10	<0.11	<0.12	<0.14	<0.10	<0.11
PCB 1268	10	--	<0.11	<0.11	<0.11	<0.14	<0.10	<0.11	<0.12	<0.14	<0.10	<0.11
Total PCBs	10	--	<0.11	<0.11	<0.11	<0.14	<0.10	<0.11	<0.12	<0.14	<0.10	<0.11
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**91.8**	**93.6**	**89.7**	**73.1**	**98.7**	**95.1**	**84.2**	**72.2**	**98.8**	**93.6**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
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3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-79-2B	WS-AOC12W-SO-79-3	WS-AOC12W-SO-79-4	WS-AOC12W-SO-80-1	WS-AOC12W-SO-80-2	WS-AOC12W-SO-80-3	WS-AOC12W-SO-80-4	WS-AOC12W-SO-81-1	WS-AOC12W-SO-81-2	WS-AOC12W-SO-DUP-10
SAMPLE DEPTH (ft bgs)			(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(0.5'-1.0')
DATE SAMPLED			7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17
WORK ORDER NO.			17G0778	17G0778	17G0778	17G0778	17G0778	17G0778	17G0778	17G0776	17G0776	17G0779
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]									PARENT	DUPLICATE
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	NA	<0.12	<0.14	<0.10	<0.10	<0.11	<0.17	<0.10	<0.11	<0.10
PCB-1242	10	--	NA	<0.12	<0.14	<0.10	<0.10	<0.11	<0.17	<0.10	<0.11	<0.10
PCB-1248	10	--	NA	<0.12	<0.14	<0.10	<0.10	<0.11	<0.17	<0.10	<0.11	<0.10
PCB-1260	10	--	NA	<0.12	<0.14	<0.10	<0.10	<0.11	<0.17	<0.10	<0.11	<0.10
PCB 1268	10	--	NA	<0.12	<0.14	<0.10	<0.10	<0.11	<0.17	<0.10	<0.11	<0.10
Total PCBs	10	--	NA	<0.12	<0.14	<0.10	<0.10	<0.11	<0.17	<0.10	<0.11	<0.10
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	**0.37**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	**0.21**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	**2.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	**0.97**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	**1.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	**0.26**	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	**340**	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	**5.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**91.9**	**83.0**	**70.2**	**96.8**	**95.6**	**92.3**	**58.1**	**98.2**	**93.3**	**93.6**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit shown.

BOLD = Compound detected at the concentration shown

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-81-3	WS-AOC12W-SO-81-4	WS-AOC12W-SO-82-1	WS-AOC12W-SO-82-2	WS-AOC12W-SO-82-3	WS-AOC12W-SO-82-4	WS-AOC12W-SO-83-1	WS-AOC12W-SO-83-2A	WS-AOC12W-SO-83-2B	WS-AOC12W-SO-83-3
SAMPLE DEPTH (ft bgs)			(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')
DATE SAMPLED			7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17
WORK ORDER NO.			17G0776	17G0776	17G0777	17G0777	17G0777	17G0777	17G0778	17G0778	17G0778	17G0778
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.12	<0.13	<0.10	<0.11	<0.13	<0.13	<0.10	<0.12	NA	<0.13
PCB-1242	10	--	<0.12	<0.13	<0.10	<0.11	<0.13	<0.13	<0.10	<0.12	NA	<0.13
PCB-1248	10	--	<0.12	<0.13	<0.10	<0.11	<0.13	<0.13	<0.10	<0.12	NA	<0.13
PCB-1260	10	--	<0.12	<0.13	<0.10	<0.11	<0.13	<0.13	<0.10	<0.12	NA	<0.13
PCB 1268	10	--	<0.12	<0.13	<0.10	<0.11	<0.13	<0.13	<0.10	<0.12	NA	<0.13
Total PCBs	10	--	<0.12	<0.13	<0.10	<0.11	<0.13	<0.13	<0.10	<0.12	NA	<0.13
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	<0.25	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	**0.49**	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	**0.47**	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	**1.2**	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	**1.3**	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	**1.9**	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	**1.6**	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.66**	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	**1.9**	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.40**	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	**2.0**	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	<0.25	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	**1.4**	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	**1.6**	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	**2.7**	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	**2.1**	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	**2.1**	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	**670**	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	**55**	NA
Total Solids (%)	--	--	**80.9**	**78.0**	**96.9**	**94.7**	**77.8**	**76.2**	**95.2**	**84.5**	**68.3**	**77.0**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-83-4	WS-AOC12W-SO-84-1	WS-AOC12W-SO-84-2A	WS-AOC12W-SO-84-2B	WS-AOC12W-SO-84-3	WS-AOC12W-SO-84-4	WS-AOC12W-SO-85-1	WS-AOC12W-SO-85-2A	WS-AOC12W-SO-85-2B	WS-AOC12W-SO-85-2R
SAMPLE DEPTH (ft bgs)			(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(1.0'-1.5')	(1.0'-1.5')
DATE SAMPLED			7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	9/14/17
WORK ORDER NO.			17G0778	17G0776	17G0776	17G0776	17G0776	17G0776	17G0777	17G0777	17G0777	17I0642
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.13	<0.10	<0.11	NA	<0.12	<0.15	<0.10	<0.13	NA	NA
PCB-1242	10	--	<0.13	<0.10	<0.11	NA	<0.12	<0.15	<0.10	<0.13	NA	NA
PCB-1248	10	--	<0.13	<0.10	<0.11	NA	<0.12	<0.15	<0.10	<0.13	NA	NA
PCB-1260	10	--	<0.13	<0.10	<0.11	NA	<0.12	<0.15	<0.10	<0.13	NA	NA
PCB 1268	10	--	<0.13	<0.10	<0.11	NA	<0.12	<0.15	<0.10	<0.13	NA	NA
Total PCBs	10	--	<0.13	<0.10	<0.11	NA	<0.12	<0.15	<0.10	<0.13	NA	NA
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	**0.50**	<0.19
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	**1.6**	<0.19
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	**2.5**	<0.19
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	**5.4**	**0.25**
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	**6.2**	**0.22**
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	**7.8**	**0.36**
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	**4.6**	<0.19
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	**2.9**	<0.19
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	**6.2**	**0.48**
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.58**	<0.19
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	**10**	**0.44**
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	**0.94**	<0.19
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	**4.6**	<0.19
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	**3.0**	**0.48**
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	**5.8**	**0.30**
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	**6.9**	**0.68**
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	**12**	**0.51**
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.30
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.30
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.050
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.057**
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.0**
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	**540**	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	**19**	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**75.9**	**97.7**	**94.7**	**89.7**	**81.8**	**65.4**	**97.6**	**78.4**	**47.6**	**90.9**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

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mg/kg = milligrams per kilogram
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< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-85-3	WS-AOC12W-SO-85-4	WS-AOC12W-SO-86-1	WS-AOC12W-SO-86-2	WS-AOC12W-SO-86-3	WS-AOC12W-SO-86-4	WS-AOC12W-SO-87-1	WS-AOC12W-SO-87-2A	WS-AOC12W-SO-87-2B	WS-AOC12W-SO-87-3
SAMPLE DEPTH (ft bgs)			(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')
DATE SAMPLED			7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17	7/19/17
WORK ORDER NO.			17G0777	17G0777	17G0779	17G0779	17G0779	17G0779	17G0779	17G0779	17G0779	17G0779
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.17	<0.17	<0.10	<0.096	<0.10	<0.13	<0.11	<0.099	NA	<0.12
PCB-1242	10	--	<0.17	<0.17	<0.10	<0.096	<0.10	<0.13	<0.11	<0.099	NA	<0.12
PCB-1248	10	--	<0.17	<0.17	<0.10	<0.096	<0.10	<0.13	<0.11	<0.099	NA	<0.12
PCB-1260	10	--	<0.17	<0.17	<0.10	<0.096	<0.10	<0.13	<0.11	<0.099	NA	<0.12
PCB 1268	10	--	<0.17	<0.17	<0.10	<0.096	<0.10	<0.13	<0.11	<0.099	NA	<0.12
Total PCBs	10	--	<0.17	<0.17	<0.10	<0.096	<0.10	<0.13	<0.11	<0.099	NA	<0.12
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.63**	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.71**	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.86**	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.72**	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.27**	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.86**	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	**0.97**	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.62**	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	**0.22**	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	**0.55**	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	**1.3**	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	**450**	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	**39**	NA
Total Solids (%)	--	--	**60.2**	**58.3**	**97.4**	**96.4**	**90.8**	**71.8**	**93.7**	**95.8**	**88.0**	**83.4**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-87-4	WS-AOC12W-SO-88-1	WS-AOC12W-SO-88-2A	WS-AOC12W-SO-88-2B	WS-AOC12W-SO-88-3	WS-AOC12W-SO-88-4	WS-AOC12W-SO-89-1	WS-AOC12W-SO-89-2	WS-AOC12W-SO-89-3	WS-AOC12W-SO-89-4A
SAMPLE DEPTH (ft bgs)			(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(6.0'-6.5')	(0-0.5')	(0.5'-1.0')	(3.0-3.5')	(7.0'-7.5')
DATE SAMPLED			7/19/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17
WORK ORDER NO.			17G0779	17G0867	17G0867	17G0867	17G0867	17G0867	17G0867	17G0867	17G0867	17G0868
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.16	<0.10	<0.10	NA	<0.12	<0.11	<0.10	<0.11	<0.12	<1.3
PCB-1242	10	--	<0.16	<0.10	<0.10	NA	<0.12	<0.11	<0.10	<0.11	<0.12	<1.3
PCB-1248	10	--	<0.16	<0.10	<0.10	NA	<0.12	<0.11	<0.10	<0.11	<0.12	<1.3
PCB-1260	10	--	<0.16	**0.22**	**0.78**	NA	**0.95**	**0.22**	**0.40**	**0.70**	<0.12	**7.1**
PCB 1268	10	--	<0.16	<0.10	<0.10	NA	<0.12	<0.11	<0.10	<0.11	<0.12	<1.3
Total PCBs	10	--	<0.16	**0.22**	**0.78**	NA	**0.95**	**0.22**	**0.40**	**0.70**	<0.12	**7.1**
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	**50**	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**61.7**	**98.4**	**96.7**	**98.2**	**86.2**	**89.5**	**97.7**	**90.7**	**84.1**	**78.5**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-89-4R	WS-AOC12W-SO-89-4B	WS-AOC12W-SO-90-1	WS-AOC12W-SO-90-2	WS-AOC12W-SO-90-3	WS-AOC12W-SO-90-4A	WS-AOC12W-SO-90-4B	WS-AOC12W-SO-91-1	WS-AOC12W-SO-DUP-15	WS-AOC12W-SO-91-2
SAMPLE DEPTH (ft bgs)			(7.0'-7.5')	(7.5'-8.0')	(0.-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(7.5'-8.0')	(0-0.5')	(0-0.5')	(0.5'-1.0')
DATE SAMPLED			9/14/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17
WORK ORDER NO.			17I0642	17G0868	17G0868	17G0868	17G0868	17G0868	17G0868	17G0868	17G0869	17G0868
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]								PARENT	DUPLICATE	
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.52	NA	<0.10	**0.11**	<0.10	<0.11	NA	<0.10	<0.10	<0.10
PCB-1242	10	--	<0.52	NA	<0.10	<0.11	<0.10	<0.11	NA	<0.10	<0.10	<0.10
PCB-1248	10	--	<0.52	NA	<0.10	<0.11	<0.10	<0.11	NA	<0.10	<0.10	<0.10
PCB-1260	10	--	**2.9**	NA	**0.37**	**0.34**	<0.10	<0.11	NA	**0.77**	**0.36**	<0.10
PCB 1268	10	--	<0.52	NA	<0.10	<0.11	<0.10	<0.11	NA	**0.28**	<0.10	<0.10
Total PCBs	10	--	**2.9**	NA	**0.37**	**0.45**	<0.10	<0.11	NA	**1.05**	**0.36**	<0.10
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	**27,000**	NA	NA	NA	NA	**6,600**	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**76.8**	**73.0**	**97.1**	**93.0**	**97.8**	**90.5**	**82.7**	**97.4**	**97.7**	**98.1**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-91-3	WS-AOC12W-SO-91-4	WS-AOC12W-SO-92-1	WS-AOC12W-SO-92-2	WS-AOC12W-SO-92-3	WS-AOC12W-SO-92-4	WS-AOC12W-SO-92-4R	WS-AOC12W-SO-93-1	WS-AOC12W-SO-93-2	WS-AOC12W-SO-93-2R
SAMPLE DEPTH (ft bgs)			(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(7.0'-7.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(0.5'-1.0')
DATE SAMPLED			7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	9/14/17	7/20/17	7/20/17	9/14/17
WORK ORDER NO.			17G0868	17G0868	17G0868	17G0868	17G0868	17G0868	17I0642	17G0868	17G0868	17I0642
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										PARENT
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	**0.12**	<0.10	<0.12	<0.12	<0.12	<0.099	<0.10	<0.11	<0.089
PCB-1242	10	--	<0.11	<0.11	<0.10	<0.12	<0.12	<0.12	<0.099	<0.10	<0.11	<0.089
PCB-1248	10	--	<0.11	<0.11	<0.10	<0.12	<0.12	<0.12	<0.099	<0.10	<0.11	<0.089
PCB-1260	10	--	**0.58**	**0.45**	**0.86**	<0.12	<0.12	**1.5**	**1.1**	**0.60**	**1.3**	<0.089
PCB 1268	10	--	<0.11	<0.11	<0.10	<0.12	<0.12	<0.12	<0.099	<0.10	<0.11	<0.089
Total PCBs	10	--	**0.58**	**0.57**	**0.86**	<0.12	<0.12	**1.5**	**1.1**	**0.6**	**1.3**	<0.089
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	<0.20
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**94.4**	**90.6**	**97.1**	**86.4**	**83.1**	**84.4**	**78.3**	**98.7**	**92.9**	**87.2**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-DUP-64	WS-AOC12W-SO-93-3	WS-AOC12W-SO-93-4	WS-AOC12W-SO-94-1	WS-AOC12W-SO-94-2A	WS-AOC12W-SO-94-2R	WS-AOC12W-DUP-65	WS-AOC12W-SO-94-2B	WS-AOC12W-SO-94-3	WS-AOC12W-SO-95-1
SAMPLE DEPTH (ft bgs)			(0.5'-1.0')	(3.0'-3.5')	(6.5'-7.0')	(0-0.5')	(0.5'-1.0')	(0.5'-1.0')	(0.5'-1.0')	(1.0'-1.5')	(3.0'-3.5')	(0-0.5')
DATE SAMPLED			9/14/17	7/20/17	7/20/17	7/20/17	7/20/17	9/14/17	9/14/17	7/20/17	7/20/17	7/20/17
WORK ORDER NO.			17I0642	17G0869	17G0869	17G0869	17G0869	17I0642	17I0642	17G0869	17G0869	17G0869
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	DUPLICATE					PARENT	DUPLICATE			
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.086	<0.12	<0.16	<0.10	<0.42	<0.084	<0.083	NA	<0.11	<0.10
PCB-1242	10	--	<0.086	<0.12	<0.16	<0.10	<0.42	<0.084	<0.083	NA	<0.11	<0.10
PCB-1248	10	--	<0.086	<0.12	<0.16	<0.10	<0.42	<0.084	<0.083	NA	<0.11	<0.10
PCB-1260	10	--	<0.086	**0.13**	<0.16	**0.31**	**2.1**	**0.27**	**0.34**	NA	**0.11**	<0.10
PCB 1268	10	--	<0.086	<0.12	<0.16	<0.10	<0.42	<0.084	<0.083	NA	<0.11	<0.10
Total PCBs	10	--	<0.086	**0.13**	<0.16	**0.31**	**2.1**	**0.27**	**0.34**	NA	**0.11**	<0.10
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	<0.20	NA	NA	NA	NA	<0.20	<0.20	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	**0.50**	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	**0.53**	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	**0.89**	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	**0.41**	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	**0.30**	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	**0.71**	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	**0.93**	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	**0.40**	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	**0.79**	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	**0.41**	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	**1.3**	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	**0.86**	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**90.0**	**84.6**	**63.7**	**99.6**	**94.6**	**94.0**	**95.7**	**93.6**	**90.6**	**99.0**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-95-2	WS-AOC12W-SO-95-3	WS-AOC12W-SO-95-4	WS-AOC12W-SO-96-1	WS-AOC12W-SO-96-2	WS-AOC12W-SO-96-3	WS-AOC12W-SO-96-4	WS-AOC12W-SO-97-1	WS-AOC12W-SO-97-2A	WS-AOC12W-SO-97-2B
SAMPLE DEPTH (ft bgs)			(0.5'-1.0')	(3.0'-3.5')	(6.5'-7.0')	(0-0.5')	(0.5'-1.0')	(3.0'-3.5')	(6.0'-7.0')	(0-0.5')	(0.5'-1.0')	(1.0'-1.5')
DATE SAMPLED			7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/26/17	7/20/17	7/20/17	7/20/17
WORK ORDER NO.			17G0869	17G0869	17G0869	17G0868	17G0868	17G0868	17G1169	17G0867	17G0867	17G0867
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.11	<0.11	<0.13	<0.10	<0.10	<0.11	<0.11	<0.10	<0.10	NA
PCB-1242	10	--	<0.11	<0.11	<0.13	<0.10	<0.10	<0.11	<0.11	<0.10	<0.10	NA
PCB-1248	10	--	<0.11	<0.11	<0.13	<0.10	<0.10	<0.11	<0.11	<0.10	<0.10	NA
PCB-1260	10	--	**0.19**	**0.14**	<0.13	<0.10	<0.10	<0.11	**0.17**	<0.10	**0.12**	NA
PCB 1268	10	--	<0.11	<0.11	<0.13	<0.10	**0.16**	<0.11	<0.11	<0.10	<0.10	NA
Total PCBs	10	--	**0.19**	**0.14**	<0.13	<0.10	**0.16**	<0.11	**0.17**	<0.10	**0.12**	NA
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.3**
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.5**
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.1**
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.87**
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.76**
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.2**
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3.0**
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.89**
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.49**
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.3**
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**88.6**	**88.3**	**74.9**	**99.6**	**95.5**	**90.9**	**87**	**99.5**	**95.6**	**89.8**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
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3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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BOLD = Compound detected at the concentration shown
NA = Not Analyzed
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-97-2R	WS-AOC12W-SO-97-3	WS-AOC12W-SO-97-4	WS-AOC12W-SO-98-1	WS-AOC12W-SO-98-2A	WS-AOC12W-SO-98-2B	WS-AOC12W-SO-98-3	WS-AOC12W-SO-98-4	WS-AOC12W-SO-98-4R	WS-AOC12W-SO-DUP-66
SAMPLE DEPTH (ft bgs)			(1.0'-1.5')	(3.0'-3.5')	(7.0'-7.5')	(0-0.5')	(0.5'-1.0')	(1.0'-2.0')	(3.0'-3.5')	(7.0'-7.5')	(7.0'-7.5')	(7.0'-7.5')
DATE SAMPLED			9/14/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	7/20/17	9/14/17	9/14/17
WORK ORDER NO.			17I0642	17G0867	17G0867	17G0867	17G0867	17G0867	17G0867	17G0867	17I0642	17I0642
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]									PARENT	DUPLICATE
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	NA	<0.11	<0.12	<0.10	<0.11	NA	<0.12	<1.2	<0.091	<0.47
PCB-1242	10	--	NA	<0.11	<0.12	<0.10	<0.11	NA	<0.12	<1.2	<0.091	<0.47
PCB-1248	10	--	NA	<0.11	<0.12	<0.10	<0.11	NA	<0.12	<1.2	<0.091	<0.47
PCB-1260	10	--	NA	<0.11	<0.12	**0.70**	**0.73**	NA	<0.12	**5.7**	**0.66**	**2.0**
PCB 1268	10	--	NA	<0.11	<0.12	<0.10	<0.11	NA	<0.12	<1.2	<0.091	<0.47
Total PCBs	10	--	NA	<0.11	<0.12	**0.70**	**0.73**	NA	<0.12	**5.7**	**0.66**	**2.0**
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	<0.20
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	<0.18	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
Acenaphthylene	2,500	84	<0.18	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
Anthracene*	2,500	400	<0.18	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	<0.18	NA	NA	NA	NA	**0.24**	NA	NA	NA	NA
Benzo(a)pyrene	1	1	<0.18	NA	NA	NA	NA	**0.26**	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	<0.18	NA	NA	NA	NA	**0.42**	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	<0.18	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	<0.18	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
Chrysene*	780	1	<0.18	NA	NA	NA	NA	**0.37**	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	<0.18	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
Fluoranthene	2,500	56	<0.18	NA	NA	NA	NA	**0.44**	NA	NA	NA	NA
Fluorene	2,500	56	<0.18	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	<0.18	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	<0.18	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
Naphthalene	2,500	56	<0.18	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
Phenanthrene	2,500	40	<0.18	NA	NA	NA	NA	**0.37**	NA	NA	NA	NA
Pyrene	2,500	40	<0.18	NA	NA	NA	NA	**0.38**	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	<0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	<0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	<0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	<0.094	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	<0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	<0.47	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	<0.47	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	<0.94	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	<0.94	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	<0.94	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	**0.072**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	<0.94	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**96.6**	**89.6**	**83.5**	**98.3**	**94.0**	**90.1**	**82.4**	**82.6**	**85.4**	**83.9**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-99-1	WS-AOC12W-SO-99-2	WS-AOC12W-SO-99-3	WS-AOC12W-SO-100-1	WS-AOC12W-SO-100-2	WS-AOC12W-SO-100-3	WS-AOC12W-SO-101-1	WS-AOC12W-SO-101-2	WS-AOC12W-SO-101-3	WS-AOC12W-SO-102-1
SAMPLE DEPTH (ft bgs)			(0-0.25')	(0.5'-1.5')	(3.0'-4.0')	(0-0.25')	(0.5'-1.5')	(3.0'-4.0')	(0-0.25')	(0.5'-1.5')	(3.0'-4.0')	(0-0.25')
DATE SAMPLED			9/11/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17
WORK ORDER NO.			17I0379	17I0379	17I0379	17I0379	17I0379	17I0379	17I0379	17I0379	17I0379	17I0379
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.083	<0.084	<0.085	<0.083	<0.087	<0.092	<0.083	<0.083	<0.083	<0.086
PCB-1242	10	--	<0.083	<0.084	<0.085	<0.083	<0.087	<0.092	<0.083	<0.083	<0.083	<0.086
PCB-1248	10	--	<0.083	<0.084	<0.085	<0.083	<0.087	<0.092	<0.083	<0.083	<0.083	<0.086
PCB-1260	10	--	<0.083	<0.084	**0.16**	<0.083	<0.087	**0.37**	<0.083	<0.083	<0.083	<0.086
PCB 1268	10	--	<0.083	<0.084	<0.085	<0.083	<0.087	<0.092	<0.083	<0.083	<0.083	<0.086
Total PCBs	10	--	<0.083	<0.084	**0.16**	<0.083	<0.087	**0.37**	<0.083	<0.083	<0.083	<0.086
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	**17**	NA	NA	**28**	NA	NA	**15**	NA	NA	**44**
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**96.1**	**94.3**	**94.0**	**95.8**	**91.6**	**86.6**	**95.9**	**95.4**	**94.8**	**93.0**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-102-2	WS-AOC12W-SO-102-3	WS-AOC12W-SO-103-1	WS-AOC12W-SO-103-2	WS-AOC12W-SO-103-3	WS-AOC12W-SO-104-1	WS-AOC12W-SO-104-2	WS-AOC12W-SO-104-3	WS-AOC12W-SO-105-1	WS-AOC12W-SO-105-2
SAMPLE DEPTH (ft bgs)			(0.5'-1.5')	(3.0'-4.0')	(0-0.25')	(0.5'-1.5')	(3.0'-4.0')	(0-0.25')	(0.5'-1.5')	(3.0'-4.0')	(0-0.25')	(0.5'-1.5')
DATE SAMPLED			9/11/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17
WORK ORDER NO.			17I0379	17I0379	17I0378	17I0379	17I0379	17I0379	17I0379	17I0379	17I0378	17I0378
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.087	<0.092	<0.085	<0.086	<0.097	<0.083	<0.082	<0.092	<0.091	<0.086
PCB-1242	10	--	<0.087	<0.092	<0.085	<0.086	<0.097	<0.083	<0.082	<0.092	<0.091	<0.086
PCB-1248	10	--	<0.087	<0.092	<0.085	<0.086	<0.097	<0.083	<0.082	<0.092	<0.091	<0.086
PCB-1260	10	--	<0.087	<0.092	<0.085	<0.086	<0.097	<0.083	<0.082	<0.092	<0.091	<0.086
PCB 1268	10	--	<0.087	<0.092	<0.085	<0.086	<0.097	<0.083	<0.082	<0.092	<0.091	<0.086
Total PCBs	10	--	<0.087	<0.092	<0.085	<0.086	<0.097	<0.083	<0.082	<0.092	<0.091	<0.086
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	**23**	NA	NA	**20**	NA	NA	**250**	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	**90**	NA	NA	NA	NA	NA	**3.6**	NA	NA	NA
Total Solids (%)	--	--	**91.1**	**86.1**	**93.7**	**92.7**	**82.5**	**95.9**	**96.4**	**85.7**	**87.1**	**93.5**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-105-3	WS-AOC12W-SO-106-1	WS-AOC12W-SO-106-2	WS-AOC12W-SO-106-3	WS-AOC12W-SO-107-1	WS-AOC12W-SO-DUP-60	WS-AOC12W-SO-107-2	WS-AOC12W-SO-107-3	WS-AOC12W-SO-108-1	WS-AOC12W-SO-108-2
SAMPLE DEPTH (ft bgs)			(3.0'-4.0')	(5.0'-7.0')	(10.0'-12.0')	(12.0'-14.0')	(5.0'-7.0')	(5.0'-7.0')	(10.0'-12.0')	(12.0'-14.0')	(5.0'-7.0')	(10.0'-12.0')
DATE SAMPLED			9/11/17	9/8/17	9/8/17	9/8/17	9/11/17	9/11/17	9/11/17	9/11/17	9/8/17	9/8/17
WORK ORDER NO.			17I0378	17I0321	17I0321	17I0321	17I0379	17I0380	17I0379	17I0379	17I0321	17I0321
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]					PARENT	DUPLICATE				
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.088	<0.13	<0.12	<0.14	<0.12	<0.11	<0.14	<0.11	<0.11	<0.13
PCB-1242	10	--	<0.088	<0.13	<0.12	<0.14	<0.12	<0.11	<0.14	<0.11	<0.11	<0.13
PCB-1248	10	--	<0.088	<0.13	<0.12	<0.14	<0.12	<0.11	<0.14	<0.11	<0.11	<0.13
PCB-1260	10	--	<0.088	<0.13	<0.12	<0.14	<0.12	<0.11	<0.14	<0.11	<0.11	<0.13
PCB 1268	10	--	<0.088	<0.13	<0.12	<0.14	<0.12	<0.11	<0.14	<0.11	<0.11	<0.13
Total PCBs	10	--	<0.088	<0.13	<0.12	<0.14	<0.12	<0.11	<0.14	<0.11	<0.11	<0.13
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	<0.29	NA	NA	NA	NA	<0.29	NA	<0.24	NA
Acenaphthylene	2,500	84	NA	<0.29	NA	NA	NA	NA	<0.29	NA	<0.24	NA
Anthracene*	2,500	400	NA	<0.29	NA	NA	NA	NA	<0.29	NA	**0.37**	NA
Benzo(a)anthracene	7.8	1	NA	**0.95**	NA	NA	NA	NA	**0.86**	NA	**1.3**	NA
Benzo(a)pyrene	1	1	NA	**0.98**	NA	NA	NA	NA	**0.92**	NA	**1.2**	NA
Benzo(b)fluoranthene	7.8	1	NA	**1.2**	NA	NA	NA	NA	**1.0**	NA	**1.4**	NA
Benzo(g,h,i)perylene*	78	1	NA	**0.57**	NA	NA	NA	NA	**0.51**	NA	**0.63**	NA
Benzo(k)fluoranthene	78	1	NA	**0.44**	NA	NA	NA	NA	**0.36**	NA	**0.47**	NA
Chrysene*	780	1	NA	**0.92**	NA	NA	NA	NA	**0.80**	NA	**1.2**	NA
Dibenz(a,h)anthracene*	1	1	NA	<0.29	NA	NA	NA	NA	<0.29	NA	<0.24	NA
Fluoranthene	2,500	56	NA	**2.2**	NA	NA	NA	NA	**1.8**	NA	**3.2**	NA
Fluorene	2,500	56	NA	<0.29	NA	NA	NA	NA	<0.29	NA	<0.24	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	**0.63**	NA	NA	NA	NA	**0.54**	NA	**0.71**	NA
2-Methylnaphthalene*	1,000	5.6	NA	<0.29	NA	NA	NA	NA	<0.29	NA	<0.24	NA
Naphthalene	2,500	56	NA	**0.32**	NA	NA	NA	NA	<0.29	NA	<0.24	NA
Phenanthrene	2,500	40	NA	**0.52**	NA	NA	NA	NA	**0.75**	NA	**1.7**	NA
Pyrene	2,500	40	NA	**2.0**	NA	NA	NA	NA	**1.7**	NA	**2.5**	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	<0.30	NA	NA	NA	NA	<0.30	NA	<0.30	NA
Acenaphthylene	NE	4,200	NA	<0.30	NA	NA	NA	NA	<0.30	NA	<0.30	NA
Anthracene*	NE	20,000	NA	<0.20	NA	NA	NA	NA	<0.20	NA	<0.20	NA
Benzo(a)anthracene	NE	0.6	NA	<0.050	NA	NA	NA	NA	<0.050	NA	<0.050	NA
Benzo(a)pyrene	NE	2	NA	<0.10	NA	NA	NA	NA	<0.10	NA	<0.10	NA
Benzo(b)fluoranthene	NE	0.8	NA	<0.050	NA	NA	NA	NA	<0.050	NA	<0.050	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	<0.5	NA	NA	NA	NA	<0.5	NA	<0.50	NA
Benzo(k)fluoranthene	NE	5	NA	<0.2	NA	NA	NA	NA	<0.2	NA	<0.20	NA
Chrysene*	NE	48	NA	<0.2	NA	NA	NA	NA	<0.2	NA	<0.20	NA
Dibenz(a,h)anthracene*	NE	1	NA	<0.2	NA	NA	NA	NA	<0.2	NA	<0.20	NA
Fluoranthene	NE	2,800	NA	<0.50	NA	NA	NA	NA	<0.50	NA	<0.50	NA
Fluorene	NE	2,800	NA	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	<0.2	NA	NA	NA	NA	<0.2	NA	<0.20	NA
2-Methylnaphthalene*	NE	280	NA	<1	NA	NA	NA	NA	<1	NA	<1.0	NA
Naphthalene	NE	2,800	NA	<1	NA	NA	NA	NA	<1	NA	<1.0	NA
Phenanthrene	NE	2,000	NA	**0.48**	NA	NA	NA	NA	<0.05	NA	<0.050	NA
Pyrene	NE	2,000	NA	<1	NA	NA	NA	NA	<1	NA	<1.0	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	**410**	NA	NA	**2400**	**1200**	NA	NA	**1300**	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	<3.6	NA	NA
Total Solids (%)	--	--	**90.9**	**58.6**	**61.9**	**56.1**	**64.0**	**69.8**	**58.4**	**70.5**	**72.1**	**59.8**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit shown.

BOLD = Compound detected at the concentration shown

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-108-3	WS-AOC12W-SO-109-1	WS-AOC12W-SO-109-2	WS-AOC12W-SO-109-3	WS-AOC12W-SO-DUP-59	WS-AOC12W-SO-110-1	WS-AOC12W-SO-110-2	WS-AOC12W-SO-110-3	WS-AOC12W-SO-111-1	WS-AOC12W-SO-111-2
SAMPLE DEPTH (ft bgs)			(12.0'-14.0')	(5.0'-7.0')	(10.0'-12.0')	(12.0'-14.0')	(12.0'-14.0')	(0-0.25')	(0.5'-1.5')	(3.0'-4.0')	(0-0.25')	(0.5'-1.5')
DATE SAMPLED			9/8/17	9/8/17	9/8/17	9/8/17	9/8/17	9/11/17	9/11/17	9/11/17	9/11/17	9/11/17
WORK ORDER NO.			17I0321	17I0320	17I0320	17I0321	17I0321	17I0378	17I0378	17I0378	17I0378	17I0378
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]				PARENT	DUPLICATE					
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.14	<0.14	<0.14	<0.13	<0.13	<0.084	<0.081	<0.084	<0.084	<0.083
PCB-1242	10	--	<0.14	<0.14	<0.14	<0.13	<0.13	<0.084	<0.081	<0.084	<0.084	<0.083
PCB-1248	10	--	<0.14	<0.14	<0.14	<0.13	<0.13	<0.084	<0.081	<0.084	<0.084	<0.083
PCB-1260	10	--	<0.14	<0.14	<0.14	<0.13	<0.13	<0.084	<0.081	<0.084	<0.084	<0.083
PCB 1268	10	--	<0.14	<0.14	<0.14	<0.13	<0.13	<0.084	<0.081	<0.084	<0.084	<0.083
Total PCBs	10	--	<0.14	<0.14	<0.14	<0.13	<0.13	<0.084	<0.081	<0.084	<0.084	<0.083
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	**0.88**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	**0.84**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	**0.90**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	**0.47**	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	**0.36**	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	**0.77**	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	**1.7**	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	**0.54**	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	**0.47**	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	**1.6**	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	**240**	NA	NA	NA	NA	NA	**66**	NA	**91**
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**55.0**	**58.6**	**55.0**	**58.0**	**57.7**	**95.4**	**96.3**	**93.3**	**93.2**	**96.6**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval by the CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.
A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC12W-SO-111-3	WS-AOC12W-SO-112-1	WS-AOC12W-SO-112-2	WS-AOC12W-SO-112-3	WS-AOC-12W-CO-113	WS-AOC-12W-CO-114	WS-AOC-12W-CO-115	WS-AOC-12W-CO-116	WS-AOC-12W-CO-117	WS-AOC-12W-CO-118
SAMPLE DEPTH (ft bgs)			(3.0'-4.0')	(0-0.25')	(0.5'-1.5')	(3.0'-4.0')	(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")
DATE SAMPLED			9/11/17	9/11/17	9/11/17	9/11/17	8/1/17	8/1/17	8/1/17	8/1/17	8/1/17	8/1/17
WORK ORDER NO.			17I0378	17I0378	17I0378	17I0378	17H0063	17H0063	17H0063	17H0064	17H0064	17H0064
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.082	<0.083	<0.086	<0.091	<0.10	<0.10	<0.10	<0.095	<0.081	<0.098
PCB-1242	10	--	<0.082	<0.083	<0.086	<0.091	<0.10	<0.10	<0.10	<0.095	<0.081	<0.098
PCB-1248	10	--	<0.082	<0.083	<0.086	<0.091	<0.10	<0.10	<0.10	<0.095	<0.081	<0.098
PCB-1260	10	--	<0.082	<0.083	**0.12**	**0.16**	<0.10	<0.10	<0.10	<0.095	<0.081	<0.098
PCB 1268	10	--	<0.082	<0.083	<0.086	<0.091	<0.10	<0.10	<0.10	<0.095	<0.081	<0.098
Total PCBs	10	--	<0.082	<0.083	**0.12**	**0.16**	<0.10	<0.10	<0.10	<0.095	<0.081	<0.098
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	<2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**96.2**	**94.0**	**93.3**	**87.2**	NA	NA	NA	NA	NA	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-CO-119	WS-AOC-12W-CO-120	WS-AOC-12W-CO-121	WS-AOC-12W-CO-122	WS-AOC-12W-CO-123	WS-AOC-12W-CO-124	WS-AOC-12W-CO-125	WS-AOC-12W-CO-126	WS-AOC-12W-CO-127	WS-AOC-12W-CO-128
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")	(0-0.5")
DATE SAMPLED			8/1/17	8/1/17	8/2/17	8/2/17	8/2/17	8/2/17	8/2/17	8/2/17	8/2/17	8/2/17
WORK ORDER NO.			17H0064	17H0064	17H0114	17H0114	17H0114	17H0114	17H0114	17H0114	17H0114	17H0114
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB 1016	10	--	<0.084	<0.093	<0.089	<0.097	<0.092	<0.093	<0.099	<0.094	<0.095	<0.093
PCB-1242	10	--	<0.084	<0.093	<0.089	<0.097	<0.092	<0.093	<0.099	<0.094	<0.095	<0.093
PCB-1248	10	--	<0.084	<0.093	<0.089	<0.097	<0.092	<0.093	<0.099	<0.094	<0.095	<0.093
PCB-1260	10	--	<0.084	<0.093	<0.089	<0.097	<0.092	<0.093	<0.099	<0.094	<0.095	<0.093
PCB 1268	10	--	<0.084	<0.093	<0.089	<0.097	<0.092	<0.093	<0.099	<0.094	<0.095	<0.093
Total PCBs	10	--	<0.084	<0.093	<0.089	<0.097	<0.092	<0.093	<0.099	<0.094	<0.095	<0.093
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)												
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)												
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = Compound detected at the concentration shown
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 6
AOC-12W Summary of Soil and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-12W-CO-129	WS-AOC-12W-CO-130
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0-0.5")
DATE SAMPLED			9/14/17	9/14/17
WORK ORDER NO.			17I0637	17I0637
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]		
PARAMETER (Units)[2]				
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)				
PCB 1016	10	--	<0.086	<0.098
PCB-1242	10	--	<0.086	<0.098
PCB-1248	10	--	<0.086	<0.098
PCB-1260	10	--	<0.086	<0.098
PCB 1268	10	--	<0.086	<0.098
Total PCBs	10	--	<0.086	<0.098
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)				
Total PCBs	--	5	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)				
Acenaphthene*	2,500	84	NA	NA
Acenaphthylene	2,500	84	NA	NA
Anthracene*	2,500	400	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA
Benzo(a)pyrene	1	1	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA
Chrysene*	780	1	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA
Fluoranthene	2,500	56	NA	NA
Fluorene	2,500	56	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA
Naphthalene	2,500	56	NA	NA
Phenanthrene	2,500	40	NA	NA
Pyrene	2,500	40	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)				
Acenaphthene*	NE	4,200	NA	NA
Acenaphthylene	NE	4,200	NA	NA
Anthracene*	NE	20,000	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA
Benzo(a)pyrene	NE	2	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA
Chrysene*	NE	48	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA
Fluoranthene	NE	2,800	NA	NA
Fluorene	NE	2,800	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA
Naphthalene	NE	2,800	NA	NA
Phenanthrene	NE	2,000	NA	NA
Pyrene	NE	2,000	NA	NA
ETPH by CT method (mg/kg)	2,500	2500	NA	NA
SPLP ETPH by CT method (mg/L)	NE	2.5	NA	NA
Total Metals by EPA method 6010B (mg/kg)				
Arsenic	10	NE	NA	NA
Total Solids (%)	--	--	NA	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 7
AOC-14 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-14-SED-1	WS-AOC14-CO-1	WS-AOC14-SE-2	WS-AOC14-CO-2	WS-AOC14-SE-3	WS-AOC14-CO-3	WS-AOC14-SE-4	WS-AOC14-CO-4	WS-AOC14-SE-5	WS-AOC14-CO-5	WS-AOC14-SE-6	WS-AOC14-CO-6
SAMPLE DEPTH (ft bgs)				(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')
DATE SAMPLED			7/13/2017	9/6/17	8/8/17	8/9/17	8/8/17	8/8/17	8/8/17	8/9/17	8/9/17	8/9/17	8/9/17	8/9/17
WORK ORDER NO.			17G0507	17I0172	17H0394	17H0533	17H0394	17H0394	17H0394	17H0533	17H0533	17H0533	17H0533	17H0533
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]												
PARAMETER (Units)[2]														
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)														
PCB-1248	10	--	**0.6**	<0.094	**0.96**	<0.10	**1.9**	<0.096	**0.93**	<0.094	**0.51**	<0.093	**0.62**	<0.10
PCB-1254	10	--	**0.74**	<0.094	**0.97**	<0.10	**1.7**	<0.096	**1.0**	<0.094	**0.57**	<0.093	**0.83**	<0.10
PCB-1260	10	--	**0.39**	<0.094	**0.64**	<0.10	**0.80**	<0.096	**0.70**	<0.094	**0.24**	<0.093	**0.33**	<0.10
Total PCBs	10	--	**1.73**	<0.094	**2.57**	<0.10	**4.4**	<0.096	**2.63**	<0.094	**1.32**	<0.093	**1.78**	<0.10
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)														
Total PCBs	--	5	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)														
Acenaphthene*	2,500	84	<0.43	NA	<0.73	NA	<0.65	NA	<0.68	NA	<0.85	NA	<0.84	NA
Acenaphthylene	2,500	84	<0.43	NA	<0.73	NA	<0.65	NA	<0.68	NA	<0.85	NA	<0.84	NA
Anthracene*	2,500	400	**0.63**	NA	<0.73	NA	<0.65	NA	<0.68	NA	<0.85	NA	<0.84	NA
Benzo(a)anthracene	7.8	1	**2.4**	NA	**1.4**	NA	**2.1**	NA	**1.4**	NA	**1.6**	NA	<0.84	NA
Benzo(a)pyrene	1	1	**2.0**	NA	**2.0**	NA	**2.7**	NA	**1.8**	NA	**1.5**	NA	**0.85**	NA
Benzo(b)fluoranthene	7.8	1	**2.9**	NA	**2.6**	NA	**3.8**	NA	**2.4**	NA	**2.5**	NA	**1.2**	NA
Benzo(g,h,i)perylene*	78	1	**1.5**	NA	**1.2**	NA	**1.7**	NA	**1.2**	NA	**0.86**	NA	<0.84	NA
Benzo(k)fluoranthene	78	1	**1.2**	NA	**0.82**	NA	**1.3**	NA	**0.81**	NA	<0.85	NA	<0.84	NA
Chrysene*	780	1	**2.9**	NA	**1.4**	NA	**2.2**	NA	**1.3**	NA	**1.5**	NA	<0.84	NA
Dibenz(a,h)anthracene*	1	1	<0.43	NA	<0.73	NA	<0.65	NA	<0.68	NA	<0.85	NA	<0.84	NA
Fluoranthene	2,500	56	**5.2**	NA	**2.8**	NA	**3.6**	NA	**2.1**	NA	**3.8**	NA	**1.5**	NA
Fluorene	2,500	56	<0.43	NA	<0.73	NA	<0.65	NA	<0.68	NA	<0.85	NA	<0.84	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	**1.4**	NA	<0.73	NA	**1.7**	NA	**1.2**	NA	**0.94**	NA	<0.84	NA
2-Methylnaphthalene*	1,000	5.6	**0.77**	NA	<0.73	NA	<0.65	NA	<0.68	NA	<0.85	NA	<0.84	NA
Naphthalene	2,500	56	**0.82**	NA	<0.73	NA	<0.65	NA	<0.68	NA	<0.85	NA	<0.84	NA
Phenanthrene	2,500	40	**3.5**	NA	**1.4**	NA	**1.8**	NA	**1.0**	NA	**3.4**	NA	<0.84	NA
Pyrene	2,500	40	**5.0**	NA	**4.1**	NA	**5.0**	NA	**3.5**	NA	**3.3**	NA	**1.8**	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)														
Acenaphthene*	NE	4,200	<0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	<0.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	<0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	<0.093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	<0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	<0.47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	4.8	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	<0.47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	<0.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	<0.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	<0.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	**0.094**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	<0.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	**5700**	NA	**3000**	NA	**3200**	NA	**5700**	NA	**410**	NA	**1900**	NA
SPLP ETPH by CT method (mg/l)	NE	2.50	**0.17**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**39.1**	NA	**23.4**	NA	**26.0**	NA	**25.1**	NA	NA	NA	NA	NA

NOTES:

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2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit, shown.

BOLD = compound detected at that concentration.

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EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 7
AOC-14 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC14-SE-7	WS-AOC14-CO-7	WS-AOC14-SE-8	WS-AOC14-CO-8	WS-AOC14-SE-12	WS-AOC14-SE-13	WS-AOC14-CO-13	WS-AOC14-SE-14	WS-AOC14-SE-15	WS-AOC14-CO-15	WS-AOC14-SE-16	WS-AOC14-SE-17
SAMPLE DEPTH (ft bgs)				(0-0.5')		(0-0.5')			(0-0.5')			(0-0.5')		
DATE SAMPLED			8/9/17	8/9/17	8/9/17	8/9/17	8/10/17	8/10/17	8/10/17	8/10/17	8/10/17	8/10/17	8/10/17	8/10/17
WORK ORDER NO.			17H0533	17H0533	17H0533	17H0533	17H0617	17H0617	17H0617	17H0617	17H0617	17H0617	17H0617	17H0617
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]												
PARAMETER (Units)[2]														
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)														
PCB-1248	10	--	**0.30**	<0.094	**0.46**	<0.099	**0.94**	**0.86**	<0.10	**0.9**	**0.67**	<0.10	**0.68**	**0.34**
PCB-1254	10	--	**0.42**	<0.094	**0.55**	<0.099	**1.2**	**1.2**	<0.10	**1.2**	**0.78**	<0.10	**0.85**	<0.33
PCB-1260	10	--	**0.29**	<0.094	**0.33**	<0.099	**0.58**	**0.47**	<0.10	**0.38**	**0.39**	<0.10	**0.35**	<0.33
Total PCBs	10	--	**1.01**	<0.094	**1.34**	<0.099	**2.72**	**2.53**	<0.10	**2.48**	**1.84**	<0.10	**1.88**	**0.34**
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)														
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)														
Acenaphthene*	2,500	84	<0.85	NA	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	<0.85	NA	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	<0.85	NA	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	<0.85	NA	**0.97**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	**0.94**	NA	**1.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	**1.5**	NA	**1.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	<0.85	NA	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	<0.85	NA	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	<0.85	NA	**1.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	<0.85	NA	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	**1.4**	NA	**2.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	<0.85	NA	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	<0.85	NA	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	<0.85	NA	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	<0.85	NA	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	<0.85	NA	**1.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	**1.7**	NA	**2.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)														
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	**980**	NA	**500**	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/l)	NE	2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	NA	NA	NA	**42.0**	**48.2**	NA	**38.1**	**32.4**	NA	**30.2**	**30.5**

NOTES:

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EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 7
AOC-14 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC14-SE-18	WS-AOC14-CO-18	WS-AOC14-SE-19	WS-AOC14-SE-20	WS-AOC14-SE-21	WS-AOC14-SE-22	WS-AOC14-SE-DUP-1	WS-AOC14-SE-23	WS-AOC14-SE-24	WS-AOC14-SE-25	WS-AOC14-SE-26	WS-AOC14-CO-26
SAMPLE DEPTH (ft bgs)				(0-0.5')										(0-0.5')
DATE SAMPLED			8/10/17	8/10/17	8/11/17	8/11/17	8/11/17	8/11/17	8/11/17	8/11/17	8/11/17	8/11/17	8/11/17	8/11/17
WORK ORDER NO.			17H0617	17H0617	17H0711	17H0711	17H0711	17H0711	17H0711	17H0711	17H0711	17H0711	17H0711	17H0711
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]						PARENT	DUPLICATE					
PARAMETER (Units)[2]														
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)														
PCB-1248	10	--	**0.54**	<0.10	<0.20	<0.23	**0.29**	<0.25	<0.25	<0.26	<0.19	<0.22	**0.85**	<0.10
PCB-1254	10	--	**0.47**	<0.10	<0.20	<0.23	**0.33**	**0.37**	**0.61**	**0.38**	**0.23**	<0.22	**1.0**	<0.10
PCB-1260	10	--	<0.35	<0.10	<0.20	**0.31**	<0.24	<0.25	**0.32**	<0.26	**0.20**	**0.34**	**0.51**	<0.10
Total PCBs	10	--	**1.01**	<0.10	<0.20	**0.31**	**0.62**	**0.37**	**0.93**	**0.38**	**0.43**	**0.34**	**2.36**	<0.10
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)														
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)														
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)														
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/l)	NE	2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**28.3**	NA	**50.7**	**42.8**	**42.3**	**40.7**	**39.7**	**38.0**	**51.6**	**44.7**	**27.9**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC.

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R = location depth was resampled.

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit, shown.

BOLD = compound detected at that concentration.

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

-- = Not Applicable

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 7
AOC-14 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC14-SE-27	WS-AOC14-SE-28	WS-AOC14-SE-29	WS-AOC14-CO-29	WS-AOC14-SE-30	WS-AOC14-CO-30	WS-AOC14-SE-31	WS-AOC14-SE-32	WS-AOC14-CO-32	WS-AOC14-SE-33	WS-AOC14-CO-33	WS-AOC14-SE-34	WS-AOC14-CO-34
SAMPLE DEPTH (ft bgs)						(0-0.5')		(0-0.5')					(0-0.5')		(0-0.5')
DATE SAMPLED			8/11/17	8/11/17	8/14/17	8/21/17	8/14/17	8/21/17	8/14/17	8/14/17	8/21/17	8/14/17	8/21/17	8/21/17	8/21/17
WORK ORDER NO.			17H0711	17H0711	17H0854	17H1163	17H0854	17H1163	17H0854	17H0854	17H1163	17H0854	17H1163	17H1163	17H1163
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]													
PARAMETER (Units)[2]															
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)															
PCB-1248	10	--	**1.3**	**0.94**	**1.9**	<0.10	**0.50**	<0.10	**0.52**	<0.38	<0.10	<0.38	<0.10	**0.25**	<0.10
PCB-1254	10	--	**1.3**	**1.1**	**2.1**	<0.10	**0.65**	<0.10	**0.57**	<0.38	<0.10	<0.38	<0.10	**0.26**	<0.10
PCB-1260	10	--	**0.53**	**0.58**	**0.87**	<0.10	**0.47**	<0.10	**0.50**	**0.53**	<0.10	**0.58**	<0.10	**0.20**	<0.10
Total PCBs	10	--	**3.13**	**2.62**	**4.87**	<0.10	**1.62**	<0.10	**1.59**	**0.53**	<0.10	**0.58**	<0.10	**0.71**	<0.10
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)															
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)															
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)															
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/l)	NE	2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**34.8**	**31.4**	**30.0**	NA	**31.0**	NA	**29.4**	**26.2**	NA	**26.5**	NA	NA	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit, shown.

BOLD = compound detected at that concentration.

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

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-- = Not Applicable

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 7
AOC-14 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC14-SE-35	WS-AOC14-SE-36	WS-AOC14-CO-36	WS-AOC14-SE-37	WS-AOC14-CO-37	WS-AOC14-SE-38	WS-AOC14-CO-38	WS-AOC14-SE-39	WS-AOC14-CO-39	WS-AOC14-SE-40	WS-AOC14-CO-40
SAMPLE DEPTH (ft bgs)					(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')
DATE SAMPLED			8/21/17	8/21/17	8/21/17	8/21/17	8/21/17	8/22/17	8/22/17	8/22/17	8/22/17	8/22/17	8/22/17
WORK ORDER NO.			17H1163	17H1163	17H1163	17H1163	17H1163	17H1209	17H1209	17H1209	17H1209	17H1209	17H1209
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]											
PARAMETER (Units)[2]													
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)													
PCB-1248	10	--	**0.16**	**0.12**	<0.10	**0.18**	<0.10	**0.10**	<0.50	<0.50	<0.50	<0.50	<0.50
PCB-1254	10	--	**0.20**	**0.15**	<0.10	**0.21**	<0.10	**0.13**	<0.50	<0.50	<0.50	<0.50	<0.50
PCB-1260	10	--	**0.22**	**0.15**	<0.10	**0.28**	<0.10	**0.17**	<0.50	<0.50	<0.50	<0.50	<0.50
Total PCBs	10	--	**0.58**	**0.42**	<0.10	**0.67**	<0.10	**0.40**	<0.50	<0.50	<0.50	<0.50	<0.50
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)													
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)													
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)													
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/l)	NE	2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:

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-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 7
AOC-14 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC14-SE-41	WS-AOC14-CO-41	WS-AOC14-SE-42	WS-AOC-14-SE-43	WS-AOC14-CO-43	WS-AOC-14-SE-44	WS-AOC14-CO-44	WS-AOC-14-SE-45	WS-AOC14-CO-45	WS-AOC-14-SE-46	WS-AOC14-CO-46	WS-AOC-14-SE-47	WS-AOC14-CO-47
SAMPLE DEPTH (ft bgs)			(0-0.5')	(0-0.5')			(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')
DATE SAMPLED			8/22/17	8/22/17	8/22/17	8/24/17	8/30/17	8/24/17	8/30/17	8/24/17	8/30/17	8/24/17	8/30/17	8/24/17	8/30/17
WORK ORDER NO.			17H1209	17H1209	17H1209	17H1359	17H1621	17H1359	17H1621	17H1359	17H1621	17H1359	17H1621	17H1359	17H1621
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]													
PARAMETER (Units)[2]															
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)															
PCB-1248	10	--	<0.50	<0.10	**0.10**	**0.36**	**0.11**	**0.55**	**0.16**	**4.6**	**0.11**	**0.81**	<0.096	**0.97**	<0.098
PCB-1254	10	--	<0.50	<0.10	**0.17**	**0.37**	**0.14**	**0.72**	**0.18**	**4.0**	**0.12**	**0.90**	<0.096	**1.0**	<0.098
PCB-1260	10	--	<0.50	<0.10	**0.32**	**0.31**	**0.23**	**0.40**	**0.20**	**1.3**	<0.099	**0.45**	<0.096	**0.55**	<0.098
Total PCBs	10	--	<0.50	<0.10	**0.59**	**1.04**	**0.48**	**1.67**	**0.54**	**9.9**	**0.23**	**2.16**	<0.096	**2.52**	<0.098
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)															
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)															
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)															
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/l)	NE	2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	NA	NA	**27.7**	NA	**43.9**	NA	**31.5**	NA	**41.6**	NA	**38.7**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC.

* These criteria are available through the submission and approval by CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit, shown.

BOLD = compound detected at that concentration.

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

-- = Not Applicable

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 7
AOC-14 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC-14-SE-48	WS-AOC14-CO-48	WS-AOC14-WO-49	WS-AOC14-CO-50	WS-AOC14-SE-51	WS-AOC14-CO-51	WS-AOC14-SE-52	WS-AOC14-CO-52	WS-AOC14-SE-53	WS-AOC14-CO-53	WS-AOC14-CO-DUP-1
SAMPLE DEPTH (ft bgs)				(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')	(0-0.5')
DATE SAMPLED			8/24/17	8/30/17	8/30/17	8/30/17	8/30/17	8/30/17	8/30/17	8/30/17	8/30/17	8/30/17	8/30/17
WORK ORDER NO.			17H1359	17H1621	17H1621	17H1621	17H1621	17H1621	17H1621	17H1621	17H1621	17H1621	17H1621
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										PARENT	DUPLICATE
PARAMETER (Units)[2]													
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)													
PCB-1248	10	--	<0.21	<0.097	<0.093	**0.10**	**0.59**	<0.098	**0.31**	<0.99	**0.097**	<0.099	<0.096
PCB-1254	10	--	<0.21	<0.097	<0.093	**0.11**	**0.53**	<0.098	**0.34**	<0.99	**0.12**	<0.099	<0.096
PCB-1260	10	--	**0.30**	<0.097	<0.093	<0.096	**0.21**	<0.098	**0.12**	<0.99	<0.093	<0.099	<0.096
Total PCBs	10	--	**0.30**	<0.097	<0.093	**0.21**	**1.33**	<0.098	**0.77**	<0.99	**0.22**	<0.099	<0.096
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)													
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)													
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)													
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/l)	NE	2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**37.5**	NA	NA	NA	**43.3**	NA	**76.3**	NA	**84.0**	NA	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit, shown.
BOLD = compound detected at that concentration.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 7
AOC-14 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC14-SE-54	WS-AOC14-CO-54	WS-AOC14-SE-55	WS-AOC14-CO-55	WS-AOC14-SE-56	WS-AOC14-CO-56	WS-AOC14-SE-57	WS-AOC14-CO-57	WS-AOC14-SE-58	WS-AOC14-CO-58	WS-AOC14-SE-59	WS-AOC14-CO-59
SAMPLE DEPTH (ft bgs)				(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')
DATE SAMPLED			8/30/17	8/30/17	8/30/17	8/30/17	8/30/17	8/30/17	9/1/17	9/1/17	9/1/17	9/1/17	9/1/17	9/1/17
WORK ORDER NO.			17H1621	17H1621	17H1621	17H1621	17H1621	17H1621	17I0058	17I0058	17I0058	17I0058	17I0058	17I0058
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]												
PARAMETER (Units)[2]														
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)														
PCB-1248	10	--	**0.21**	<0.99	**2.1**	<0.96	**0.33**	<0.96	<0.12	<0.079	<0.086	<0.096	<0.14	<0.99
PCB-1254	10	--	**0.35**	<0.99	**1.7**	<0.96	**0.55**	<0.96	<0.12	<0.079	**0.13**	<0.096	**0.16**	<0.99
PCB-1260	10	--	<0.12	<0.99	**0.64**	<0.96	**0.30**	<0.96	<0.12	<0.079	<0.086	<0.096	<0.14	<0.99
Total PCBs	10	--	**0.56**	<0.99	**4.44**	<0.96	**1.18**	<0.96	<0.12	<0.079	**0.13**	<0.096	**0.16**	<0.99
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)														
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)														
Acenaphthene*	2,500	84	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	**1.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	**1.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)														
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	**1900**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/l)	NE	2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**62.5**	NA	**30.8**	NA	**47.8**	NA	**68.0**	NA	**92.5**	NA	**57.3**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC.

* These criteria are available through the submission and approval by CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit, shown.

BOLD = compound detected at that concentration.

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

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NE = Not Established by DEEP

-- = Not Applicable

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 7
AOC-14 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC14-SE-60	WS-AOC14-CO-60	WS-AOC14-SE-61	WS-AOC14-CO-61	WS-AOC14-SE-62	WS-AOC14-CO-62	WS-AOC14-SE-63	WS-AOC14-CO-63	WS-AOC14-SE-64	WS-AOC14-CO-64	WS-AOC14-SE-65	WS-AOC14-CO-65
SAMPLE DEPTH (ft bgs)				(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')
DATE SAMPLED			9/1/17	9/1/17	9/1/17	9/1/17	9/1/17	9/1/17	9/1/17	9/1/17	9/6/17	9/6/17	9/6/17	9/6/17
WORK ORDER NO.			1710058	1710058	1710058	1710058	1710058	1710058	1710058	1710058	1710172	1710172	1710172	1710172
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]												
PARAMETER (Units)[2]														
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)														
PCB-1248	10	--	<0.14	<0.096	**0.12**	<0.091	**0.20**	<0.099	**0.23**	<0.093	<0.092	<0.098	<0.093	<0.099
PCB-1254	10	--	**0.17**	<0.096	**0.15**	<0.091	**0.27**	<0.099	**0.28**	<0.093	<0.092	<0.098	**0.13**	<0.099
PCB-1260	10	--	<0.14	<0.096	**0.14**	<0.091	**0.27**	<0.099	**0.21**	<0.093	<0.092	<0.098	<0.093	<0.099
Total PCBs	10	--	**0.17**	<0.096	**0.41**	<0.091	**0.74**	<0.099	**0.72**	<0.093	<0.092	<0.098	**0.13**	<0.099
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)														
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)														
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	**0.42**	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	**0.29**	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	**1.8**	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	**5.1**	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	**4.6**	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	**6.7**	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	**3.2**	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	**2.3**	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	**5.6**	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	**0.86**	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	**14**	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	**0.80**	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	**3.5**	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	**1.0**	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	**1.8**	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	**8.0**	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	**12**	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)														
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	**1300**	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/l)	NE	2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**56.1**	NA	**90.8**	NA	**95.8**	NA	**62.9**	NA	**86.9**	NA	**85.6**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC.

* These criteria are available through the submission and approval by CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit, shown.

BOLD = compound detected at that concentration.

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

-- = Not Applicable

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 7
AOC-14 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC14-SE-66	WS-AOC14-CO-66	WS-AOC14-SE-67	WS-AOC14-CO-67	WS-AOC14-SE-68	WS-AOC14-CO-68	WS-AOC14-SE-69	WS-AOC14-CO-69	WS-AOC14-SE-70	WS-AOC14-CO-70	WS-AOC14-SE-71	WS-AOC14-CO-71
SAMPLE DEPTH (ft bgs)				(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')		(0-0.5')
DATE SAMPLED			9/6/17	9/6/17	9/6/17	9/6/17	9/6/17	9/6/17	9/6/17	9/6/17	9/6/17	9/6/17	9/6/17	9/6/17
WORK ORDER NO.			17I0172	17I0172	17I0172	17I0172	17I0172	17I0172	17I0172	17I0172	17I0172	17I0172	17I0172	17I0172
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]												
PARAMETER (Units)[2]														
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)														
PCB-1248	10	--	**0.44**	<0.096	**0.32**	<0.085	**0.19**	<0.087	**0.56**	<0.97	**0.32**	<0.091	**0.62**	<0.93
PCB-1254	10	--	**0.51**	<0.096	**0.39**	<0.085	**0.35**	<0.087	**0.69**	<0.97	**0.46**	<0.091	**0.62**	<0.93
PCB-1260	10	--	**0.25**	<0.096	**0.24**	<0.085	**0.26**	<0.087	**0.35**	<0.97	**0.25**	<0.091	**0.28**	<0.93
Total PCBs	10	--	**1.2**	<0.096	**0.95**	<0.085	**0.8**	<0.087	**1.6**	<0.97	**1.03**	<0.091	**1.52**	<0.93
SPLP Polychlorinated Biphenyls by EPA method 8082 (µg/l)														
Total PCBs	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)														
Acenaphthene*	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	2,500	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	2,500	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	1,000	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (µg/l)														
Acenaphthene*	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene*	NE	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	NE	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene*	NE	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NE	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH by CT method (mg/kg)	2,500	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP ETPH by CT method (mg/l)	NE	2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**55.0**	NA	**62.6**	NA	**83.5**	NA	**71.8**	NA	**57.4**	NA	**47.2**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.

mg/kg = milligrams per kilogram

µg/l = micrograms per liter

< = compound not detected above laboratory reporting limit, shown.

BOLD = compound detected at that concentration.

NA = Not Analyzed

GB PMC = GB Pollutant Mobility Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

NE = Not Established by DEEP

-- = Not Applicable

EXCEEDS I/C DEC

EXCEEDS GB PMC

EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-AS-1	WS-AOC15-SO-1-1	WS-AOC15-SO-1-2	WS-AOC15-SO-1-3	WS-AOC15-AS-2	WS-AOC15-AS-DUP-20	WS-AOC15-S0-2-1	WS-AOC15-SO-2-2	WS-AOC15-SO-2-3	WS-AOC15-AS-3
SAMPLE DEPTH (ft bgs)			(0-0.5")	(1.0'-1.5')	(1.5'-2.5')	(5.0'-6.0')	(0-0.5")	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")
DATE SAMPLED			9/12/17	9/5/17	9/5/17	9/5/17	9/12/17	9/12/17	9/6/17	9/6/17	9/6/17	9/12/17
WORK ORDER NO.			17I0464	17I0112	17I0112	17I0112	17I0464	17I0465	17I0177	17I0175	17I0175	17I0464
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]					PARENT	DUPLICATE				
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<1.0	<0.095	<0.099	<0.097	<1.0	<1.0	<0.086	<0.090	<0.089	<1.0
PCB-1260	10	--	<1.0	<0.095	<0.099	<0.097	<1.0	<1.0	<0.086	<0.090	<0.089	<1.0
PCB 1268	10	--	<1.0	<0.095	<0.099	<0.097	<1.0	<1.0	**0.15**	<0.090	<0.089	<1.0
Total PCBs	10	--	<1.0	<0.095	<0.099	<0.097	<1.0	<1.0	**0.15**	<0.090	<0.089	<1.0
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	**220**	NA	NA	NA	NA	NA	**68**	NA	NA
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**83.7**	**80.8**	**82.6**	NA	NA	**93.3**	**89.1**	**90.1**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval bt CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at this concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-3-1	WS-AOC15-SO-3-2	WS-AOC15-SO-3-3	WS-AOC15-AS-4	WS-AOC15-SO-4-1	WS-AOC15-SO-4-2	WS-AOC15-SO-4-3	WS-AOC15-AS-5	WS-AOC15-SO-5-1	WS-AOC15-SO-5-2
SAMPLE DEPTH (ft bgs)			(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.5')
DATE SAMPLED			9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17
WORK ORDER NO.			17I0243	17I0243	17I0243	17I0464	17I0243	17I0243	17I0243	17I0464	17I0243	17I0243
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<0.095	<0.099	<0.10	<1.0	<0.084	<0.088	<0.096	<1.0	<0.091	<0.093
PCB-1260	10	--	<0.095	<0.099	<0.10	<1.0	<0.084	<0.088	<0.096	<1.0	<0.091	<0.093
PCB 1268	10	--	<0.095	<0.099	<0.10	<1.0	<0.084	<0.088	<0.096	<1.0	<0.091	<0.093
Total PCBs	10	--	<0.095	<0.099	<0.10	<1.0	<0.084	<0.088	<0.096	<1.0	<0.091	<0.093
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	<1.5	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	**9400**	NA	NA	NA	NA	NA	**21**	NA	NA	**61**
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	**2.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**83.8**	**81.2**	**78.8**	NA	**94.6**	**90.9**	**83.6**	NA	**87.8**	**85.8**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval bt CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at this concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-5-3	WS-AOC15-AS-6	WS-AOC15-SO-6-1	WS-AOC15-SO-6-2	WS-AOC15-SO-6-3	WS-AOC15-AS-7	WS-AOC15-SO-7-1	WS-AOC15-SO-7-2	WS-AOC15-SO-7-3	WS-AOC15-AS-8
SAMPLE DEPTH (ft bgs)			(4.0'-5.0')	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")
DATE SAMPLED			9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/6/17	9/6/17	9/6/17	9/12/17
WORK ORDER NO.			17I0243	17I0464	17I0243	17I0243	17I0243	17I0464	17I0175	17I0175	17I0175	17I0464
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<0.12	<1.0	<0.084	<0.10	<0.10	<1.0	<0.084	<0.086	<0.092	<1.0
PCB-1260	10	--	<0.12	<1.0	<0.084	<0.10	<0.10	<1.0	<0.084	<0.086	<0.092	<1.0
PCB 1268	10	--	<0.12	<1.0	<0.084	<0.10	<0.10	<1.0	<0.084	<0.086	<0.092	**3.3**
Total PCBs	10	--	<0.12	<1.0	<0.084	<0.10	<0.10	<1.0	<0.084	<0.086	<0.092	**3.3**
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	**1.0**	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	**0.93**	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	**1.4**	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	**0.59**	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	**0.44**	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	**1.1**	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	**1.9**	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	**0.66**	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	<0.21	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	**0.85**	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	**1.3**	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	**0.090**	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	**4900**	NA	NA	NA	**160**	NA	NA	NA
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	**1.8**	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**68.5**	NA	**94.9**	**80.2**	**77.5**	NA	**95.7**	**92.8**	**87.2**	NA

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at this concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-8-1	WS-AOC15-SO-8-2	WS-AOC15-SO-8-3	WS-AOC15-AS-9	WS-AOC15-SO-9-1	WS-AOC15-SO-9-2	WS-AOC15-SO-9-3	WS-AOC15-SO-DUP-49	WS-AOC15-AS-10	WS-AOC15-SO-10-1
SAMPLE DEPTH (ft bgs)			(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(4.0'-5.0')	(0-0.5")	(0.5'-1.5')
DATE SAMPLED			9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17
WORK ORDER NO.			17I0242	17I0242	17I0242	17I0464	17I0243	17I0243	17I0243	17I0241	17I0464	17I0243
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]							PARENT	DUPLICATE		
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<0.094	<0.092	<0.11	<1.0	<0.087	<0.10	<0.10	<0.096	<1.0	<0.092
PCB-1260	10	--	<0.094	<0.092	<0.11	<1.0	<0.087	<0.10	<0.10	<0.096	<1.0	<0.092
PCB 1268	10	--	<0.094	<0.092	<0.11	<1.0	<0.087	<0.10	<0.10	<0.096	<1.0	<0.092
Total PCBs	10	--	<0.094	<0.092	<0.11	<1.0	<0.087	<0.10	<0.10	<0.096	<1.0	<0.092
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	**650**	NA	NA	NA	**2000**	NA	NA	NA	NA	**1800**
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**85.1**	**85.3**	**71.2**	NA	**91.3**	**79.7**	**80.3**	**83.2**	NA	**87.1**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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A/B labels indicate smaller subintervals for normal samples.

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mg/kg = milligrams per kilogram
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GB PMC = GB Pollutant Mobility Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-10-2	WS-AOC15-SO-10-3	WS-AOC15-AS-11	WS-AOC15-SO-11-1	WS-AOC15-SO-11-2	WS-AOC15-SO-11-3	WS-AOC15-AS-12	WS-AOC15-SO-12-1	WS-AOC15-SO-12-2	WS-AOC15-SO-12-3
SAMPLE DEPTH (ft bgs)			(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(0.5-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')
DATE SAMPLED			9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17
WORK ORDER NO.			17I0243	17I0243	17I0464	17I0244	17I0244	17I0244	17I0464	17I0244	17I0244	17I0244
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<0.096	<0.12	<1.0	<0.091	<0.094	<0.11	<1.0	<0.087	<0.086	<0.11
PCB-1260	10	--	<0.096	<0.12	<1.0	<0.091	<0.094	<0.11	<1.0	<0.087	<0.086	<0.11
PCB 1268	10	--	<0.096	<0.12	<1.0	<0.091	<0.094	<0.11	<1.0	<0.087	<0.086	<0.11
Total PCBs	10	--	<0.096	<0.12	<1.0	<0.091	<0.094	<0.11	<1.0	<0.087	<0.086	<0.11
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	NA	**480**	NA	NA	NA	**1000**	NA	NA
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**83.4**	**68.0**	NA	**87.6**	**85.1**	**72.0**	NA	**92.4**	**92.6**	**75.7**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
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I/C DEC = Industrial/Commercial Direct Exposure Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-AS-13	WS-AOC15-SO-13-1	WS-AOC15-SO-13-2	WS-AOC15-SO-13-3	WS-AOC15-AS-14	WS-AOC15-SO-14-1	WS-AOC15-SO-14-2	WS-AOC15-SO-14-3	WS-AOC15-AS-15	WS-AOC15-SO-15-1
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(0.5'-1.5')
DATE SAMPLED			9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17
WORK ORDER NO.			17I0464	17I0244	17I0244	17I0244	17I0464	17I0243	17I0243	17I0244	17I0464	17I0241
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<1.0	<0.084	<0.084	<0.096	<1.0	<0.094	<0.084	<0.089	<1.0	<0.093
PCB-1260	10	--	<1.0	<0.084	<0.084	<0.096	<1.0	<0.094	<0.084	<0.089	<1.0	<0.093
PCB 1268	10	--	<1.0	<0.084	<0.084	<0.096	<1.0	<0.094	<0.084	<0.089	<1.0	<0.093
Total PCBs	10	--	<1.0	<0.084	<0.084	<0.096	<1.0	<0.094	<0.084	<0.089	<1.0	<0.093
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	**620**	NA	NA	NA	**320**	NA	NA	NA	**30**
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**95.8**	**94.9**	**83.5**	NA	**85.1**	**95.0**	**89.4**	NA	**86.3**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at this concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-15-2	WS-AOC15-SO-15-3	WS-AOC15-AS-16	WS-AOC15-SO-16-1	WS-AOC15-SO-16-2	WS-AOC15-SO-16-3	WS-AOC15-SO-DUP-50	WS-AOC15-AS-17	WS-AOC15-SO-17-1	WS-AOC15-SO-17-2
SAMPLE DEPTH (ft bgs)			(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(4.0'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.5')
DATE SAMPLED			9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17
WORK ORDER NO.			17I0241	17I0241	17I0464	17I0244	17I0244	17I0244	17I0241	17I0464	17I0244	17I0242
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]						PARENT	DUPLICATE			
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<0.089	<0.10	<1.0	<0.086	<0.092	<0.10	<0.093	<1.0	<0.088	<0.095
PCB-1260	10	--	<0.089	<0.10	<1.0	<0.086	<0.092	<0.10	<0.093	<1.0	<0.088	<0.095
PCB 1268	10	--	<0.089	<0.10	<1.0	<0.086	<0.092	<0.10	<0.093	<1.0	<0.088	<0.095
Total PCBs	10	--	<0.089	<0.10	<1.0	<0.086	<0.092	<0.10	<0.093	<1.0	<0.088	<0.095
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	NA	**630**	NA	NA	NA	NA	**78**	NA
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**90.2**	**78.1**	NA	**93.1**	**86.5**	**78.9**	**85.7**	NA	**90.5**	**84.6**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
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A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-17-3	WS-AOC15-AS-18	WS-AOC15-SO-18-1	WS-AOC15-SO-18-2	WS-AOC15-SO-18-3	WS-AOC15-AS-19	WS-AOC15-SO-19-1	WS-AOC15-SO-19-2	WS-AOC15-SO-19-3	WS-AOC15-SO-DUP-51
SAMPLE DEPTH (ft bgs)			(4.0'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(4.0'-5.0')
DATE SAMPLED			9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/7/17
WORK ORDER NO.			17I0242	17I0464	17I0242	17I0242	17I0242	17I0464	17I0242	17I0242	17I0242	17I0241
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]									PARENT	DUPLICATE
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<0.098	<1.0	<0.090	<0.093	<0.10	<1.0	<0.085	<0.096	<0.093	<0.091
PCB-1260	10	--	<0.098	<1.0	<0.090	<0.093	<0.10	<1.0	<0.085	<0.096	<0.093	<0.091
PCB 1268	10	--	<0.098	<1.0	<0.090	<0.093	<0.10	<1.0	<0.085	<0.096	<0.093	<0.091
Total PCBs	10	--	<0.098	<1.0	<0.090	<0.093	<0.10	<1.0	<0.085	<0.096	<0.093	<0.091
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Chrysene*	780	1	NA	NA	NA	<0.20	NA	NA	NA	**0.21**	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	<0.20	NA	NA	NA	**0.25**	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Naphthalene	2,500	56	NA	NA	NA	<0.20	NA	NA	NA	<0.20	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	<0.20	NA	NA	NA	**0.22**	NA	NA
Pyrene	2,500	40	NA	NA	NA	<0.20	NA	NA	NA	**0.25**	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	**220**	NA	NA	NA	**2500**	NA	NA	NA
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**81.0**	NA	**89.2**	**85.2**	**79.0**	NA	**94.1**	**83.4**	**86.3**	**87.5**

NOTES:

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-AS-20	WS-AOC15-SO-20-1	WS-AOC15-SO-20-2	WS-AOC15-SO-20-3	WS-AOC15-AS-21	WS-AOC15-SO-21-1	WS-AOC15-SO-21-2	WS-AOC15-SO-21-3	WS-AOC15-AS-22	WS-AOC15-SO-22-1
SAMPLE DEPTH (ft bgs)			(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(1.0'-1.5')
DATE SAMPLED			9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17
WORK ORDER NO.			17I0464	17I0242	17I0242	17I0242	17I0465	17I0241	17I0241	17I0241	17I0465	17I0244
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<1.0	<0.092	<0.092	<0.11	<1.0	<0.21	<0.21	<0.089	<0.98	<0.089
PCB-1260	10	--	<1.0	<0.092	<0.092	<0.11	<1.0	<0.21	<0.21	<0.089	<0.98	<0.089
PCB 1268	10	--	<1.0	<0.092	<0.092	<0.11	<1.0	<0.21	<0.21	<0.089	<0.98	<0.089
Total PCBs	10	--	<1.0	<0.092	<0.092	<0.11	<1.0	<0.21	<0.21	<0.089	<0.98	<0.089
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	**580**	NA	NA	NA	**1400**	NA	NA	NA	**540**
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**86.1**	**85.8**	**75.1**	NA	**95.2**	**95.3**	**89.8**	NA	**90.0**

NOTES:

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-22-2	WS-AOC15-SO-22-3	WS-AOC15-AS-23	WS-AOC15-SO-23-1	WS-AOC15-SO-23-2	WS-AOC15-SO-23-3	WS-AOC15-AS-24	WS-AOC15-SO-24-1	WS-AOC15-SO-24-2	WS-AOC15-SO-24-3
SAMPLE DEPTH (ft bgs)			(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.5')	(4.0'-5.0')
DATE SAMPLED			9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17
WORK ORDER NO.			17I0244	17I0244	17I0465	17I0244	17I0244	17I0244	17I0465	17I0242	17I0242	17I0242
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<0.091	<0.098	<1.0	<0.088	<0.098	<0.098	<1.0	<0.11	<0.085	<0.097
PCB-1260	10	--	<0.091	<0.098	<1.0	<0.088	<0.098	<0.098	<1.0	<0.11	<0.085	<0.097
PCB 1268	10	--	<0.091	<0.098	<1.0	<0.088	<0.098	<0.098	<1.0	<0.11	<0.085	<0.097
Total PCBs	10	--	<0.091	<0.098	<1.0	<0.088	<0.098	<0.098	<1.0	<0.11	<0.085	<0.097
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	**0.41**	NA	NA	NA	**0.40**	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	**0.35**	NA	NA	NA	**0.35**	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	**0.47**	NA	NA	NA	**0.51**	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	**0.20**	NA	NA	NA	**0.25**	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	<0.19	NA	NA	NA	<0.21	NA	NA	NA	NA	NA
Chrysene*	780	1	**0.48**	NA	NA	NA	**0.55**	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	**0.76**	NA	NA	NA	**0.82**	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	**0.22**	NA	NA	NA	**0.24**	NA	NA	NA	NA	NA
Naphthalene	2,500	56	<0.19	NA	NA	NA	**0.21**	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	**0.59**	NA	NA	NA	**0.79**	NA	NA	NA	NA	NA
Pyrene	2,500	40	**0.66**	NA	NA	NA	**0.64**	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	NA	**1500**	NA	NA	NA	**680**	NA	NA
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**87.9**	**81.4**	NA	**91.0**	**82.0**	**82.0**	NA	**75.4**	**94.1**	**82.1**

NOTES:

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2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
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mg/kg = milligrams per kilogram
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< = compound not detected above laboratory reporting limit shown.
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NA = Not Analyzed
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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-AS-25	WS-AOC15-SO-25-1	WS-AOC15-SO-25-2	WS-AOC15-SO-25-3	WS-AOC15-AS-26	WS-AOC15-SO-26-1	WS-AOC15-SO-26-2	WS-AOC15-SO-26-3	WS-AOC15-AS-27	WS-AOC15-SO-27-1
SAMPLE DEPTH (ft bgs)			(0-0.5")	(1.0'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(1.0'-1.5')	(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(0.5'-1.5')
DATE SAMPLED			9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/11/17
WORK ORDER NO.			17I0465	17I0242	17I0242	17I0242	17I0465	17I0241	17I0241	17I0241	17I0465	17I0378
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<1.0	<0.088	<0.095	<0.10	<1.0	<0.21	<0.093	<0.10	<1.0	<0.090
PCB-1260	10	--	<1.0	<0.088	<0.095	<0.10	<1.0	<0.21	<0.093	<0.10	<1.0	<0.090
PCB 1268	10	--	<1.0	<0.088	<0.095	<0.10	<1.0	<0.21	<0.093	<0.10	<1.0	<0.090
Total PCBs	10	--	<1.0	<0.088	<0.095	<0.10	<1.0	<0.21	<0.093	<0.10	<1.0	<0.090
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	**56**	NA	NA	NA	**1600**	NA	NA	NA	**2200**
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	NA	**91.0**	**84.4**	**78.3**	NA	**95.1**	**85.1**	**77.0**	NA	**87.7**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-27-2	WS-AOC15-SO-27-3	WS-AOC15-AS-28	WS-AOC15-SO-28-1	WS-AOC15-SO-28-2	WS-AOC15-SO-28-3	WS-AOC15-SE-29	WS-AOC15-AS-30	WS-AOC15-SO-30-1	WS-AOC15-SO-30-2
SAMPLE DEPTH (ft bgs)			(1.5'-2.5')	(4.0'-5.0')	(0-0.5")	(0.5'-1.5')	(1.5'-2.5')	(4.0'-5.0')		(0-0.5")	(4.0'-5.0')	(6.0'-7.0')
DATE SAMPLED			9/11/17	9/11/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/12/17	9/7/17	9/7/17
WORK ORDER NO.			17I0378	17I0378	17I0465	17I0241	17I0241	17I0241	17I0465	17I0465	17I0241	17I0241
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]										
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<0.096	<0.11	<1.0	<0.095	<0.095	<0.10	**0.18**	<1.0	<0.10	<0.11
PCB-1260	10	--	<0.096	<0.11	<1.0	<0.095	<0.095	<0.10	**0.49**	<1.0	<0.10	<0.11
PCB 1268	10	--	<0.096	<0.11	<1.0	<0.095	<0.095	<0.10	<0.10	<1.0	<0.10	<0.11
Total PCBs	10	--	<0.096	<0.11	<1.0	<0.095	<0.095	<0.10	**0.67**	<1.0	<0.10	<0.11
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	<2.2	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	NA	**270**	NA	NA	NA	NA	**240**	NA
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	**27**	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	**11**	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	**280**	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	**2.8**	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	**43**	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	**540**	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	**1900**	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	**0.28**	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	**49**	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	**110**	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	**920**	NA	NA	NA
Total Solids (%)	--	--	**81.6**	**72.1**	NA	**84.0**	**82.8**	**76.4**	**76.6**	NA	**80.1**	**74.7**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-30-3	WS-AOC15-AS-31	WS-AOC15-SO-31-1	WS-AOC15-SO-31-2	WS-AOC15-SO-31-3	WS-AOC15-AS-32	WS-AOC15-SO-32-1	WS-AOC15-SO-DUP-52	WS-AOC15-SO-32-2	WS-AOC15-SO-32-3
SAMPLE DEPTH (ft bgs)			(8.0'-9.0')	(0-0.5")	(4.0'-5.0')	(6.0'-7.0')	(8.0'-9.0')	(0-0.5")	(4.0'-5.0')	(4.0'-5.0')	(6.0'-7.0')	(8.0'-9.0')
DATE SAMPLED			9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/8/17	9/8/17	9/8/17	9/8/17
WORK ORDER NO.			17I0241	17I0465	17I0240	17I0240	17I0240	17I0465	17I0317	17I0321	17I0317	17I0317
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]							PARENT	DUPLICATE		PARENT
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<0.095	<1.0	<0.11	<0.096	<0.090	<1.0	<0.10	<0.12	<0.10	<0.11
PCB-1260	10	--	<0.095	<1.0	<0.11	<0.096	<0.090	<1.0	<0.10	<0.12	<0.10	<0.11
PCB 1268	10	--	<0.095	<1.0	<0.11	<0.096	<0.090	<1.0	<0.10	<0.12	<0.10	<0.11
Total PCBs	10	--	<0.095	<1.0	<0.11	<0.096	<0.090	<1.0	<0.10	<0.12	<0.10	<0.11
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	**20**	NA	NA	NA	**83**	**200**	NA	NA
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**83.8**	NA	**73.2**	**78.3**	**83.1**	NA	**72.3**	**62.1**	**76.4**	**68.1**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

Table 8
AOC-15 Summary of Sediment and Porous Media Results
English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-DUP-53	WS-AOC15-AS-33	WS-AOC15-SO-33-1	WS-AOC15-SO-33-2	WS-AOC15-SO-33-3	WS-AOC15-AS-34	WS-AOC15-SO-34-1	WS-AOC15-SO-34-2	WS-AOC15-SO-34-3	WS-AOC15-AS-35
SAMPLE DEPTH (ft bgs)			(8.0'-9.0')	(0-0.5")	(4.0'-5.0')	(6.0'-7.0')	(8.0'-9.0')	(0-0.5")	(4.0'-5.0')	(6.0'-7.0')	(8.0'-9.0')	(0-0.5")
DATE SAMPLED			9/8/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17	9/7/17	9/12/17
WORK ORDER NO.			17I0321	17I0465	17I0240	17I0240	17I0240	17I0465	17I0241	17I0241	17I0240	17I0465
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]	DUPLICATE									
PARAMETER (Units)[2]												
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)												
PCB-1254	10	--	<0.13	<1.0	<0.098	<0.099	<0.11	<1.0	<0.088	<0.12	<0.12	<1.0
PCB-1260	10	--	<0.13	<1.0	<0.098	<0.099	<0.11	<1.0	<0.088	<0.12	<0.12	<1.0
PCB 1268	10	--	<0.13	<1.0	<0.098	<0.099	<0.11	<1.0	<0.088	<0.12	<0.12	<1.0
Total PCBs	10	--	<0.13	<1.0	<0.098	<0.099	<0.11	<1.0	<0.088	<0.12	<0.12	<1.0
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)												
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)												
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	NA	NA	**43**	NA	NA	NA	**23**	NA	NA	NA
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)												
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**60.9**	NA	**76.0**	**75.0**	**65.8**	NA	**91.1**	**65.5**	**62.3**	NA

NOTES:

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EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

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English Station Soil and Groundwater Investigation
510 Grand Avenue, New Haven, Connecticut

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS[1]		WS-AOC15-SO-35-1	WS-AOC15-SO-35-2	WS-AOC15-SO-35-3	WS-AOC15-AS-36	WS-AOC15-SO-36-1	WS-AOC15-SO-36-2	WS-AOC15-AS-37	WS-AOC15-SO-37-1	WS-AOC15-SO-37-2
SAMPLE DEPTH (ft bgs)			(4.0'-5.0')	(6.0'-7.0')	(8.0'-9.0')	(0-0.5")	(4.0'-5.0')	(6.0'-7.0')	(0-0.5")	(4.0'-5.0')	(6.0'-7.0')
DATE SAMPLED			9/8/17	9/8/17	9/8/17	9/12/17	9/7/17	9/7/17	9/12/17	9/7/17	9/7/17
WORK ORDER NO.			17I0317	17I0317	17I0317	17I0465	17I0240	17I0240	17I0465	17I0240	17I0240
QA/QC IDENTIFIER	I/C DEC	GB PMC[3]									
PARAMETER (Units)[2]											
Polychlorinated Biphenyls by EPA method 8082 (mg/kg)											
PCB-1254	10	--	<0.086	<0.12	<0.099	<1.0	<0.084	<0.11	<1.0	<0.083	<0.091
PCB-1260	10	--	<0.086	<0.12	<0.099	<1.0	<0.084	<0.11	<1.0	<0.083	<0.091
PCB 1268	10	--	<0.086	<0.12	<0.099	<1.0	<0.084	<0.11	<1.0	**0.12**	<0.091
Total PCBs	10	--	<0.086	<0.12	<0.099	<1.0	<0.084	<0.11	<1.0	**0.12**	<0.091
Semivolatile Organic Compounds by EPA method 8270 (mg/kg)											
Benzo(a)anthracene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene*	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	78	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene*	780	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	7.8	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	2,500	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	2,500	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Semivolatile Organic Compounds by EPA method 8270 (ug/L)											
Phenanthrene	NE	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Total Petroleum Hydrocarbons by CT method (mg/kg)	2,500	2,500	**180**	NA	NA	NA	**74**	NA	NA	**40**	NA
SPLP Extractable Total Petroleum Hydrocarbons by CT method (mg/l)	NE	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals by EPA method 6010B (mg/kg)											
Antimony	8,200	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	140,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	76,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	610	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7,500	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	14,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	610,000	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids (%)	--	--	**86.3**	**67.2**	**77.1**	NA	**89.4**	**69.6**	NA	**90.4**	**83.3**

NOTES:

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised June 27, 2013).
2. Only compounds that were detected are provided in this table. For a complete list of analytes, refer to laboratory report.
3. The site is located within a GB groundwater area. For comparison to SPLP results for Organics except for PCBs, the GB PMC listed is 10x the GWPC. No NAPL was observed at the Site.

* These criteria are available through the submission and approval bt CT DEEP of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

A/B labels indicate smaller subintervals for normal samples.

R = location depth was resampled.
mg/kg = milligrams per kilogram
µg/l = micrograms per liter
< = compound not detected above laboratory reporting limit shown.
BOLD = compound detected at this concentration shown.
NA = Not Analyzed
GB PMC = GB Pollutant Mobility Criteria
I/C DEC = Industrial/Commercial Direct Exposure Criteria
NE = Not Established by DEEP
-- = Not Applicable

EXCEEDS I/C DEC
EXCEEDS GB PMC
EXCEEDS I/C DEC AND GB PMC

APPENDIX A

TRC Scope of Service (electronic)

TRC
Results you can rely on

SCOPE OF STUDY

ENGLISH STATION, 510 GRAND AVENUE
NEW HAVEN, CONNECTICUT




Prepared for

The United Illuminating Company

180 Marsh Hill Road, Orange, Connecticut

Prepared by

TRC Environmental Corporation

The United Illuminating Company

OCTOBER 2016

REVISED JULY 2017

SCOPE OF STUDY

ENGLISH STATION FACILITY
510 GRAND AVENUE
NEW HAVEN, CONNECTICUT

Prepared for

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180 Marsh Road
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APPENDICES

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Acronym/Abbreviation List

AET	American Environmental Technology
AEI	Advanced Environmental Interface, Inc.
AHERA	Asbestos Hazard Emergency Response Act
AIHA	American Industrial Hygiene Association
AOC	Area of Concern
ASNAT	ASNAT Realty, LLC
AST	Aboveground storage tank
ASTM	American Society for Testing and Materials
AWP	Alternate Work Practices
CET	Complete Environmental Testing, Inc.
CFC	Chlorofluorocarbon
CHMM	Certified Hazardous Materials Manager
cm	Centimeter
cm/sec	Centimeters per second
COC	Contaminant of concern
CSM	Conceptual site model
CTDEEP	Connecticut Department of Energy and Environmental Protection
CT DPH	Connecticut Department of Health
CTL	Connecticut Testing Laboratories, Inc.
DEC	Residential Direct Exposure Criteria
DQA	Data Quality Assessment
DQO	Data Quality Objectives
DUE	Data Usability Evaluation
ECAF	Environmental Condition Assessment Form
ELLAP	Environmental Lead Laboratory Accreditation Program
ELUR	Environmental Land Use Restriction
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ETPH	Extractable total petroleum hydrocarbons
ftbgs	Feet below ground surface
GEI	GEI Consultants, Inc.
gr	Gravimetric reduction
GWPC	Groundwater protection criteria
HPLC	High performance liquid chromatography
HRP	HRP Associates, Inc.
I/C	Industrial/Commercial
LCS	Laboratory control sample
ID	Identifier
IDW	Investigation-derived waste
LEP	Licensed Environmental Professional
LF	Lineal feet
LQG	Large Quantity Generator
MDL	Minimum detection limit
mg/cm^2	Milligrams per square centimeter

mg/kg	Milligrams per kilogram
MS	Matrix spike
MSD	Matrix spike duplicate
NAPL	Non-aqueous phase liquids
NESHAP	National Emissions Standard for Hazardous Air Pollutants
NOB	Non-friable organically bound
NTU	Nephelometric turbidity unit
NVLAP	National Voluntary Laboratory Accreditation Program
PAH	Polycyclic aromatic hydrocarbons
pc	Point counting
PCB	Polychlorinated biphenyl
PCO	Partial Consent Order
PID	Photoionization detector
PLM	Polarized light microscopy
PMC	Pollutant Mobility Criteria
PPE	Personal protective equipment
ppm	Parts per million
QA/QC	Quality Assurance/Quality Control
QE	Quinnipiac Energy, LLC
%R	Percent recovery
RAP	Remedial Action Plan
RCP	Reasonable Confidence Protocols
RCRA	Resource Conservation and Recovery Act
RCSA	Regulations of Connecticut State Agencies
RES	Residential
RL	Reporting limit
RPD	Relative percent difference
RSR	Remediation Standard Regulations
SEH	Significant Environmental Hazard
SOP	Standard Operating Procedure
SOS	Scope of Study
SPLP	Synthetic precipitation leachate procedure
Stantec	Stantec Consulting Services
SVOC	Semi-volatile organic compound
SWPC	Surface Water Protection Criteria
TCLP	Toxicity Characteristic Leaching Procedure
TEM	Transmission electron microscopy
TPH	Total petroleum hydrocarbon
TRC	TRC Environmental Corporation
UI	The United Illuminating Company
USCG	United States Coast Guard
USDOT	U.S. Department of Transportation
UST	underground storage tank
vae	Visual area estimation
VC	Volatilization Criteria
VOC	Volatile organic compound

XRF	X-ray fluorescence

1.0 INTRODUCTION

1.1 Overview

TRC Environmental Corporation (TRC) has been retained by The United Illuminating Company (UI) to provide Licensed Environmental Professional (LEP) services as they relate to adherence to and completion of all tasks outlined in Partial Consent Order (PCO) COWSPCB 15-001, including the preparation of this Scope of Study (SOS). On August 4, 2016, the PCO pertaining to environmental matters at an approximate 8.9-acre parcel of land located at 510 Grand Avenue in New Haven, Connecticut known as "English Station" (the "Site"), see Figure 1-1, became effective. For the purposes of the PCO, the Site includes the two main buildings, several smaller buildings and all associated structures located on the 510 Grand Avenue parcel of land, as well as the soil, sediment, groundwater and surface water located within the confines of the perimeter of the Site as defined on Exhibit A to the PCO (provided herein as Figure 2). The Site does not include off-site soil, groundwater or sediment in the adjacent Mill River.

As the Respondent, UI has committed to conducting the investigation and remediation (with the exception of any post-remediation monitoring requirements) of the Site in accordance with the provisions of the PCO within three years of the Access Date, unless there is an alternate completion date approved in writing by the Commissioner of Connecticut's Department of Energy and Environmental Protection (CTDEEP). Per the definition of the Access Date provided in the PCO, this means that the investigation and remediation shall be completed by August 10, 2019. Other general requirements of the PCO include:

- Development of the SOS and associated schedule;
- Implement the SOS once approved by the CTDEEP (and if required, any approved supplemental plans);
- Develop and submit for review and approval by the CTDEEP an Investigation Report that fully describes the investigatory activities conducted, evaluates the results of analyses conducted for all sample media as identified in the PCO, evaluates remedial alternatives and proposes a preferred alternative;
- Develop plans and specifications for the approved remedial actions, including a list of permits required in order to complete the remedial actions;

- Implement the CTDEEP-approved remedial actions;
- Prepare a report describing, in detail, the remedial actions performed at the Site and the proposed monitoring program designed to determine the effectiveness of the remediation; and
- Implement and document the results of the post-remediation monitoring activities.

There are two focal points of the investigation and remediation required by this PCO, environmental media and building materials (related not only to the buildings themselves, but other structures located at the Site, including, but not necessarily limited to, concrete pads). Whereas the general requirements of the PCO were outlined above, the following sections provide more detailed information about the objectives associated with the development of the SOS document for both environmental media and building materials. The PCO is included for reference in Appendix A.

1.2 Objectives

The primary objective of this SOS document is to provide a framework for investigation/characterization of the Site, therefore allowing for the fulfillment of the obligations of the PCO. Specifically, the SOS objectives as they relate to environmental media (soil, surface water, groundwater, and sediment located within the perimeter of the Site, as shown on Figure 2) include:

- Identifying the existing and potential extent and degree of contamination (defining the three-dimensional extent and distribution of substances associated with each release) while complying with all prevailing standards and guidelines (including, but not limited to Connecticut's Site Characterization Guidance Document (CTDEEP, 2010a).
- Identify non-hazardous and hazardous wastes at the Site.

These objectives will be accomplished by presenting within this document the following:

- A thorough summary of previous investigation and remediation efforts undertaken at the Site;
- An updated conceptual site model (CSM), including an evaluation and presentation of data gaps; and

- A proposed sampling and analytical program for all environmental media as defined above.

The SOS objective as it relates to building materials includes:

- Identifying asbestos and asbestos-containing materials, polychlorinated biphenyl (PCB) constituents of construction materials, lead and mercury, and other hazardous materials at the Site.

The specific requirements outlined in the PCO with respect to achieving this objective are as follows:

- Identify, document, inventory and assess asbestos and asbestos-containing materials;
- Determine if such materials are friable, damaged, unstable and accessible or may be disturbed by other actions required by the PCO;
- Further, determine how to conduct the abatement of the asbestos in accordance with all applicable laws and develop a plan for doing so;
- Fully characterize PCB constituents of all caulk, paint, flooring, roofing, mastics, fireproofing, soundproofing, waterproofing, sealants and all other materials;
- Sample PCBs consistent and in compliance with the requirements as set forth in 40 CFR Part 761 for PCBs;
- Investigate the presence of lead and mercury as part of the overall hazardous building materials survey; and
- Identify non-hazardous and hazardous waste and other hazardous materials.

In support of all activities outlined in this SOS, data quality objectives (DQOs) will be specified, as well as the quality assurance/quality control (QA/QC) measures to be implemented to meet those DQOs. In addition and per the requirements of the PCO, a proposed schedule for implementing the Scope of Study will be also be presented herein.

2.0 SITE INFORMATION

2.1 Site Location and Description

The Site is located at 510 Grand Avenue in the City of New Haven, Connecticut and consists of approximately 8.9 acres of land on the southern end of an island (Ball Island) located within the Mill River. Between 2000 when the Site was transferred from UI to Quinnipiac Energy, LLC (QE), and 2006 when QE sold a portion of the property to Evergreen Power, LLC (Evergreen) and another to ASNAT Realty, LLC (ASNAT), the Site was divided into two separate parcels. The portion of the Site identified as "Parcel A" (the northern portion) is approximately 3.58 acres in size. Parcel A is occupied by a portion of a former electrical generating plant, commonly referred to as Station B. The remainder of the property, identified as "Parcel B", encompasses the southern portion of the Site and is approximately 5.32 acres in size. Parcel B is occupied by the English Station power generating plant ("the Plant" or "English Station"). The Site as a whole is bounded to the east, west and south by the Mill River (note that the water-facing sides of the Site are bulk-headed) and to the north by Grand Avenue. The parcel boundaries and general Site layout are shown on Figure 2-1.

2.1.1 Parcel A

Station B consists of the northern portion of a former power plant constructed circa 1890 and is a two-story structure that occupies a footprint of approximately 25,000 square feet. Station B is immediately adjacent to Grand Avenue, which runs along the Site's northern property boundary. Station B is constructed of brick exterior walls with interior steel framing. A basement is present beneath the first floor of the building (GEI, 1998a). A second story office area occupies the eastern end of the building and a mezzanine is present above the first floor along the northern wall of the building.

Remnants of a former coal storage and handling system are present on Parcel A, between Station B and English Station. The system consisted of rails and elevated platforms, presumably to convey coal from barges on the Mill River to several on-site storage areas. Portions of the coal conveyor system have been removed to provide access to the interior of the Site.

A subsurface concrete tunnel that once served as the cooling water discharge conduit from Station B emanates from the southwestern portion of the building and runs toward the east-central portion of Parcel A.

2.1.2 Parcel B

English Station is located on the southern portion of the Site and has an approximate footprint of 100,000 square feet. English Station is constructed of brick and concrete with steel reinforcement. The northeastern portion of the Plant formerly housed twelve out-of-service low-pressure boilers and a fuel oil pump room. Two large, brick smokestacks are present extending through the roof in the southern portion of the former low-pressure boiler room.

The western portion of the first floor houses various pumps and equipment and also served as the Plant's main entrance. A second floor adjacent to the low-pressure boiler room formerly housed six turbines that were reportedly part of the older, low-pressure boiler system (Ibid.). Two cooling water intakes which directed water from the Mill River through the low pressure boiler system are located along the western side of the island, adjacent to the Plant. An outfall for the low-pressure boiler cooling water is located along the eastern side of the island, adjacent to the Plant.

Two separate rooms in the southern portion of English Station previously housed two large, high-pressure boilers and two turbines associated with the high-pressure system. Two large, steel smokestacks are present and extend through the roof over both high-pressure boiler systems. An oil and pump room and ash silo are located along the eastern side of the two high-pressure boiler rooms and were likely part of the fuel system that fed the high pressure boilers. Two additional cooling water intakes for the high-pressure boiler systems are located along the southwestern portion of the island, adjacent to the Plant. Discharge outfalls for the high-pressure boiler cooling water are located along the southeastern portion of the island, adjacent to the Plant.

Remnants of a former wastewater treatment system (concrete pads, etc.) are located adjacent to the eastern side of the Plant, between the high-pressure and low-pressure cooling water discharge outfalls.

Remnant structures, including brick and concrete secondary containment dikes associated with former horizontal and vertical fuel oil storage tanks, and concrete pads are located on the

southern portion of the Site, adjacent to English Station. These structures are associated with the former horizontal and vertical fuel oil storage tanks that fed the boiler systems in the Plant. A small, one-story brick building (former Foam House) is also located on the southern portion of the Site, to the west of the former fuel tank area.

Several structures are located on the southwestern portion of the Site, along the western side of English Station. Remnant and former structures in this area include a concrete slab for a former boathouse, a one-story brick building formerly used for storage and a contractor's office, and a larger rectangular one-story concrete block building that was reportedly a former assembly hall. A sub-grade sewage collection sump and pumping station are also located along the western side of Parcel B, adjacent to English Station.

2.1.3 Current Site Conditions

Several visits to the Site were made in September 2016 in order to evaluate current conditions. The Site appears overgrown in many areas relative to how it appears in historic aerial photographs and there is debris (primarily wood and metal debris) located behind Station B on Parcel A and throughout the southern portion of Parcel B, particularly around the perimeter of English Station. Also prominent throughout Parcel B are the Significant Environmental Hazard (SEH) areas that are fenced off with metal stakes, snow-fencing and signage indicating the presence of elevated concentrations of polychlorinated biphenyls (PCBs) in environmental media (predominantly surface soils) above SEH threshold criteria. Also present at the boundary between Parcels A and B (and extending onto Parcel B) are pieces of equipment left behind by demolition and asbestos abatement contractors that had been performing work at the Site until the issuance of a Cease and Desist Order in 2012. The equipment left behind includes two excavators, one outside and one inside of English Station, and several trailers that were used for storage of equipment during the demolition and abatement activities, decontamination and the storage of bags full of asbestos that had been brought from the building interior in preparation for off-site disposal. As both Station B and English Station have been vacant for several years and have not been subject to upkeep for at least 4 years, signs of decline were observed. Deterioration of portions of the roofs of both buildings were observed and evidence of exposure of the interiors to the elements were observed. Further, there was evidence that vagrants have been living in a portion of Station

B and on the date of a recent walk-through, a truck was observed on the first floor of the building. Notable observations made in English Station include the collapse of a large portion of the concrete mezzanine onto the concrete floor of the turbine hall below. In addition, there are areas of English Station in which there are hundreds to thousands of asbestos bags (totaling an estimated 10,000 bags) that had not been removed from the building for disposal prior to the issuance of the Cease and Desist Order. Additional details regarding current site conditions can be found throughout this document.

2.2 Site History and Ownership

In the late 1880s, the Site was occupied by a coal and lumber facility (Enos S. Kimberly and Company), as indicated on an 1886 Sanborn map. The New Haven Electric Company purchased the Site in 1890 and began construction of Station B, which included filling of the Mill River south of the original island boundary to provide room for the stockpiling of coal. Station B operated as a coal-fired power plant until 1903, when it reportedly ceased operations.

The Site was purchased by UI in 1914 and at that time, Station B was reportedly used for storage; however, a 1924 Sanborn map depicts the southern half of Station B as a boiler house with several smokestacks shown. The northern half of Station B is labeled as the "Generating House" on the 1924 Sanborn map. By 1939 the boiler house portion of Station B had been razed (Ibid.).

Construction of the English Station Power Plant commenced in 1924, with construction of the coal-fired, low-pressure boiler and turbine areas completed in 1929. In 1948 and 1952 two additional coal-fired, high-pressure boilers/turbines were added to the southern end of English Station, with additional filling of the river to extend the southern Site boundary (Ibid.). Sometime in the mid-1950s to early 1960s, the Plant ceased using coal as a fuel source and was converted to an oil-fired plant.

English Station continued operation until 1992, when it was placed on deactivated reserve status; two additional gas-fired boilers for maintaining interior building temperatures during colder months were added at that time. In addition to the gas-fired boilers, temperature and humidity controls were installed, reportedly to "preserve" the existing equipment such that it could be reactivated, if needed, with minimal maintenance (Ibid.).

The Site was previously identified in the New Haven Tax Assessor's records as a single parcel (Map 179, Block 567, Lot 8.01) (Ibid.). As indicated above, on or about August 16, 2000, UI transferred the Site to QE, as described in a deed recorded at page 72 of volume 5716 of the City of New Haven land records. When UI sold the Site to QE, an escrow in the amount of $1,900,000 was established by UI to fund environmental investigation and cleanup of the Site (Stantec, 2012). An Environmental Condition Assessment Form (ECAF) was filed with the CTDEEP on September 2000, by Advanced Environmental Interface, Inc. (AEI) on behalf of Quinnipiac Energy, summarizing the Areas of Concern (AOCs) for the Site and summarizing the environmental investigation completed on the Site to that date. AEI conducted investigation/remediation of the Site from 2000 until 2008 on behalf of QE, when the escrow originally established by UI was depleted. As discussed previously, sometime prior to December 2006, the Site was divided into two parcels, Parcel A and Parcel B.

As also indicated above, in 2006 QE filed for bankruptcy and subsequently sold Parcel A to Evergreen, as described in a deed recorded at page 14 of volume 7814 of the City of New Haven land records. On December 13, 2006, Quinnipiac Energy sold Parcel B to ASNAT, as described in a deed recorded at page 195 of volume 7817 of the City of New Haven land records.

From 2008 to 2011, the Site was unused and no longer maintained as suitable for power generation. In 2011, Grant Mackay Company (Grant Mackay) and Classic Environmental, Inc. (Classic Environmental) were hired by the owners of the Site to commence demolition activities, including the removal of scrap metal and structural steel, with the objective of generating enough money to fund further environmental investigation and remediation, including asbestos abatement. This work appears to have been focused on the English Station building on Parcel B. Mishandling of PCB-containing oils, including inaccurate characterization and waste disposal led to a CTDEEP inspection of the Site in February 2012. Based on the potential for tracking and spreading PCB contamination from source areas to other, uncontaminated areas of the Site and the off-site recycling of potentially contaminated steel and metals, the State of Connecticut issued to Grant Mackay and the Site owners a Cease and Desist Order (CDOWSUST 12-001) on February 12, 2012 (Partner, 2015).

Since the Cease and Desist Order was issued, no further demolition or asbestos abatement activities have occurred, and equipment owned or leased by Grant Mackay and Classic Environmental remains on-site.

In August 2014, there was a large area of staining observed on the pavement beneath equipment left behind by Grant Mackay and Classic Environmental. Specifically, oil staining was observed just to the north of the eastern portion of English Station (in the area between the main entrance and the two ash hoppers), beneath an asbestos waste trailer and the nearby asbestos abatement decontamination trailer and Connex supply box. It was later determined that the source of the oil staining was leaking drums and aboveground oil tanks located within the nearby Oil Room (interior to English Station, but within several feet of the staining). Based on the proximity of the oil staining to a nearby catch basin that conveys Site stormwater to the Mill River, a sample of the sediment in the catch basin was collected and subjected to laboratory analyses (the details of which are included in subsequent sections of this SOS document). The results indicated that there were PCBs present in the catch basin sediments at concentrations less than 1 part per million (ppm) (Ibid.).

In addition to the observation of the oil stain precipitating the sampling referenced above, it precipitated the involvement of the United States Coast Guard (USCG). Given the presence of uncontained oils and liquids identified in the Oil Room within English Station and the potential for a release to the Mill River via the nearby catch basin, the USCG issued Administrative Order 002-14 to the property owners and UI (as a former operator of the Site) on September 19, 2014. The USCG initiated response activities at the Site in late September 2014. The response actions conducted by the USCG included placement of a boom within the Mill River around the southern portion of Ball Island (south of Grand Avenue) and the removal of liquid wastes and drummed materials from within and around the Oil Room (Ibid.).

Since the completion of the USCG response actions in 2014, there has been a limited amount of work conducted at the Site. Namely, HRP Associates, Inc. (HRP) resumed investigatory work that they had begun prior to the issuance of the Administrative Order by the USCG. The scope and findings of HRP's work are discussed later in this document.

2.3 Environmental Setting

2.3.1 Geology

According to the Surficial Materials Map of Connecticut (Stone et al, 1992), the Site is located in an area underlain by fill. According to the 1998 Phase II/III report by GEI Consultants, Inc. (GEI), fill material encountered during their investigation of the Site ranged in thickness from 9 to 16.5 feet and consisted of a variety of granular materials, including loose, poorly sorted sands with fine to medium gravel, moderately dense, slightly plastic silty sands, and anthropomorphic materials including brick, ash, cinders, wood, glass, metal and plastic fragments.

A slightly plastic silt and fine sand layer was reportedly encountered beneath the fill layer and generally ranged in thickness from 5 to 11 feet. Numerous mollusk shells, fine roots and other organic material were observed in this layer. Occasional 1- to 3-inch thick layers of well-sorted and sub-rounded fine to medium sands were observed interbedded with the more silty portions of this strata.

Interbedded fine to medium sand and slightly plastic silts were observed beneath the potential confining layer of slightly plastic silts. This strata is interpreted to represent a transition from low to medium depositional environment energy, as suggested by the alternating strata types. Both materials are similar to those described in the overlying strata, except that individual layer thicknesses and spacing were greater than those observed in the strata above.

A reddish-brown, well-sorted, medium to coarse sand with less than 10 percent non-plastic fines and up to 15 percent sub-rounded fine gravel is present at approximately 35 feet below ground surface (ftbgs) (GEI, 1998b).

Others who have performed intrusive environmental work at the Site subsequent to the 1998 investigation have confirmed GEI's findings with respect to the presence of fill. In January 2003, AEI prepared a document titled *Request for Variance for Widespread Polluted Fill* for the English Station Site and on behalf of QE. In this document, AEI indicated that the materials that comprise the bulk-headed island on which English Station is located are primarily Mill River dredge spoils generated between 1900 and 1936 (prior to environmental laws and controls) to maintain navigable shipping channels. The dredged sand and silt materials that comprise the island were referred to in the 2003 report as "native" only in that they were derived from the adjacent river, however, as described in more detail later in this document, these dredged materials were

subject to pre-dredging impact by various contaminants as a result of discharges to the river from the industries that lined its banks. These spoils were placed upon the native sand and silts of the marsh and tidal flat areas once present in the area (and exposed at low tide) to create the present day Ball Island.

According to the Bedrock Geologic Map of Connecticut (USGS, 1985), the bedrock beneath the Site consists of New Haven Arkose. This bedrock is described as consisting of reddish, poorly sorted, coarse-grained, sandstone-like sedimentary rock.

2.3.2 Hydrogeology

In general, groundwater behavior beneath the Site is strongly influenced by the action of the tides in the Mill River, which is inferred to be a regional groundwater discharge zone. As the majority of the Site is paved, and therefore largely impervious to precipitation recharge, it is likely that the primary influence on groundwater flow is cyclical in response to the changing river stages (GEI, 1998b).

Shallow groundwater beneath the Site is strongly affected by tidal changes. According to the GEI Phase II/III report, a groundwater mound is evident in the northeastern portion of the Site, possibly resulting from a tidal head breaking through the old bulkhead line at a former intake tunnel. Groundwater flows in a northwesterly direction from this mound. An apparent groundwater sink is located in the central portion of the Site, where groundwater observations made during previous investigations determined that monitoring wells in this area are apparently isolated from tidal influences. The shallow groundwater table in the southern portion of the Site is relatively flat (Ibid.).

Based on the observed difference in groundwater elevations within the shallow and deep monitoring wells during previous investigations, the fine sandy silt horizon beneath the Site may be serving as a confining or semi-confining layer. GEI noted that the deeper aquifer appeared to have an upward gradient, as the head difference from the paired shallow and deep wells was between +1.5 and +2.0. In general, horizontal groundwater flow direction in the deep aquifer appears to be toward the west. GEI also surmised that the hydraulic gradient of the deep aquifer may also be influenced by the tidal stage.

Slug tests performed by GEI during their Phase II/III investigation of the Site identified hydraulic conductivity values of 7.2×10^{-2} centimeters per second (cm/sec), or 204.48 feet per day in the northern end of the Site, and 1.7×10^{-2} cm/sec, or 48.26 feet per day in the southern end of the Site. GEI concluded that the range of determined hydraulic conductivity values was consistent with the published values for the well-sorted medium to medium mixed with coarse sands screened by the wells tested (MW-3 and MW-17S). Using the groundwater data collected and an assumed soil porosity of 0.30, GEI calculated groundwater flow rates in the shallow aquifer beneath the Site as ranging from 6.43 feet per day to 61.34 feet per day, and indicated that the average groundwater flow velocity would likely be on the lower end of the range.

To evaluate tidal influence on groundwater, GEI monitored groundwater level fluctuations in several wells on-site and in the Mill River over an 8-hour period during their 1998 Phase II/Phase III investigation. During the monitoring period, the reported tidal range in the river was 5.02 feet between high and low tides. According to the Phase II/III report, groundwater elevations responded most dramatically in the northwestern (MW-1) and southern (MW-16) portions of the Site, with observed changes in groundwater elevations of 1.7 and 2.22 feet, respectively. Lesser changes in elevation were observed in the interior portions (0.97 feet) and the northern half (0.25 feet) of the Site. Lag times, in response to the tide, were reportedly just under two hours at interior and northern portions of the Site, with shorter lag times noted at the southern and northwestern ends of the Site. Based on the observed tidal influences, GEI indicated that a groundwater flow reversal due to the relatively rapid tidal influences at the outer portions of the Site was likely, and determined that the overall groundwater flow direction should not be greatly affected by the tide, but the overall groundwater table will rise and fall with the tide (Ibid.).

3.0 PREVIOUS ENVIRONMENTAL WORK

3.1 Historic Environmental Reports

The Site has been the subject of numerous investigations, cleanups, and remedial actions to evaluate its potential impacts to human health and the environment. A brief discussion of the environmental history of the Site based on the information provided in previous environmental reports and documents follows. Additionally, information provided by the previous environmental reports is referenced, where appropriate, throughout this report. Not every report available or reviewed is summarized below. Note that the historical analytical summary tables associated with previous investigations conducted at the Site are included as Appendix B.

3.1.1 1998 *Subsurface Investigation and Remediation Plan Report for English Station*, The United Illuminating Company (UI, 1998)

In a letter addressed to Ms. Lori Saliby, UI documented the results of a PCB remediation project that was carried out in advance of a bulkhead repair project. The letter references an earlier Remediation Plan having been submitted to the CTDEEP in March of 1998. No such plan was available for review by TRC at the time of this report. Though the location of the remediation project and associated soil samples are referenced as being presented in an attached Figure 1, no such figure was provided in the document reviewed. Additionally, no numerical remedial goal for PCB concentrations was mentioned in the report. A table summarizing sample dates, sample identifiers (IDs), remediation area, sample depths and PCB concentrations for the soil samples collected during remediation was attached to the report.

According to the report, three areas, identified as Area 1, Area 2 and Area 3, were remediated through excavation and off-site disposal. The report indicates that Areas 1 and 2 were excavated using a barge-mounted crane and clamshell. Area 3 was reportedly excavated using a typical land-based excavator. The report indicates that a total of 324 tons of PCB-contaminated media were shipped to the Chemical Waste Management facility in Model City, New York for landfill disposal. According to Tables 1 and 2 of the report, it appears that soil samples exhibiting concentrations below 10 ppm PCBs were left behind. Additional excavation was conducted in those areas where soil samples contained PCBs in excess of 10 ppm. This suggests that the remedial goal for this project was likely 10 ppm PCBs.

In the 2000 *Draft Remedial Action Plan for the Site* (GEI, 2000a), as reviewed in more detail in a following section), TRC identified a plan (Figure 2 - Bulkhead PCB Release Area Remediation Sample Location) showing the sample locations for the soil samples collected after the excavation activities described above. Based on the figure, it appears that Remediation Areas 1, 2 and 3 were located approximately 75 feet to the northwest of English Station, and directly adjacent to the former Transformer House. Based on the sample locations presented in the figure, it appears samples were collected on a 10-foot sample grid.

3.1.2 1998 *Phase I Environmental Site Assessment*, GEI Consultants, Inc. (GEI, 1998a)

In 1998, GEI completed a Phase I Environmental Site Assessment (ESA) on the Site for UI. According to the report, the Station B building was being used for storage at the time of GEI's Site reconnaissance. The report indicates that a bermed area was observed along the southern wall of the first floor of Station B that was reportedly used more than two years prior as a storage area for PCB-containing oil and soil. The area is referred to as an "Annex 3 PCB Storage Area" in the report (in later reports, it is described as Annex III). GEI reportedly did not observed any active storage in this area during their Site reconnaissance.

GEI noted that a 50,000-gallon vertical aboveground storage tank (AST), reportedly used for the storage of No. 6 fuel oil, was observed on the southern portion of the Site, to the south of English Station. In addition to the vertical AST, GEI noted two 5,000-gallon horizontal ASTs, reportedly used for the storage of No. 2 fuel oil, in the same area. All three tanks were located within brick and concrete containment dikes. GEI did not observe stains or leaking associated with the tanks during their Site reconnaissance.

GEI noted the following known and suspected PCB-containing equipment during their inspection of the Site:

- **Exterior Courtyard, Southwest Portion of English Station:** Former capacitor bank within a fenced enclosure with a gravel base. No staining of the area was noted by GEI.

- **Exterior Courtyard, Southwest Portion of English Station:** Two pad-mounted transformers with green labels, indicating a PCB content of less than 1.0 ppm. Located within a concrete berm, with no evidence of a release noted.

- **Along Western Exterior Wall of English Station:** Three pad-mounted transformers reportedly associated with the low-pressure boiler system. All three transformers were affixed with blue labels indicating PCB concentrations less than 50 ppm. Some staining on the transformer exteriors was noted.

- **Northwest Corner of English Station:** One large, pad-mounted transformer (Transformer "G"), situated above a concrete containment dike. The large transformer was affixed with a blue label indicating PCB concentrations less than 50 ppm. A tank associated with the transformer was labeled as containing less than 1.0 ppm PCBs. No staining or evidence of a release was noted in the GEI report.

- **Northwest Corner of English Station:** Two circuit breakers were present in this area and were affixed with green labels, indicating PCB concentrations less than 1.0 ppm. Both circuit breakers were located within a concrete containment dike.

- **English Station Interior, First Floor:** Five pad-mounted transformers reportedly containing "pure PCB oil" were observed by GEI. The transformers were reportedly located within concrete berms, with no evidence of releases noted.

- **Southern Portion of Coal Handling Area:** Three capacitor banks were observed in this area: two of the capacitor banks were reportedly located in a single enclosure at one location; a single capacitor bank was observed in another enclosure; and a third enclosure was observed to be empty. Tags reportedly indicated "No PCBs."

- **Bulkhead, Western, Southern and Eastern Sides:** Three cathodic protection relays were observed by GEI along the western, southern and eastern sides of the bulkhead. According to the GEI report, two of the relays were affixed with blue labels, indicating PCB concentrations less than 50 ppm. The third relay was affixed with a green label, indicating PCB concentrations less than 1.0 ppm.

In addition to the equipment noted above, GEI observed two tank trucks in the central portion of the former coal handling area that UI personnel reportedly noted contained transformer fluid from the large "G" transformer located at the northwest corner of English Station.

GEI made the following conclusions and identified the following areas of concern at the completion of the Phase I ESA (GEI, 1998a):

- Four underground storage tanks (USTs) were formerly located in an area adjacent to the west side of Station B. According to information obtained from CTDEEP files, two older, 2,000-gallon gasoline USTs were installed at this location and removed in June 1991, when they were both replaced by 1,000-gallon USTs. A CTDEEP spill report noted that a nominal petroleum sheen was observed on the water table during the tank removal, although groundwater samples did not

exhibit contamination. The 1,000-gallon USTs were reportedly removed in October 1996 and limited soil and groundwater sampling conducted at that time did not reveal the presence of contaminants.

- A 1967 CTDEEP inspection report (P-5) indicated that the Site was served by six separate septic tanks and associated leaching fields. The report notes that one of the septic systems was noted on a UI site plan, to the north of the coal conveyor system. The locations of the other septic systems were not indicated by GEI in their report.

- Spill reports on file with CTDEEP identified nineteen separate spills in connection with the Site. Of these spills, roughly half were releases to the Mill River. Several others involved spills or releases of PCB-containing oils to soil or other areas on-site, but generally did not identify specific locations.

- CTDEEP spill documents reviewed by GEI from 1979 indicated that oily soil was encountered during the installation of a transmission tower foundation located approximately 40 feet from the western bulkhead. Though the report does not specifically identify where on the Site the discovery was made, the spill report does indicate that it was somewhere within the former coal storage area between Station B and English Station. A past coal dust suppression practice of spraying the area with oil was noted by UI personnel interviewed by GEI as a potential source of the oil. Repair of the Site bulkhead in 1997 in the same general area reportedly encountered similar contamination. Analysis of the oil encountered during the bulkhead repair indicated a PCB concentration of 350 parts per million (ppm).

- A 1984 CTDEEP spill report indicated that a capacitor "blew up" at English Station. Based on information provided by UI, it appeared that the soil has been remediated to 50 ppm. Apparently there was also a similar 1981 release adjacent to an English Station capacitor. Remediation also occurred in which soils were removed to less than 50 ppm PCBs.

- A waste oil AST was formerly located adjacent to the southeastern corner of English Station.

- One 50,000-gallon No. 6 fuel oil and two 5,000-gallon No. 2 fuel oil ASTs were noted on the southern portion of the Site, adjacent to English Station.

- Several station transformers, large circuit breakers, capacitor banks, and cathodic protection relays were observed across the Site.

- Three former chemical storage areas were identified within English Station, though their exact locations were not described by GEI.

- A former industrial wastewater treatment system was located southeast of English Station. At the time of the 1998 Phase I, the system was no longer present, although GEI noted remnants of the former wastewater treatment system (concrete pads, etc.) present adjacent to the north of the high-pressure discharge point.

- GEI noted that based on their review of historic maps, aerial photographs and other documentation, the majority of the Site appears to be underlain primarily by fill material of an unknown quality and origin.

- Coal storage operations at the Site, south of Station B, were conducted over an extended period.

- The Site was identified as a Large Quantity Generator (LQG) of hazardous wastes. GEI noted that the Site may be considered an "Establishment" under the Connecticut Property Transfer Act. A 1992 CTDEEP Hazardous Waste Generation Report indicates 13,315 pounds and 966 gallons of hazardous waste were generated during deactivation of the Plant in 1991/1992.

3.1.3 1998 *Phase II/III Field Investigation*, GEI Consultants, Inc. (GEI, 1998b)

In July 1998, GEI returned to the Site to perform a Phase II and partial Phase III investigation. The purpose of the investigation was to assess soil and groundwater conditions in the AOCs identified in their earlier (May 1998) Phase I. GEI identified the following AOCs for the Site:

- **AOC 1: Station B.** Station B was identified as an AOC by GEI due to former chemical and petroleum product storage, and its status as an "Annex 3" PCB storage facility.

- **AOC 2: Station B USTs.** Four gasoline USTs were formerly located to along the west side of Station B. Two older 2,000-gallon gasoline USTs were removed from this area in 1991 and replaced with two 1,000-gallon gasoline USTs. The 1,000-gallon gasoline USTs were removed in 1996. Only limited sampling was completed in this area.

- **AOC 3: Former Septic Systems.** CTDEEP documentation indicated as many as six septic systems were previously in use at the Site. Only one septic tank was identified by GEI during their review of plans for the Site.

- **AOC 4: Past Spills.** Several spill reports reviewed by GEI indicated sheens and releases to the Mill River occurred via the storm sewer system on-site.

- **AOC 5: PCB Remediation Area.** GEI identified an area of PCB-contaminated soil along the western/central portion of the Site, in the vicinity of the bulkhead. At the time of the Phase I, this area was actively undergoing remediation by UI.

- **AOC 6: Capacitor Release.** Documentation reviewed by GEI identified a 1984 spill report that indicated a capacitor "blew up". Anecdotal information provided by UI personnel regarding similar incidents were also noted. The Phase II/III report indicates that cleanup of the area around the pad and soil continued until samples were non-detect for PCBs, contradicting GEI's Phase I report (GEI, 1998a) that stated remediation was conducted until soil concentrations dropped below 50 ppm. The release reportedly occurred at what GEI identified as Capacitor Bank No. 1, located to the north of English Station, adjacent to the coal conveyor system.

- **AOC 7: Waste Oil AST/Oil Pump House.** A former waste oil AST was identified by GEI as having been located next to the southeastern corner of English Station. An oil pump house that served high-pressure boiler units 7 and 8 was also located in this area.

- **AOC 8: Fuel Oil ASTs.** One 50,000-gallon No. 6 fuel oil AST and two 5,000-gallon No. 2 fuel oil ASTs were identified on the southern portion of the Site. All three tanks were located within secondary containment dikes; however, GEI noted surficial soil staining outside of the bermed area.

- **AOC 9: Transformers.** Several transformers, large circuit breakers capacitor banks, and cathodic relays were identified by GEI in various locations across the Site, primarily associated with English Station.

- **AOC 10: Former Interior Chemical Storage Areas.** Three former chemical storage areas were identified within the Plant building. (Note that the locations of these former chemical storage areas were not specifically identified in the report.)

- **AOC 11: On-Site Fill Material.** Historic information reviewed by GEI indicated that the majority of the Site is underlain by fill material of an unknown origin and quality.

- **AOC 12: Coal Storage.** The central portion of the Site, south of Station B and north of English Station, housed coal storage and handling operations for an estimated 40-year duration.

- **AOC 13: Former Wastewater Treatment Facility.** According to GEI, a former wastewater treatment system was located in the southeastern corner of the Site. Remnants of the treatment system, including concrete pads and a below grade pumping station, were observed by GEI during the Phase I.

GEI used a combination of soil borings, surface soil samples (including samples collected from sumps), concrete chip samples, sediment samples, deep and shallow groundwater monitoring wells (with deep wells carrying a "D" designation and shallow wells carrying an "S" designation where couplets were installed), and groundwater samples to evaluate each of the AOCs identified above. General observations regarding soil conditions encountered during investigation activities by GEI are included in Section 2.3.1. As part of the Phase II/III, GEI also completed hydraulic conductivity testing, a tidal groundwater survey, and an ecological survey. Relevant conclusions regarding the results of the hydraulic conductivity testing and tidal groundwater survey were discussed in Section 2.3.2.

Total petroleum hydrocarbons (TPH) were reportedly detected in six soil samples collected from AOC-1, but only one sample exhibited a concentration above the applicable Connecticut Remediation Standard Regulations (RSR) numerical criteria. (Note that at the time this investigation was conducted, AOC-1 included not only Station B, but its environs as well.) TPH was detected at a concentration of 4,397 ppm in a soil sample collected from TB-6, which was located to the south of Station B. According to the report, several polycyclic aromatic hydrocarbons (PAHs) were also detected in soil samples collected from several other borings in the vicinity of AOC-1, at concentrations below the applicable RSR criteria. GEI noted that no visible or olfactory evidence of contamination was observed in the soil borings from which the soil samples were collected, and concluded that the source of the TPH was not known. Based on the absence of a distinct source, the elevated TPH detection was attributed to the presence of fill in the area. GEI also collected a concrete chip sample from within Station B during the investigation. Laboratory analysis of the concrete sample indicated PCBs were present at 15 ppm. GEI concluded that the PCB detection in concrete was indicative of a past release in the Station B building.

Elevated concentrations of TPH above the applicable RSR criteria were detected in two soil samples collected from borings within AOC-2 and ranged in concentration from 1,212 ppm to 7,179 ppm. The samples were collected from depths ranging from 5 to 17 ftbgs, and the report indicates that petroleum odors and soil staining were observed in the borings. GEI concluded that residual contamination remained in soil in the vicinity of the former USTs associated with Station B.

Though historical CTDEEP documentation has suggested as many as six separate septic systems have previously been in use at the Site, GEI only identified a single septic tank located south of Station B. The report indicates that no evidence of a release was identified in the soil boring observations or in the analytical results for collected soil samples. Additionally, no evidence of a release from known or suspected septic system locations were detected in site-wide groundwater analyses, which were also used to evaluate AOC-3.

With respect to the documentation of past spills on the Site, AOC-4, GEI noted that many of the spill reports were for evidence of discharges to the Mill River (e.g. sheens, floating product) due mainly to unknown sources. Additionally, several other spill reports were for discreet events or areas of the Site evaluated during the investigation of other AOCs. GEI reasoned that the evaluation of historic spills on-site would be accomplished through sampling of groundwater monitoring wells across the Site and sediment samples collected from Site drainage structures. As such, no specific discussion was presented relative to an evaluation of AOC-4.

An evaluation of AOC-5 was not completed by GEI during their 1998 investigation of the Site. According to the Phase II/III report, PCB contamination discovered during the bulkhead repair project was being evaluated under a CTDEEP-approved plan, and remediation (by others) was on-going at the time of the report.

For AOC-6, GEI collected soil and concrete chip samples from Capacitor Banks 1, 2, and 3 to confirm that the 1984 capacitor release at Capacitor Bank No. 1 was remediated, and to confirm that similar releases had not occurred at the other capacitor banks. Low concentrations of PCBs (3.0 and 10.0 ppm) were detected in the two concrete samples (CS-1 and CS-2) collected from Capacitor Bank #1. PCBs were also detected at a concentration of 2.0 ppm in a soil sample PCB-17, collected along the east side of Capacitor Bank #1. PCBs were not detected above the laboratory reporting limit (1 ppm) at Capacitor Banks 2 and 3; however, relatively low concentrations of TPH were detected in soil samples PCB-13 (27 ppm) and PCB-14 (118 ppm) collected from the area between Capacitor Banks 2 and 3. Low concentrations of TPH were also detected in soil samples collected from an area immediately south of Capacitor Bank #1, at concentrations between 25 and 28 ppm.

GEI evaluated AOC-7 (Former Waste Oil AST) and AOC-13 (Former Wastewater Treatment Facility) together, based on the close proximity of these AOCs to one another. Elevated

concentrations of TPH were detected in several soil samples collected from seven locations (AST-1, MW-18, MW-21, TB-18, TB-109, TB-110 and TB-111) across this area of the Site, ranging from 238 ppm to 16,263 ppm. The detected concentrations of TPH in several of the samples were above the applicable RSR criteria. The highest concentration was detected in a shallow soil sample, AST-01, collected from below the former waste oil AST. Elevated PAH concentrations were detected in soil samples collected from three locations across the area (MW-21, TB-18, and TB-111). Concentrations of several of the PAHs in these samples were above the applicable RSR criteria. Lead was detected at a concentration of 2,160 ppm in boring TB-18, and was the highest concentration of lead detected in the samples collected from AOCs 7 and 13. GEI did not identify a specific source for the lead, but opined that it may be related to the presence of fill in the area. PCBs were detected in two samples from this area, AST-01 and SED-02, at concentrations of 2 and 1 ppm, respectively. Sediment sample SED-02 was collected from a sump reportedly associated with the former wastewater treatment system. No further discussion is presented in the Phase II/III report relative to sources of contamination associated with these AOCs.

TPH was detected in eleven of the soil samples collected in the vicinity of AOC-8, ranging in concentration from 30 ppm to 35,520 ppm. The highest concentration of TPH was detected in soil sample SS-01, a shallow soil sample. PCBs were also detected in SS-01 at a concentration of 14 ppm. PAHs were detected in five soil samples collected from this area. GEI attributed the TPH and PAH detections in this area to past oil releases or potentially contaminated fill.

In their Phase II/III report, GEI broke AOC-9 (Site Transformers) down into separate areas consisting of the Western Transformer Yard, (including the transformer to the northwest of English Station), Southwest Transformers, and Capacitor Bank #4. GEI evaluated AOC-9 by collecting shallow soil and sump sediment samples. In the Western Transformer Yard, PCBs and TPH were detected in soil sample PCB-9 at concentrations of 1.0 ppm and 32 ppm, respectively. Concentrations of TPH were detected at two soil sampling locations (PCB-3 and PCB-4) in the Western Transformer Yard. In the vicinity of the Northwest Transformers, PCBs and TPH were detected in sediment sample PCB-6 at concentrations of 4.0 ppm and 9,091 ppm, respectively. Based on the detections of PCBs and TPH at this location, GEI concluded that a release had occurred. PCBs were not detected above 1 ppm in sediment sample PCB-5, and only a relatively low concentration of TPH, (165 ppm) was detected. Elevated concentrations of PCBs were

detected in soil samples collected from both the Capacitor Bank #4 area and the Southwest Transformer area. Soil samples PCB-1, PCB-31 and PCB -32 exhibited PCB concentrations ranging from 53 ppm to 440 ppm. Soil sample PCB-2, collected just outside of the fenced portion of Capacitor Bank #4 exhibited a PCB concentration of 2,300 ppm. PCBs were not detected above the reporting limit of 1 ppm in soil samples PCB-20 and PCB-21 collected from inside the fenced area at the same location.

The report indicates that GEI evaluated AOC-10 (Former Interior Chemical Storage Areas), located inside of English Station, using monitoring wells and soil borings at exterior locations around the building. Based on the results of their investigation, GEI concluded that the detection of contaminants in the exterior sample locations, particularly TB-108, were likely attributable to releases outside the building or the presence of fill.

GEI addressed AOCs 11 (On-Site Fill Material) and AOC-12 (Coal Storage) together in their Phase II/III report. GEI reported that analytical data for samples collected within the former coal storage area consistently contained contaminants including arsenic, PAHs, and TPH. The detected concentrations of one or more of these constituents often exceeded the applicable RSR criteria.

With respect to Site groundwater, GEI concluded that no volatile organic compounds (VOCs), metals or PCBs were detected above the applicable RSR groundwater criteria. GEI noted that one up-gradient deep well, MW-04D, contained low levels of solvent-related VOCs that were attributed to an unnamed, off-site source. Several semi-volatile organic compounds (SVOCs), were detected in on-site wells sampled during the Phase II/III. GEI attributed the occurrence of these constituents to the widespread fill across the area and not to any one AOC.

In addition to providing the results of their investigation, GEI's report summarizes options with respect to each of the evaluated AOCs. A notable, general conclusion made in the report is that non-aqueous phase liquids (NAPLs) were not observed or encountered at the Site during investigation activities. With respect to AOCs 3 and 4, GEI did not recommend any further work, as no impacts associated with the former septic systems (AOC-3) were identified and contamination attributable to past spills (AOC-4) was addressed by other AOCs. With respect to AOC-5 (PCB Remediation Area), GEI indicates that a summary of ongoing remediation work would be submitted to CTDEEP under a separate cover and not addressed as part of the Phase

II/III. With respect to AOCs where PCBs were detected, GEI indicates that a determination of applicable cleanup standards would be needed from either the Environmental Protection Agency (EPA) or CTDEEP. This includes AOCs 1, where PCBs were detected in the Station B building; AOC-6, where PCBs were detected in the vicinity of Capacitor Bank No. 1; and AOC-9, where PCBs were detected in the vicinity of the Western Transformer Yard, Southwest Transformers, and Capacitor Bank #4. Conclusions regarding all other AOCs consisted of an evaluation of means to achieve compliance with the RSRs in place at the time of the investigation.

3.1.4 1999 *Preliminary Report #20210: Regarding Supplemental Environmental Investigation at the UI English Station*, Enviroshield, Inc. (Enviroshield, 1999)

The Enviroshield 1999 Preliminary Report documented tasks completed by Enviroshield during their investigation of the area adjacent to and around the PCB remediation area along the western side of the Site bulkhead. The report references an earlier summary report (Enviroshield Summary Report #18055) that was not available for review during development of this SOS. According to Preliminary Report #20210, Enviroshield drilled nine soil borings, identified as GP-20A, GP-30 through GP-33, and GP-38 through GP-41 on the Site. Soil samples were reportedly collected every two feet from the ground surface to a depth of 12 ftbgs and submitted for laboratory analysis of PCBs. No analytical data reports or sample results tables were included in the report. According to the report, all borings were completed as 1-inch diameter monitoring wells.

Though no analytical summary tables or copies of laboratory results were included, the report notes that a continuous oil film and strong petroleum odor was observed on the water table at GP-20A. Small globules of oil and a light petroleum odor were also noted in wells GP-30 through GP-32, GP-38 and GP-39.

3.1.5 2000 *Summary Report #20216: Regarding Additional Environmental Investigation at the UI English Station*, Enviroshield, Inc. (Enviroshield, 2000)

Due to reportedly erratic PCB results in silty groundwater samples collected from the previously installed 1-inch diameter monitoring wells, Enviroshield returned to the Site to install four additional 4-inch diameter monitoring wells (MW-50 through MW-53) to a depth of 12 ftbgs (except for MW-52, which met refusal at 8 ftbgs). Soil samples were again collected every two feet. After two rounds of well development one week apart and an additional week for

equilibration, the four wells were sampled. Although no analytical summary tables or copies of laboratory results were included in the Enviroshield report, the report notes that PCBs were detected at low concentrations (ranging from 1.4 milligram per kilogram or mg/kg to 2.6 mg/kg) in soil samples collected from well locations MW-50, MW-51 and MW-53. The report indicates that PCBs were not detected (laboratory reporting limits were not documented in the report) in the silt-free groundwater samples collected from the 4-inch wells.

3.1.6 2000 *Supplemental Field Investigation*, GEI Consultants, Inc. (GEI, 2000b)

In May 2000, GEI completed a supplemental field investigation to further define previously identified areas of contamination on the Site for use in preparation of a Remedial Action Plan (RAP). The supplemental field investigation was based on the results of GEI's earlier Phase II/III investigation of the Site completed in 1998. The supplemental investigation was performed based on the premise that a Site-wide environmental land use restriction (ELUR) would be implemented, restricting land use to non-residential and restricting the disturbance of soil greater than 4 feet below existing grade.

At AOC-1, GEI drilled soil boring TB-217 to further evaluate an elevated detection of TPH in a previous composite soil sample (collected from 1-7 ftbgs) collected from boring TB-6. Soil samples were collected every two feet to a depth of 8 ftbgs. The four samples were analyzed for extractable total petroleum hydrocarbons (ETPH), and all four samples exhibited concentrations below the applicable RSR criteria. Based on these results, GEI concluded that no further investigation or remediation was necessary at AOC-1. The previous detection of PCBs in an interior concrete chip sample was not addressed.

At AOC-2, TPH in excess of the applicable RSRs was previously identified in a soil sample collected from boring TB-01 near the former UST graves. To further evaluate this detection, GEI drilled five additional soil borings (TB-218, and TB-226 through TB-229). ETPH was detected in eight of the nine soil samples collected. The highest concentrations of ETPH were detected in TB-218 (534 ppm) and TB-227 (954 ppm). Additionally, elevated concentrations of several SVOCs were detected in TB-218, TB-226, TB-227, TB-228 and TB-229. According to GEI, the concentrations of SVOCs in TB-218 were reportedly high enough to indicate the presence of NAPL when the calculation presented in Section 22a-133k-2(c)(3) of the Regulations of

Connecticut State Agencies (RCSA) is applied. GEI noted that, aside from the NAPL calculation, there was no other evidence to suggest a NAPL source of SVOCs was present at AOC-2 (e.g., no free-phase product in area wells or soil borings, and no documented significant spills or releases). Based on the field screening results for TB-218 and the analysis of other nearby soil samples, GEI concluded that the SVOC impacts at AOC-2 were limited and did not warrant further investigation. GEI did note that soil remediation in the vicinity of TB-218 would be required.

To further evaluate detections of TPH, SVOCs, and PCBs in soil at AOC-7, GEI drilled four shallow soil borings (TB-207 through TB-210) in the immediate vicinity of the previous boring locations TB-110 and TB-111, where these constituents were detected during GEI's Phase II/III, and three borings (TB-223 through TB-225) to further evaluate impacts related to the former waste oil AST. Elevated concentrations of SVOCs were detected in TB-208 and TB-209, with some constituents exceeding applicable RSR criteria. Of the three soil borings advanced within and adjacent to the waste oil AST area, ETPH was detected in samples collected from TB-224 and TB-225. PCBs were also detected in four samples collected from soil borings TB-224 and TB-225. GEI concluded that the extent of SVOC and PCB impacts at AOC-7 were adequately defined and noted that soil remediation in the area of the waste oil tank would be required.

At AOC-8, shallow soil PCB and TPH impacts were found adjacent to the east of the former No. 6 fuel oil AST and containment dike during the Phase II/III. Additionally, soil samples collected from boring locations TB-113 and MW-16, adjacent to the north of the AST berms, exhibited elevated concentrations of SVOCs. To further evaluate these impacts, GEI drilled four soil borings (TB-219 through TB-222) and collected five surface soil samples (SS-04 through SS-08) from the area east of the tank and containment dike. Two shallow borings were also advanced in the area of TB-113 and MW-16 to evaluate shallow soil quality. ETPH was detected in soil samples collected from TB-212, TB-219, TB-220, TB-221 and TB-222. The highest concentrations of ETPH were detected in soil samples collected from TB-220. PCBs were detected in three of the five surface soil samples collected ranging in concentration from 1-3 ppm. GEI concluded that the extent of PCB impacts east of the former ASTs were well defined by the field sampling programs and noted that soil remediation would be required in the area of the identified PCB impacts.

In this report, GEI appears to have combined two previously separate AOCs: AOC-6 Capacitor Release and AOC-9 Site Transformers. Therefore, the Capacitor Release Area (Capacitor Bank 1) is discussed along with the other capacitor and transformer locations as part of AOC-9.

To further characterize the soil in the vicinity of Capacitor Bank 1, GEI collected additional soil samples oriented in a 10-foot grid, as required by EPA regulations and CTDEEP guidance. The additional samples, identified as SS-01, SS-02, SS-03 and HA-02, were collected to further delineate the PCB impacts at soil sample PCB-17, collected during GEI's previous Phase II/III. PCBs were detected in soil sample SS-02 only, at a concentration of 23 ppm. Arsenic was also detected in soil samples HA-2, SS-01 and SS-03 at concentrations ranging from 116 ppm to 230 ppm. In addition to Capacitor Bank 1, additional soil samples HA-1, TB-214 and TB-215 were collected in the vicinity of the southwest transformer area, where elevated concentrations of PCBs were detected during the previous Phase II/III. PCBs were detected in all three samples, with the highest concentration (29 ppm) being detected HA-1. According to the report, no additional samples were collected from Capacitor Bank No. 4 due to the presence of underground utilities. GEI concluded that the additional characterization of PCB impacts in the vicinity of Capacitor Bank #1 and the Southwest Transformer Area had revealed more extensive PCB contamination than was previously identified. GEI noted that soil remediation to address the PCB and TPH contamination in these areas would be required to address impacted soils. No mention was made of Capacitor Bank No. 4, where high concentrations of PCBs were previously detected during the Phase II/III.

Arsenic concentrations above the applicable RSR criteria were identified in soils throughout AOC-12, the former coal storage and handling area, at depths ranging from 0 - 13 ftbgs. According to the report, the source of the contamination is attributed to the former storage/use of coal. Initially during the Supplemental Field Investigation, thirteen soil borings were completed within the former coal storage and handling area specifically to evaluate arsenic concentrations. However, additional arsenic analyses were run on soil samples collected from other nearby areas of the Site to provide a better definition of the extent of arsenic in soils.

Arsenic concentrations in excess of applicable RSR criteria were detected in soil samples collected form TB-231 through TB-235 and HA-3. Soil samples collected from other adjacent

AOCs identified significant arsenic exceedances adjacent to Capacitor Bank 1 and the Southwestern Transformer Area. GEI concluded that the occurrence of arsenic in association with the former coal storage and handling area was "fairly well delineated", and goes on to note that remediation to address arsenic-containing soils in the vicinity of the former coal handling and storage area and in the vicinity of the former Station B boiler house would be required. GEI did not render an opinion on the other areas of the Site where high concentrations of arsenic were detected in soils, such as Capacitor Bank 1 or the Southwestern Transformer Area.

To further evaluate the former wastewater treatment system (AOC-13) where lead, SVOCs and TPH were previously detected in soils, GEI collected soil samples from five additional soil borings (TB-202 through TB-206) in the area. Additionally, to provide further screening of shallow soils in the area, GEI collected soil samples from two soil borings (TB-200 and TB-201) drilled further north of AOC-13. Relatively low concentrations of SVOCs, ETPH and metals were detected in soil samples collected from soil borings TB-200 and TB-201, with no apparent exceedances of applicable RSR criteria being noted by GEI. However, high concentrations of one or more SVOCs, were detected in soil samples collected from soil borings TB-202 through TB-206. According to GEI, the concentrations of SVOCs in the soil samples collected from these borings were high enough to indicate the potential presence of NAPL when the calculation presented in Section 22a-133k-2(c)(3) is applied. GEI subsequently concluded that delineation of the SVOC-impacted soil in the vicinity of the former wastewater treatment plant was adequate and noted that remediation of these soils would be required.

3.1.7 2000 *Draft Remedial Action Plan*, GEI Consultants, Inc. (GEI, 2000a)

The 2000 GEI Draft RAP summarizes environmental investigative work completed up to that point, provides an evaluation of RSR compliance, and presents remedial actions and objectives for several areas of the Site. The RAP presents actions GEI determined were required to bring the Site into compliance with the industrial standards of the RSRs and to perform a self-implementing on-site cleanup of PCBs under the federal regulations (40 CFR 761.6l(a)). Remedial actions proposed by GEI in their Draft RAP were based primarily on their earlier Phase I ESA (1998), Phase II/III (1998), and Supplemental Environmental Investigation (2000), summarized previously.

Of the thirteen previously identified AOCs at the Site, GEI's Draft RAP concluded that no remediation was required for AOC-1 (TPH Release associated with Station B). The Draft RAP indicates that remediation would be required at AOCs 2, 5, 7, 8, 9, 12 and 13. No mention of AOCs 3, 4, 6, 10 or 11 is made, although previous GEI reports had recommended no further work was necessary at AOCs 3 or 4 and that there was no exterior evidence of interior sources of contamination for AOC 10. Also, GEI appeared to have combined AOC 6 with AOC 9 and AOC 11 with AOC 12 in previous reports, possibly explaining the absence of any specific discussions of these two AOCs. To address contaminants in soil at concentrations above the Residential (RES) Direct Exposure Criteria (DEC), GEI indicated that a Site-wide ELUR would be recorded, allowing compliance with the Industrial/Commercial (I/C) DEC and the groundwater Class GB Pollutant Mobility Criteria (PMC). At those AOCs where contaminants in soil exceeded the GB PMC, excavation to the seasonal high water table and off-site disposal was the remedial method specified. Contaminants detected in soil at concentrations above the I/C DEC only would be rendered inaccessible through the placement of 2 feet of clean fill and capping with three inches of asphalt. With respect to those AOCs where PCB contamination was identified, soil with PCB concentrations greater than 1.0 ppm but less than 10 ppm would be covered with a cap consisting of a minimum of 6-inches of asphalt, and soils with PCB concentrations greater than 10 ppm would be excavated and disposed of off-site.

Though SVOCs in soil at the former Station B USTs (AOC-2) and the former wastewater treatment system (AOC-13) were detected at concentrations indicative of potential NAPL, GEI reasoned that recoverable NAPL that requires remediation under Section 22a-133K-2(g) was not believed to be present at the Site for the following reasons:

- a review of the Site history did not indicate the release of any significant quantities of NAPL;
- free phase NAPL layers had not been detected in any of the monitoring wells at the Site;
- elevated SVOCs were present in part due to coal ash, not due to the release of liquids containing SVOCs;
- concentrations of SVOCs in groundwater did not indicate that the presence of NAPL is likely; and

- the equation to predict the presence of calculated NAPL includes a factor of safety and is only one of several general indications that are used to suggest the possible presence of NAPL.

Additionally, GEI noted that no groundwater remediation was required, though continued groundwater monitoring would likely be required to demonstrate compliance with the RSRs, specifically the Surface Water Protection Criteria (SWPC).

3.1.8 2001 *Remedial Action Plan for Former Coal Yard Area*, Advanced Environmental Interface, Inc. (AEI, 2001)

Shortly after the Site was sold to QE, AEI was retained to prepare and implement a RAP for the former coal yard (AOC-12). According to the plan, the former coal yard was being considered for remediation ahead of planned construction activities associated with the potential re-powering of the Site.

AEI's RAP was based solely on previous Site investigations and relied heavily on the early work completed by GEI and Enviroshield. Based on AEI's review of the existing data for the former coal yard, they determined that soil within the former coal yard generally contained concentrations of arsenic above the I/C DEC and that smaller areas contained PCBs at concentrations that also exceeded the I/C DEC. Groundwater that contained lead and PAHs above the SWPC was also identified in monitoring wells along the eastern property boundary.

According to AEI's analysis, there was no particular apparent pattern to arsenic distribution, except that most of the detected arsenic concentrations were in the shallow soils in and around the former coal storage/handling area. AEI acknowledged a "hot spot" in the south portion of the former coal yard, north of the Plant, that had high levels of arsenic and PCBs. Based on the figures included in the plan, this area appears to correspond with former Capacitor Bank 1. AEI notes that the PCB-contaminated soil was scheduled for excavation.

In order to achieve compliance with the RSRs, AEI proposed to use planned construction activities to render soils inaccessible (e.g., covered with 2 feet of fill with asphalt cap or four feet of fill with no cap) and environmentally isolated (e.g. concrete building floors and pads), record an ELUR to prevent future disturbance of soil, and where necessary, excavate and dispose of contaminated soil. AEI also planned additional sampling across the former coal yard and

surrounding area (23 soil borings) and the area around former Capacitor Bank 1 (8 shallow soil samples with hand tools).

3.1.9 2002 *Site-Wide PCB Characterization and Cleanup Plan*, AEI (AEI, 2002)

In 2002, AEI produced a Site-Wide PCB Characterization and Cleanup Plan for QE to document the status of characterization and planned cleanup of Site soils, and porous and non-porous surfaces contaminated with PCBs at the Site. While acknowledging that a number of non-PCB-related remediation issues were present, AEI indicated that the plan was assembled to "keep the PCB issues clear and separate", and noted that the plan only discussed PCB contamination at the Site.

The plan summarizes the investigations (including those completed by AEI) and remediation activities that had occurred at the Site with respect to PCBs. The plan also breaks out and identifies five PCB Areas associated with the Site that were known or suspected to be PCB contaminated and include the following:

- PCB Area 1: Station B Building
- PCB Area 2: Former Coal Yard Area
- PCB Area 3: Excavation Area/Electrical Infrastructure Area
- PCB Area 4: Southwest Area
- PCB Area 5: Southeast Area

The plan notes that no further characterization work was planned for PCB Area 1 based on the characterization and cleanup that had occurred at that location up to that point. Characterization sample locations results for the Annex III area (concrete samples), the basement (soil samples), and overhead crane (wipe samples) were also presented in the report.

Similarly, no additional characterization work was planned for PCB Area 2. AEI noted that the numerous rounds of soil characterization sampling conducted in the vicinity of the former coal yard were sufficient to characterize the area.

PCB Area 3 encompasses several areas of the Site called out as AOCs in earlier reports and consists of the three former Capacitor Banks located to the north of English Station and two transformers located at the northwest corner of English Station. Though extensive sampling had

been completed for at least portions of this area, AEI proposed additional samples to further characterize PCB impacts around Capacitor Bank No.1 and the transformer pads located at the northwest corner of English Station.

PCB Area 4 encompasses the area of the Site called out as AOC 9 in earlier reports and consists of the transformers and electrical equipment located along the western wall of the English Station, the Southwest Transformers and containment tub, and the former Capacitor Bank No. 4. According to the plan, QE had poured a concrete slab over a portion of the area where the West Transformers were located. The slab reportedly was 6 inches thick and supported a micro-turbine. It is unclear whether or not the area covered by the slab was previously characterized and/or required remediation. AEI indicated that PCB Area 4 was not well characterized, and therefore proposed additional characterization of the area, including shallow and deep soil samples, concrete samples, and wipe samples.

PCB Area 5 encompasses the area of the Site called out as AOC 8 in earlier reports and consists of the area around the former 50,000-gallon and 5,000-gallon fuel oil ASTs and containment dike and the former waste oil AST to the southeast of English Station (AOC 7). Much like PCB Area 4, additional characterization was proposed by AEI in PCB Area 5.

A summary of the previous investigation work completed within each of the newly-defined PCB Areas, consisting of figures showing sample locations and data tables summarizing laboratory analytical results, was included in the plan. The report also describes cleanup activities previously conducted at the western bulkhead wall (AOC 5), and identifies proposed supplemental characterization activities, decontamination methods, and disposal protocols.

3.1.10 2005 *Interim PCB Report for Station B Parcel Sale*, AEI (AEI, 2005)

In 2005, AEI issued an interim report summarizing work completed on what is now identified as the "Parcel A" portion of the Site. The purpose for issuing the interim report was to provide a summary of all PCB-related work completed for the northern portion of the Site, in advance of the subdivision and sale of that portion of the Site. According to the report, the additional investigative work and remedial options previously discussed in AEI's July 2002 *Site-Wide PCB Characterization and Cleanup Plan* were greatly expanded after it was discovered that PCB contamination on the Site was more widespread than initially thought.

The report indicates that the previously identified "PCB Areas" (AEI, 2002) were further divided into "sub areas" on a Site-wide basis. The areas covered in the report include the following:

PCB Area 1 – Station B Building

- PCB Area 1.1: Mezzanine and First Floor of Station B (except Annex III);
- PCB Area 1.2: Annex III of Station B; and
- PCB Area 1.3: Basement of Station B.

PCB Area 2 – Former Coal Yard

- PCB Area 2.1: Elevated Concrete Supports and Railroad Tracks, and Turntables; and
- PCB Area 2.2: Former Coal Yard Storage Areas.

PCB Area 6 – Balance of Site, Except English Station

- PCB Area 6.1 – Former Station B Boiler House and Coal Yard Area; and
- PCB Area 6.2 – Mill River East Branch Area.

According to the report, the investigation of PCB contamination in the northern portion of the Site was complete and that portion of the Site was fully characterized with respect to PCBs. The report indicates that the Station B interior was remediated to less than 1 mg/kg PCBs in affected concrete or other porous materials, and to less than 10 µg/100 cm^2 on stained, impervious surfaces. In addition, the earthen basement floor had been previously sampled and no PCBs were detected. In order to satisfy other regulatory requirements related to arsenic, lead and PAHs (and not PCBs), a concrete cap was subsequently poured over the entire earthen basement to render the soils inaccessible.

PCB levels in soil and pavement in the yard (i.e., Former Coal Yard) exterior to the building were reportedly below 10 mg/kg. Leachable PCBs were not detected above the reporting limit of 0.5 ppb in those soil samples analyzed by the synthetic precipitation leachate procedure (SPLP). PCB contamination of groundwater was not detected above the reporting limit of 0.5 ppb in any of the monitoring wells located in the area.

PCBs were detected in sediment in a catch basin identified by AEI as "CB-2," located in the central portion of the former coal yard. Additionally, PCBs were also detected in soil in a small area to the southeast of CB-2. Concentrations of PCBs in both areas were below 10 mg/kg. The report notes that catch basins CB-1 and CB-2 tie into a cooling water discharge tunnel that runs from Station B to an unidentified termination point on the southern portion of the Site. According to the report, the tunnel is approximately 3 feet tall and 4 feet wide, and is buried approximately 1 foot below grade. The tunnel is reportedly sealed off at both ends and no outfall to the Mill River.

The report indicates that the catch basins in the coal yard area would be pumped out, with the material disposed of properly. Sampling of the tunnel sediments and concrete were planned, and AEI indicates that the tunnel would be remediated, as needed, based on the results of that sampling. Re-grading of the coal yard area and subsequent application of 3-inches of asphalt was planned to render soils across the area inaccessible.

3.1.11 2006 *Station B Parcel PCB Cleanup Plan*, AEI (AEI, 2006)

In March 2006, on behalf of QE, AEI formally submitted the *Station B Parcel PCB Cleanup Plan* to the EPA in order to satisfy the notification and certification requirements of 40 CFR 761.61 (a)(3) for cleanup of the Station B parcel. Cleanup of the parcel was to be done under the self-implementing option at 40 CFR 761.61(a). This plan presents information very similar to the previous 2005 Interim PCB Report for Station B Parcel Sale.

The stated cleanup objective for the parcel is $\leq$ 1 mg/kg for PCB residuals in PCB remediation wastes (i.e. soil, concrete and other porous surfaces), and $\leq$ 10 µg/100 cm^2 for non-porous surfaces (steel and painted materials). The intent of these cleanup objectives was to be consistent with the requirements of a self-implementing cleanup for achieving unrestricted access to high occupancy areas without further conditions.

The plan documents the results of additional soil sampling that was conducted in the vicinity of a small area located in the former coal yard that was mentioned in the previous interim PCB report (AEI, 2005) for the Station B parcel. The apparent purpose of the additional sampling was to better define PCB contamination in that area. Results of this sampling did not identify PCBs in the soil at concentrations greater than 1 mg/kg.

The remainder of the plan describes the remedial activities that would be utilized to achieve the PCB remedial goals.

3.1.12 2007 *Parcel A PCB Cleanup Plan*, AEI (AEI, 2007)

In April 2007, on behalf of QE, AEI again submitted a PCB Cleanup Plan to the EPA in order to satisfy the notification and certification requirements of 40 CFR 761.61 (a)(3) for cleanup of the Station B parcel. At the time this report was prepared, the northern portion of the Site was clearly identified as "Parcel A" and had been formally sub-divided from the rest of the Site. This plan supersedes the previous 2006 PCB cleanup plan, as the parcel had been reconfigured and additional PCB characterization sampling had been completed.

Cleanup of the parcel was to be done under the self-implementing option at 40 CFR 761.61(a). The plan notes that extensive additional investigation work had been completed since July 2002 and had resulted in re-mapping of the boundaries of several of the PCB Areas initially identified on the property. The numbering system used to identify possibly-affected areas of Parcel A reportedly remained consistent with past usage, with the addition of a couple of new areas. Specifically, PCB Areas covered by this plan included:

- Area 1 is the interior of the Station B Building. It includes a first floor with a mezzanine (Area 1.1), an Annex III storage area (Area 1.2), a basement (Area 1.3), and an overhead crane (Area 1.1).
- Area 2.1 is the elevated hopper track system for the former coal handling equipment.
- Area 2.2 is the area where coal was stored between and around the hopper tracks.
- Area 3.1 is a small section (of Parcel A) where electrical infrastructure (e.g., prior UI capacitor banks) may have been a source of ground contamination.
- Area 3.2 is a portion of the coal yard area at the southwestern corner of Parcel A that is adjacent to a PCB spill area excavated by UI in 1998, where excavation equipment may have carried PCBs.
- Area 6.1 is the yard area immediately adjacent to Station B, to its south and west. The steam boiler section of the old power plant occupied a portion of this yard.
- Area 6.2 is the Site access driveway to the east of the coal yard.

New information presented in this plan that was not included in the earlier reports includes the following:

- The paint on the overhead crane was noted as having low PCB concentrations (< 50 mg/kg) based on the collection of paint chip or scrape samples. PCB concentrations in the paint ranged from 4.5 to 22.0 mg/kg.

- Portions of the concrete and wooden floors on the 1st floor and mezzanine of the Station B building, outside of the previously remediated Annex III, were found to contain PCBs at concentrations > 1.0 mg/kg. AEI indicates that the floor areas will be remediated.

- A small area of affected asphalt in the 1 to 10 mg/kg range exists in Area 2.2 adjacent to Area 3.2, but the underlying soil was not affected. According to the plan, the asphalt will be removed.

- A larger area along the south border of the west side of Parcel A in Area 3.2 contains soil PCBs generally in the 1 to 10 mg/kg range, with a few borings above 10 mg/kg. Soil contaminated above 10 mg/kg in this area will be excavated and removed, with a cap and deed restriction for areas left in place above 1 mg/kg PCB.

- PCBs at concentrations above 1 mg/kg were not detected in any of the soil samples collected adjacent to the elevated coal hopper tracks.

- For Area 6.2 (east access drive), there was no reason to suspect the presence of PCBs. Historically that area was simply a roadway to the Plant on the south part of the island. The PCB items stored in the Annex III storage area in Station B were brought in and taken out via that building's loading docks, which were located at the north side of the west end of the building, at Grand Avenue). No PCBs were detected during prior sampling of soil borings in this area. PCB results for soil samples collected during follow-up test borings on a 50-foot grid (with locations limited by the presence of buried gas, water and sewer lines) were mostly below detection limits, and no PCBs were detected at concentrations greater than 1 mg/kg.

3.1.13 2008 *Interim Status Report / Quinnipiac Energy English Station Parcel A PCB Cleanup Plan*, AEI (AEI, 2008)

In May 2008, AEI submitted an Interim Status Report to Quinnipiac Energy regarding the status of the PCB cleanup of Parcel A. Apparently, funding for the cleanup established through an escrow had been depleted and AEI was unable to complete the PCB remediation activities

specified in their 2007 Parcel A PCB Cleanup Plan. In order to document the status of the work completed and the condition of Parcel A to that point, AEI drafted the interim report.

According to the report, several floor areas of the first floor of Station B (PCB Area 1.1) were scarified, but verification concrete sample results indicated that the scarification did not meet the remedial goal of <1 mg/kg PCBs. Though PCB concentrations in the concrete were generally in the 1 to 2 mg/kg range, some were in the 2 to 6 mg/kg range, and one verification sample was found to contain 16,600 mg/kg PCBs.

Remediation of the former cooling water discharge tunnel that runs beneath the former coal yard (PCB Area 2.2) was completed as specified in the 2007 plan; however, additional sediments containing PCBs >1 mg/kg were identified just outside the area that was remediated by AEI. Sampling of the concrete walls and floor of the tunnel did not identify the presence of PCBs. AEI noted that the tunnel was deeper and contained more sediment than initially thought, and recommended the entire length of the tunnel be cleaned during any future cleanup work at the Site.

Two small areas in the vicinity of former coal hopper Track C and Track B (PCB Area 2.2) were successfully remediated by removing impacted soil and asphalt above the remedial goal of 1.0 mg/kg and backfilled. Verification samples demonstrated that the remedial goal had been achieved.

A small area that previously contained PCBs above 10 mg/kg located in the southwest portion of the coal yard, north of Track A (PCB Area 3.2), was also excavated. According to the interim report, the remedial goal in this area was 10 mg/kg PCBs and soil exceeding this goal was removed through excavation to a depth of 6 to 7.5 ftbgs. PCB concentrations in all verification samples were reportedly below the remedial goal and the excavation was subsequently backfilled. The report notes that no cap was placed over the excavated area, as was planned. No other investigation or remediation activities were discussed in the interim report.

3.1.14 2012 *Conceptual Remedial Action Plan for PCB Impacted Soil*, Stantec (Stantec, 2012)

Subsequent to a Cease and Desist Order (CDOWSUST 12-001) issued to ASNAT Realty, LLC / Evergreen Power, LLC by CTDEEP on February 12, 2012, Stantec Consulting Services, Inc. (Stantec) was hired by ASNAT to prepare a Conceptual Remedial Action Plan (the "Plan") for removal and management of soils containing PCBs at the Site. Chief among the concerns

behind the issuance of the Order was the concern that PCBs present in Site buildings and shallow soils were being tracked from impacted areas of the Site to those that had historically been clean. The Order and recent Site timelines are discussed in greater detail in Section 2.2.

Based on tracking concerns, Stantec drafted the Plan to address data gaps in the characterization of the Site, re-characterization of those areas of the Site where tracking was suspected, and to present remedial measures to achieve compliance with the RSRs and the applicable federal regulations at 40 CFR 761.

In their Plan, Stantec presented the following data gaps with respect to the environmental investigation/remediation completed at the Site up to that point (note that those data gaps identified by Stantec that relate to issues or potential issues not germane to the Site as defined in the CO are not included herein):

- Vertical soil characterization was not adequate to determine the nature and extent of release areas. In many areas, only surficial soil samples were collected. Vertical soil sampling was needed to characterize the nature and extent of releases at the Site.

- Horizontal soil characterization did not exist in some portions of the Site. Additional soil sampling was deemed necessary in several areas.

- The terminal or bottom depth of each release area was not known. Stantec surmised that the release areas are anchored to a clay/silt interface beneath marine deposits.

- The depth to bedrock had not been determined.

- Additional leachability analysis was needed to confirm that PCB-impacted soil was in compliance with the GB PMC.

- The data did not meet the RCP requirements. As a result, a formal evaluation of the data set was deemed necessary to determine that it is comparable and suitable for remedial decision making.

- The remaining amount of asbestos in English Station was not known since access to the interior of English Station was prohibited at the time.

- Only limited porous media sampling had been conducted for brick, concrete, and other structures. Additional non-porous media sampling could also be required.

- The full scope of drainage from both Station B and English Station was not well understood. Stantec noted that floor drains, sumps, and the drainage trench on Parcel A had not been fully investigated.

- Re-characterization of soil areas adjacent to PCB source areas was needed to evaluate the potential for PCB tracking. Stantec indicated this concern needed to be addressed through additional sampling.

- The number, content, and source of drums that remained in the Plant needed to be determined. Drummed waste disposal would also be required. (Note that at least a portion of this was accomplished as part of the subsequent USCG activities conducted in 2014, as described in Sections 2.2 and 4.1.15)

- Additional groundwater data were needed to confirm that PCBs and other contaminants had not adversely impacted groundwater.

Based on the data gaps identified above, Stantec indicated that the historical data were sufficient for the development of a conceptual remediation plan. However, Stantec also noted that the data did not meet the requirements specified in the CTDEEP's Site Characterization Guidance Document (CTDEEP, 2010a) and/or the requirements for investigation contained in 40 CFR Part 761.

3.1.15 2015 *Draft Section 4 Subsurface Investigation for the Former English Station*, HRP (HRP, 2015)

In 2015, HRP completed a subsurface investigation on behalf of UI to characterize the distribution of soil and groundwater contamination in the vicinity of select AOCs identified for the Site. The subsurface investigation was completed in accordance with a Generalized Scope of Work Plan submitted to the CTDEEP in February 2014. The investigation activities were completed to provide a preliminary evaluation of the distribution of contamination in select AOCs and were not meant to fully characterize the Site. Areas of the Site investigated at this time included the following:

- AOC-1: Station B Building (including PCB Area 1);

- AOC-7: Above Ground Waste Oil Storage Tank and Oil Pump House (including PCB Areas 5.3, 5.4, 5.5 and 5.6);

- AOC-8: Above Ground Fuel Oil Storage Tanks (including PCB Area 5.7);

- AOC-12: Cooling Water Discharge Tunnel (including PCB Area 6.1);

- AOC-13: Former Wastewater Treatment Facility (including PCB Areas 5.1 and 5.2);
- Various exterior areas of Parcel B; and
- Groundwater monitoring wells (sampling of existing wells) at various locations across the Site.

Investigation activities completed by HRP in AOC-1 were focused on the soil beneath the basement floor of the Station B building. HRP collected soil samples from 10 locations (identified as BS-111714-1 through BS-111714-10) beneath the former Annex III area on the first floor of the building. Of the 10 samples collected, PCBs were detected in only 3 soil samples at concentrations below 1.0 mg/kg.

HRP collected a single sediment sample (identified as DT-111914-1) from the former cooling water discharge tunnel near the eastern terminus of the tunnel. Laboratory analytical results on sediment sample DT-111914-1 indicated that it contained PCBs at a concentration of 1.78 mg/kg.

HRP's evaluation of AOCs 7, 8, and 13, all located in the southwest portion of the Site, involved the drilling of twenty soil borings and the collection and laboratory analysis on 40 soil samples. Photoionization detector (PID) readings were detected in several soil samples ranging to 108.3 mg/kg, with the maximum reading detected at a depth of 13-15 ftbgs in soil boring SB-092914-109. Additionally, a sheen was observed at 8.5 to 10 ftbgs and 14 to 15 ftbgs in soil borings SB-093014-112 and 113, respectively. A slight petroleum odor was also detected in SB-093014-112 and SB-111814-127. VOCs were detected below the applicable RSR numeric criteria in 9 of the 40 samples analyzed. ETPH was detected in 39 of the 40 soil samples, with 11 samples exceeding one or more RSR numeric criteria. Of those, only three samples (SB-111814-127B 13-15', SB-111814-130A 0-2', and SB-111814-130B 2-4') had ETPH concentrations exceeding the I/C DEC. None of these soil samples exceeded ten times (10x) the groundwater protection criteria (GWPC) when analyzed using SPLP methodology. PCB concentrations exceeded the RES DEC in three soil samples (SB-111814-125A 3-5', SB-111814-127B 13-15' and SB-111814-130A 0-2'). PCBs were also detected below the applicable RSR numeric criteria in 9 of the 40 soil samples.

To evaluate the extent of surficial PCBs across the Parcel B exterior (presumably driven by reports of tracking), HRP collected a total of 360 soil/asphalt samples from 120 shallow soil

borings and submitted them to the laboratory for PCB analysis. PCBs exceeded the I/C DEC of 10 mg/kg in 2 samples (SB-091714-16A 0-1' and SB-092414-74A 0.0-0.5') and exceeded the RES DEC but not the I/CDEC in 20 other samples. Soil boring SB-091714-16A was installed to the west of the Plant toward the northern portion of the building (AOC-9), reportedly near the remains of a former chlorination tower. Soil boring SB-092414-74A was also installed in AOC-9 to the west of the Plant, west of a former transformer area that was previously identified as a significant environmental hazard (SEH) area. PCBs were not detected above the reporting limit of 0.1 ppm or 0.11 ppm in the deepest sampled interval in either of these borings, consistent with a surface release. Analytical results from the sampling activities expanded the areas of known PCB impacts along the western, southwestern, and eastern sides of the Plant. The majority of samples that exceeded 1 mg/kg were collected near areas of previously identified PCB impacts greater than 1 mg/kg.

3.2 Previously Approved Variances and Alternate Work Practices

3.2.1 2003 Request for Widespread Polluted Fill Variance, AEI (AEI, 2003)

On behalf of QE, AEI submitted a report to the CTDEEP titled *Request for Widespread Polluted Fill Variance* in 2003. The specific variance requested was a determination that the PMC put forth in the RSRs, as stated in RCSA Section 22a-133k-2, do not apply to the Site because the subsurface consists of widespread polluted fill from historic dredging operations conducted prior to QE's ownership of the Site. The variance requested was to be applied to the entire Site, and was based on the demonstration of six provisions in RCSA 22a-133k-2(f)(1) and the proposed compliance plan for meeting the RSR DEC. Through documentation provided in the variance request, AEI was able to successfully demonstrate that the Site met the conditions required to qualify for the Widespread Polluted Fill variance. In a letter from the CTDEEP to QE dated March 27, 2003, the Department formally approved the use of the Widespread Polluted Fill Variance for exemption from the PMC.

3.2.2 2010 Application for Approval of Alternate Work Practices, HRP (HRP, 2010)

In April 2010, HRP submitted an Application for Approval of Alternative Work Practices related to removal of asbestos-containing materials in the Lower Level of the Turbine Building.

The application requested the use of critical barriers only in lieu of covering wall and floor surfaces throughout the building with polyethylene sheeting. This application received approval from CT DPH on April 23, 2010. Abatement activities described in this Application for Approval of Alternative Work Practices were conducted in 2010.

3.2.3 2011 Application for Approval of Alternative Work Practices, ATC Associates, Inc. (ATC, 2011)

In April 2011, ATC submitted an Application for Approval of Alternative Work Practices related to removal of asbestos-containing materials in the Boiler Room. The application requested the use of critical barriers only in lieu of covering wall and floor surfaces throughout the Boiler Room with polyethylene sheeting. This application received approval from CT DPH on April 16, 2011. Abatement activities described in this Application for Approval of Alternative Work Practices were conducted in late 2011 through early 2012.

3.2.4 2015 Application for Approval of Alternative Work Practices, Partner (Partner, 2015)

In April 2015, Partner submitted an Application for Approval of Alternative Work Practices related to work activities to accomplish certain tasks stated in their *Revised Equipment Decontamination Work Plan* dated March 15, 2015 (Partner, 2015). The stated tasks included the re-installation of critical barriers, installation of warning signs at each point of access to asbestos-contaminated portions of the building, removal of asbestos waste from the storage trailer, and decontamination and removal of various equipment, including the personnel decontamination trailer, air filtration devices, excavator, task lights, cords, and hoses. This application received approval from CT DPH on April 21, 2015. Abatement activities described in this Application for Approval of Alternative Work Practices have not been conducted to date.

3.3 Historic Data Quality Assessment

Data for soil, sediment, asphalt, and groundwater samples collected between 1996 and 2014 were reviewed with respect to data quality. The following steps were performed during this review process:

- A table summarizing the available data was created and consisted of the following information: sample IDs, matrix, analytical parameters, level of QC included in the laboratory report, and any issues noted during the review.

- The following parameters were reviewed in each laboratory report, when available and as applicable to the method: holding times, blanks, laboratory control sample (LCS) recoveries, surrogate recoveries, and matrix spike (MS) recoveries.

- Sensitivity was also evaluated using project screening criteria listed on historical data tables. Non-detect results were reviewed to determine if the reporting limits were below the project screening criteria. Sensitivity was not evaluated for results not included on the historical data tables.

It should be noted that there were results presented on data summary tables for select samples where no laboratory report was available for review. This included select PCB soil/asphalt samples from 1997, 1998, 1999, 2007, and 2014; select PCB groundwater samples from 1998, 2007, 2008, and 2014; select PAH, VOC, metals and ETPH groundwater samples from 1998; select PAH, VOC, metals and ETPH soil samples from 2001 and 2002; and select VOC and ETPH soil samples from 2014.

The results of the data evaluation indicated that, in general, data are usable for project decisions based on a review of accuracy, precision, and sensitivity of the data. In general, the data are valid as reported and may be used for decision-making purposes. Although there were some potential biases and uncertainty noted during the review process, the effect on the overall usability of the data was minor. However, there were two issues noted that resulted in unusable data for decision-making purposes.

- The non-detect results for total selenium in June 1998 groundwater samples GW-17S, GW-13, GW-12, GW-14S, GW-20, GW-10, GW-16, GW-15, GW-21, and GW-19 (from Connecticut Testing Laboratories, Inc. (CTL) report 698345) were rejected since selenium exhibited a significantly low recovery (18%) in the MS performed on sample GW-17S.

- The non-detect results for SPLP silver in June 1998 soil samples ES-MW3 (15-17), ES-TB5 (4-6), ES-TB6 (1-7), ES-TB8A (1-3), ES-TB-8B (15-17), ES-TB7A (7-9), ES-TB9 (3-7), ES-TB10 (11-13), and ES-MW7 (7-9) (from CTL report 698067) were rejected since silver exhibited a significantly low recovery (13%) in the MS performed on sample ES-MW3 (15-17).

The analysis of sensitivity showed that there were several non-detect results for select PAHs in soil (1998), PCBs in soil (2007), PCBs and arsenic in groundwater (1998), and bromomethane and acrylonitrile in groundwater (2014) that were found to be above the project

screening criteria provided on the data tables. However, this occurred on a small percentage of the samples.

3.4 Previous Building Studies and Assessments

Buildings at the Site (English Station and ancillary buildings, and Station B) have undergone previous inspections to identify and quantify asbestos and hazardous materials required to be removed prior to building demolition. A brief discussion of the information provided in previous survey report follows. Information provided by this previous survey report is referenced throughout this report.

3.4.1 1999 Asbestos and Hazardous Materials Survey, GEI Consultants, Inc. (GEI, 1999)

In 1999, GEI conducted an Asbestos and Hazardous Materials Survey of English Station, Station B, and ancillary buildings on the site for TLG Services, Inc. According to the report, the survey identified significant amounts of asbestos-containing materials in the Site buildings. The survey identified various building materials, equipment, and sludges/sediments/oils as hazardous or having the potential to be classified as hazardous. Lead was detected in samples collected from various building components.

GEI conducted extensive sampling of suspect materials for asbestos throughout the buildings. Identified asbestos-containing materials in English Station and ancillary buildings include thermal system insulation on boilers and piping, ebonized asbestos board, Transite panels, roofing materials, corrugated Transite siding, and floor tiles. Identified asbestos-containing materials in Station B include flooring materials, roofing materials, door and window caulking and glazing, and hard-pack pipe fitting insulation. A cumulative quantity of asbestos-containing materials was provided in the report. Specific locations and assessment of condition of asbestos-containing materials were not provided.

GEI conducted inspections throughout the buildings to assess building materials, equipment, and sludges/sediments/oils that are known or suspected to contain hazardous materials. These items included mercury-containing switches, PCB-containing equipment, oil-filled piping, coal ash, and stained concrete. Various analytical procedures were utilized to characterize these materials, depending on the nature of the sample collected and usage of the specific equipment.

The report identified the presence of hazardous materials or materials having the potential to be classified as hazardous, including PCB transformer oils, non-PCB transformer oils, fuel oils, mercury-containing switches/reservoirs/thermometers, light ballasts, and drain sediments.

Lead testing by GEI was limited to the collection and analysis of painted building materials utilizing the Toxicity Characteristic Leaching Procedure (TCLP) (EPA Method 1311) to determine whether the future building debris with the attached paint would be classified as hazardous waste. These building materials consisted of structural steel, brick, concrete, and wood from wall, ceiling, and/or floor surfaces. Direct testing of paints to determine lead content was not conducted.

3.4.2 2012 Interior Survey of Potential PCB Containing Concrete, GeoQuest, Inc. (GeoQuest, 2012)

In 2012, GeoQuest conducted a concrete sampling program to determine if PCBs were present in the concrete decking of the Mezzanine Level in the Turbine Room at English Station, prior to demolition activities to remove the decking. According to their report, GeoQuest collected concrete samples from the mezzanine floor alongside each piece of installed equipment and from the floor area most likely to be used for the transportation of any containers of PCB oil. Per the report, 20 samples were collected; laboratory results showed that no PCBs were detected above the minimum detection limits.

3.4.3 2015 Revised Equipment Decontamination Work Plan, Partner Engineering and Science, Inc. (Partner, 2015)

In 2015, Partner developed a decontamination work plan to facilitate removal of PCB-impacted equipment that remains at the site. Partner's site reconnaissance and subsequent report provided information relative to potential tracking of PCBs.

4.0 CONCEPTUAL SITE MODEL

Development of a CSM for the Site requires a thorough understanding of each of the AOCs. Therefore, each of the AOCs as originally identified by GEI is discussed individually below. Where applicable, the PCB Areas defined in previous AEI reports are cross-referenced. In addition to the 13 AOCs originally identified by GEI in their Phase II/III report (GEI, 1998b), TRC has identified 5 other AOCs on the basis of available information. The AOC descriptions are followed by the presentation of the CSM and identification of data gaps. Table 4-1 presents the CSM for the Site. AOCs and PCB Areas identified for the Site are depicted on Figure 4-1. Past investigation locations across the Site are shown on Figures 4-2A and 4-2B. To better facilitate discussion of each of the AOCs below, smaller scale figures showing past investigation activities are referenced throughout the Sections that follow.

4.1 Areas of Concern (AOCs)

Due to the division of the Site into two parcels and the environmental investigation and remediation efforts that have been undertaken in advance of, or as a result of that division, Parcel A is somewhat further along in its cleanup. This is especially true of Station B, which has undergone PCB remediation under an EPA-approved Self-Implementing Plan (SIP). As such, the AOCs presented in the Sections that follow are organized by Parcel. Based on the rather significant issues associated with the partial asbestos abatement and demolition activities within English Station, the proposed investigation/remediation of Parcel A may occur first.

AOCs Associated With Parcel A (Station B)

4.1.1 AOC-1 Station B - Building Interior (Including PCB Areas 1.1, 1.2 and 1.3)

Station B's use as a power plant reportedly ceased in the 1920s, which was before PCBs were brought into commercial use in the electrical power industry. However, PCB equipment destined for disposal was stored in an Annex III area in that building after the initial PCB regulations were promulgated in 1978.

A single concrete “chip” sample was collected from the floor of the Annex III area inside Station B during GEI’s 1998 Phase II/III of the Site (GEI, 1998b). Laboratory analysis of the

concrete sample indicated PCBs were present at 15 ppm. GEI concluded that the PCB detection in concrete was indicative of a past release in the Station B building.

As part of the 2002 *Site-Wide PCB Characterization and Cleanup Plan (AEI, 2002)*, the interior of the Station B building was further identified as "PCB Area 1" by AEI. As described in their plan, the entirety of the Annex III area inside Station B was sampled on a five-foot sample grid by AEI, resulting in the collection and analysis of 28 concrete samples. Of the 28 samples collected, 5 were found to have PCB concentrations greater than the remedial goal of 1.0 mg/kg. According to AEI, a 10-foot by 15-foot area of the concrete floor in the area where the exceedances were detected was scarified and verification samples were collected. Of the 12 verification samples collected, two exceeded the remedial goal. Additional scarification was completed in the vicinity of the two verification samples that failed to meet the remedial goal. When another set of verification samples failed after the second scarification, that area of the floor was cut out and disposed of (AEI, 2005). The remaining areas of the Annex III area (now identified as PCB Area 1.2) met the remedial goal and contain PCB concentrations <1 mg/kg.

According to a 2008 Interim Status Report (AEI, 2008), efforts to remediate various areas of the 1st floor of Station B consisted of scarification of the concrete floor and removal of portions of the wooden floor with PCBs above the remedial goal. The report notes that scarification of the concrete floor was not successful in all areas and several verification concrete samples failed to meet the remedial goal. One of the verification samples exhibited a PCB concentration of 16,600 mg/kg. In addition, 43 wipe samples were collected from steel beams in the vicinity of the scarification. PCBs were detected in only 2 samples at concentrations below the remedial goal of 10 µg/100 cm^2.

Oil-containing equipment in Station B was limited to an overhead crane, which was found to contain low levels of PCBs in lubricating oil in a motor (AEI, 2002). Based on sampling completed by AEI, the PCB concentration in the oil was 6.6 mg/L. This oil was drained from the crane and properly disposed off-site. AEI subsequently collected 47 wipe samples (1 sample every 1 to 4 meters) to characterize the entire crane. Based on the wipe sample results, all but one sample met the remedial goal of 10 µg/100 cm^2. The area of the crane with the exceeding sample (25 µg/100 cm^2) was decontaminated, re-sampled and the resulting concentrations were below the remedial goal. In the 2005 *Interim PCB Report for Station B Parcel Sale* (AEI, 2005), the overhead

crane is noted as being within "PCB Area 1.1," along with the first floor and mezzanine. Samples of the paint on the overhead crane were collected by AEI in 2006. Of the 17 paint samples collected, all 17 exhibited PCB concentrations ranging from 4.5 to 22 mg/kg (AEI, 2007).

Concrete from the first floor (outside of the Annex III area) of the Station B building was sampled by AEI during their work on the Site. Reportedly, all concrete samples were collected in accordance with the EPA Region 1 *Draft Standard Operating Procedure for Sampling Concrete in the Field*. Samples were collected using a randomized grid, plus biased samples were collected under the crane and in other areas where stains were observed. The mezzanine floor that was used for storage reportedly had no indication of staining on its concrete surface and was not sampled. A wooden platform on the first floor and wooden shelves on the mezzanine also were also sampled and tested. None of the samples exhibited PCB concentrations above the remedial goal of <1 mg/kg. Despite the apparent absence of PCB impacts on the first floor of the building, the 2007 Parcel A Cleanup Plan (AEI, 2007) indicates an additional 96 samples were collected from the first floor (outside of Annex III) to further characterize PCB impacts. As the 2007 plan supersedes an older 2006 plan, it is likely that the EPA requested additional characterization. The results of the sampling indicated that 30 of the 96 samples exceeded the remedial goal of <1 mg/kg PCBs. The PCB concentrations in these samples ranged from 1 to 43 mg/kg.

AEI collected seven soil samples from the earthen floor of the basement of Station B (identified as PCB Area 1.3 in later reports). According to the 2005 Interim PCB Report for Station B (AEI, 2005), none of the soil samples collected exhibited PCB concentrations above the remedial goal of 1 mg/kg. After soil samples were collected from the earthen floor of the basement, a concrete cap was poured to cover the earthen portion of the basement and render those soils inaccessible. Installation of the cap reportedly had nothing to do with PCBs and was done solely to satisfy DEC under the RSRs.

Investigation activities completed by HRP in 2014 involved the collection of 10 additional soil samples from beneath the concrete cap in the basement of Station B (HRP, 2015). Of the 10 samples collected, PCBs were detected in only 3 soil samples at concentrations below 1 mg/kg.

Sample locations and remediated areas within Station B, with the exception of the sampling of the overhead crane, are depicted on Figure 4-3.

4.1.2 AOC-2 Station B Former UST Area (Overlaps a portion of PCB Area 6.1)

Four USTs were formerly located in an area adjacent to the west side of Station B. According to information reviewed in the 1998 Phase I ESA (GEI, 1998a), two older, 2,000-gallon gasoline USTs were installed at this location and removed in June 1991 when they were both replaced by 1,000-gallon USTs. Although only limited soil and groundwater sampling was conducted, the documentation reviewed did not indicate that soil or groundwater contamination was detected at the time of the replacement, with the exception of a CTDEEP spill report that noted a nominal petroleum sheen on the water table during tank removal. The 1,000-gallon USTs were reportedly removed in October 1996 with no additional soil or groundwater testing noted.

GEI evaluated AOC-2 as part of their 1998 Phase II/III and 2000 Supplemental Field Investigation (GEI, 1998b and GEI, 200b). Elevated concentrations of TPH above the RES DEC but below the I/C DEC and GB PMC were detected in soil samples collected from borings MW-01 and MW-2 (later converted to monitoring wells). TPH was detected above the RES DEC, I/C DEC and GB PMC in a soil sample collected from TB-01. Soil sample depths in these samples ranged from 5 to 17 ftbgs. Low concentrations of arsenic, barium, chromium, lead, mercury and selenium were also detected in soil samples collected from AOC-2, at concentrations below the applicable RSR criteria.

To further evaluate this detection, GEI drilled five additional soil borings (TB-218, and TB-226 through TB-229) (GEI, 2000b). ETPH was detected in eight of the nine soil samples collected. The highest concentrations of ETPH were detected in TB-218 (534 mg/kg) and TB-227 (954 mg/kg). Additionally, elevated concentrations of several SVOCs were detected in TB-218, TB-226, TB-227, TB-228 and TB-229. According to GEI, the concentrations of SVOCs in TB-218 were reportedly high enough to indicate the presence of NAPL when the calculation presented in Section 22a-133k-2(c)(3) of the Regulations of Connecticut State Agencies (RCSA) is applied. GEI noted that aside from the NAPL calculation, there was no other evidence to suggest a NAPL source of SVOCs was present at AOC-2 (e.g. free-phase product in area wells or soil borings, documented spills or releases). Based on the field screening results for TB-218 and the analysis of other, nearby soil samples, GEI concluded that the SVOC impacts in at AOC-2 were limited and did not warrant further investigation. GEI did note that soil remediation in the vicinity of TB-218 would be required.

According to later reports by AEI and HRP, it appears the soils exhibiting elevated concentrations of TPH/ETPH were excavated from this area and confirmatory samples collected. The date of excavation and the excavation limits are shown on historic Site figures developed by AEI and indicate the soil was removed in January 2002. Confirmatory soil samples CS-1 through CS-7 were collected and exhibited elevated concentrations of one or more PAHs. PCBs have not been detected in soil samples collected from within AOC-2 (or this portion of PCB Area 6.1) to date. No VOCs or PCBs were detected in monitoring wells MW-J or MW-K during HRP's September 2014 groundwater sampling event (HRP, 2015). Past sample locations and the approximate limits of excavation associated with the remediation of the former USTs at AOC-2 are shown on Figure 4-4.

4.1.3 AOC-3 Former Septic Systems

According to information in the 1998 Phase I ESA (GEI, 1998a), a 1967 CTDEEP inspection report (P-5) indicated that the Site was served by six separate septic tanks and associated leaching fields. The report notes that one of the septic systems was noted on a UI site plan, to the north of the coal conveyor system. The locations of the other septic systems were not indicated by GEI in their report. GEI collected soil samples from two soil borings advanced in the area of the former septic system. Elevated concentrations of arsenic (23.1 mg/kg) and lead (807 mg/kg) above the RES DEC were detected in a shallow soil sample collected in this area. SPLP results for arsenic and lead on the same soil sample indicated the leachable concentrations of these metals were below the GB PMC. Analytical results for a deeper soil sample collected from a second boring in the area did not exhibit the same elevated concentrations of metals.

Because AOC-3 is also located within PCB Area 6.1 (Former Station B Area) AEI collected several soil samples for PCB analysis during their work on the Site in 2002. PCBs were not detected above the reporting limit of 0.5 ppm in any of the soil samples collected from within AOC-3 by AEI. No further sampling of AOC-3 has been conducted to date. Past sample locations within AOC-3 are shown on Figure 4-5.

No groundwater monitoring wells are located within AOC-3. Sampling of Site groundwater monitoring wells has not specifically identified AOC-3 as a source of groundwater contamination at the Site.

4.1.4 AOC-12 Former Coal Storage Yard (Including PCB Areas 2.1, 2.2, and 6.1)

Coal storage began as early as the late 1880s, and Station B operated as a coal-fired power plant from the 1890s until 1903. English Station burned coal from the early 1900s to the mid-1950s to early 1960s. Fill beneath the former coal storage area reportedly included a 1 to 2-foot layer of fine coal dust. As noted by GEI, the granular fill beneath the majority of the Site is assumed to contain bottom ash and fly ash as well as other foreign material such as cinders, brick, wood, glass, metal, and or plastic fragments. Arsenic is a natural constituent of coal, and also appears in coal ash, predominantly in fly ash. Arsenic detected in Site soil samples (at concentrations that exceed DEC) is elevated above naturally-occurring levels in native soils for this area. PAH concentrations detected in certain soil samples and groundwater samples also may be related to the fill beneath the Site.

Early investigations of the former coal yard by GEI routinely identified soils that exceeded applicable RSR criteria for PAHs and several metals. In most cases, the detection of these constituents in soil samples was tied to the widespread use of polluted fill material to construct/expand much of the island on which the Site rests. As discussed in Section 3.2.1 of this plan, a Widespread Polluted Fill variance for the entire Site was granted by the CTDEEP in 2003.

Later investigations of the Site by AEI and others further divided AOC-12 into smaller sections based on operational history and ease of discussion. Thus, AOC-12 encompasses those areas identified in previous investigations as AOC-12N, AOC-12E and AOC-12W. In addition, later investigations of the Site by AEI further subdivided AOC-12 into the following PCB Areas:

- PCB Area 2.1 which consists of the elevated hopper track system for the former coal handling equipment.
- PCB Area 2.2 covers the area where coal was stored between and around the hopper tracks.
- A portion of PCB Area 3.2 covers the coal yard area at the southwestern corner of Parcel A, adjacent to a PCB spill area excavated by UI in 1998 (addressed herein as AOC-5). Excavation equipment may have carried PCBs into the coal yard portion of PCB Area 3.2. This area is discussed in Section 4.1.15.
- PCB Area 6.1 consists of the coal yard area immediately adjacent to the Station B Building to its south and west. The former boiler house for Station B occupied a substantial portion of this area.

- PCB Area 6.2 consists of the Site access driveway to the east of the coal yard.

4.1.4.1 AOC-12N (PCB Area 6.1-Former Station B Area)

As previously described, the consistent detection of metals, PAHs and TPH in soil by GEI during their early Site investigations led them to conclude that the contamination was primarily related to the presence of polluted fill, particularly in the northern portion of the coal storage area that was later designated as AOC-12N. As such, GEI did not perform significant additional investigation at AOC-12N during their 2000 Supplemental Field Investigation (GEI, 2000b).

During AEI's early investigations of the Site (i.e. 2001-2002), they collected asphalt samples from 15 locations across AOC-12N and analyzed them for PCBs. None of the asphalt samples exhibited detectable concentrations of PCBs. Additionally, AEI collected soil samples from multiple depth intervals at 18 locations across AOC-12N. None of the soil samples exhibited detectable concentrations of PCBs. AEI also collected a sediment and concrete sample from a catch basin in this area, identified as CB-1. CB-1 reportedly ties into the former cooling water discharge tunnel (AOC-14). Neither the concrete sample nor the sediment sample exhibited detectable concentrations of PCBs.

Numerous soil samples collected from within AOC-12N during investigation of the Site by GEI and AEI exhibited concentrations of arsenic above both the RES DEC and I/C DEC. Additionally but to a lesser extent, soil samples from this area also exhibited concentrations of PAHs above RES DEC and I/C DEC. Historic sample locations for AOC-12N are shown on Figure 4-5.

4.1.4.2 AOC-12W (PCB Area 2.1-Elevated Railroad Tracks and Foundations)

As part of their investigations of the Site, AEI collected samples from the elevated railroad track system associated with historical coal storage and handling. AEI identified the former coal handling tracks as PCB Area 2.1. AEI also identified each spur of the track system as Tracks A through E, as shown on Figure 4.1.

AEI collected 30 shallow soil samples from 20 locations across the former coal transportation track area and submitted them for PCB laboratory analysis. PCBs were detected in 6 of the 30 samples, at concentrations below 1.0 mg/kg. The locations of samples collected from AOC-12W/PCB Area 2.1 are shown on Figures 4-2A, 4-5, and 4-6.

4.1.4.3 AOC-12W (PCB Area 2.2 – Former Coal Storage Area)

In PCB Area 2.2, AEI used a 50-foot sampling grid to conduct initial PCB characterization sampling in the former coal yard. Most samples were below detection limits. Only a single boring (TB-206) located along the southeast side of Track C was found to contain PCBs at 3.0 mg/kg at the surface and 1.4 mg/kg at a 4 to 6 foot depth during the initial characterization. A 10-foot sampling grid was subsequently established around TB-206 and additional soil samples from ten boring locations were collected and analyzed, but no samples exhibited PCB concentrations >1 mg/kg. According to AEI, this small area of soil contamination appeared to be incidental, as no electrical infrastructure was present nearby.

The area of soil around boring location TB-206 was subsequently excavated during remedial activities conducted between 2007 and 2008. The small area of contaminated soil along the southeast side of Track C was excavated to a depth of approximately 6 ftbgs (below the water table). Verification sampling on a 5-ft grid, with perimeter samples of the surrounding asphalt surface, was performed following the methods and procedures specified in a 2007 EPA-approved PCB Cleanup Plan. Results of the PCB verification sampling indicate the area was successfully cleaned up to the 1 mg/kg remedial goal. The excavation was backfilled with clean fill from offsite (AEI, 2008). The limits of excavation are shown on Figure 4-6.

A small area of contaminated asphalt with PCB concentrations in the 1 to 10 mg/kg range was identified in PCB Area 2.2, along the northwest side of Track B. Sample data from soil beneath the asphalt indicated that PCB contamination did not extend to the underlying soils. Removal and off-site disposal of the contaminated asphalt continued until verification sampling indicated PCB concentrations were below the remedial goal of 1 mg/kg. The limits of excavation are shown on Figure 4-6.

Numerous soil samples collected from within AOC-12WN during investigation of the Site by GEI and AEI exhibit concentrations of arsenic above both the RES DEC and I/C DEC. Additionally but to a lesser extent, soil samples from this area also exhibited concentrations of PAHs above RES DEC and I/C DEC. Historic sample locations for AOC-12W/PCB Area 2.2 are shown on Figures 4-6 and 4-16.

4.1.5 AOC-14 Former Cooling Water Discharge Tunnel

Historical drawings obtained from UI indicate that a former cooling water discharge tunnel, possibly associated with the former Station B Boiler House, runs from the south side of Station B through the former coal yard and to an unidentified discharge point at some location along the eastern side of the Site. The tunnel is approximately 3 feet tall and 4 feet wide, and is buried approximately 1 foot below grade (AEI, 2002). The tunnel is reportedly sealed off at both ends and no longer discharges to the Mill River. Previous investigations by AEI noted that at least two catch basins, identified as CB-1 and CB-2, located within the former coal yard, tie into this tunnel. PCBs were previously detected at a concentration of 3.8 mg/kg in sediment in catch basin CB-2 located in the central portion of the former coal yard. The former cooling water discharge tunnel is shown on Figure 4-1.

Remediation of the former cooling water discharge tunnel in the vicinity of Catch Basin CB-2 was reportedly conducted as specified in the 2007 *Parcel A PCB Cleanup Plan* (AEI, 2007), however, two additional sediment samples containing PCBs >1 mg/kg were subsequently identified just outside the area that was cleaned by AEI. Concrete samples collected from the walls and floor of the tunnel where it was cleaned did not exhibit PCBs. AEI noted that the tunnel was deeper and contained more sediment than initially thought and recommended the entire length of the tunnel be cleaned during any future cleanup work at the Site. A sediment sample (DT-111914-1) later collected by HRP from the base of the tunnel near its eastern end (northwest of MW-5) exhibited PCBs at a concentration of 1.78 mg/kg (HRP, 2015)

Based on previous investigation and remediation completed in the former cooling water discharge tunnel, additional sediments containing PCBs over the numerical regulatory criteria remain in the tunnel. Additional investigation and remediation of this structure appear warranted.

AOCs Associated With Parcel B (English Station)

4.1.6 AOC-3 Former Septic Systems

Features included on historical plans and figures for the Site depict structures labeled "Septic East" and "Septic West" on the east and west sides of English Station. These structures will be evaluated as part of the investigation of the AOCs and PCB Areas in which they are located

(AOC-13 for Septic East; AOC-9 for Septic West). Septic West is shown on Figure 4-12, while Septic East is shown on Figure 4-19.

No groundwater monitoring wells are located within AOC-3. Sampling of Site groundwater monitoring wells has not specifically identified AOC-3 as a source of groundwater contamination at the Site.

4.1.7 AOC-4 Past Spills

Spill reports on file with CTDEEP identified nineteen separate spills in connection with the Site. Of these spills, roughly half were releases to the Mill River. Several others involved spills or releases of PCB-containing oils to soil or other areas on-site, but generally did not identify locations. Areas that have been impacted by known releases or spills have historically been identified as separate and distinct AOCs or PCB Areas. As such, the impact of the many documented and undocumented spills are evaluated based on groundwater monitoring data or as part of other AOCs/PCB Areas.

4.1.8 AOC-5 Bulkhead PCB Remediation Area

In late 1997, a portion of the bulkhead wall along the western side of the Site collapsed and revealed an area of oil-contaminated soil that was determined to contain PCBs. This area was evaluated by UI, a spill cleanup contractor, American Environmental Technology (AET), and an environmental consultant, Enviroshield, Inc. The objectives were to define the area of soil contamination, remove it, and confirm the remaining area was below 10 mg/kg PCBs, per CTDEEP and EPA requirements (AEI, 2002).

The scope of that effort was limited to the contaminated soil area. Soil sampling and PCB testing procedures were reportedly performed in accordance with a formal UI Subsurface Investigation and Remediation Plan dated March 1998 and submitted to CTDEEP prior to cleanup. Characterization soil samples were collected at discrete sample intervals from grade to varying depths, up to seventy feet at certain locations (Ibid.).

Remediation activities were conducted in June and July 1998, and resulted in the removal and disposal of 324 tons of PCB-contaminated soil from UI-defined Areas 1, 2 and 3. Pre-excavation sampling and testing was used to determine what soil in 10-foot square grid areas

required excavation and disposal per the cleanup requirements. UI reported that the soil was disposed of at the PCB landfill in Model City, New York (Ibid.).

Generally, characterization and verification samples were collected for PCB testing to determine the extent of the excavation. Groundwater samples were collected from the excavation and other locations in the area at various times throughout the remediation. Characterization and confirmatory soil and groundwater samples were reportedly analyzed for PCBs by the UI state-certified in-house laboratory and/or Complete Environmental Testing, Inc. (CET), also a state-certified laboratory, using EPA Method 8080A or 8082. Twenty-eight soil samples collected from above or at/near the groundwater table in the vicinity of the excavation also were tested for leachable PCBs using the SPLP method. Leachable PCBs were not detected above the reporting limit of 0.5 ppb in any sample tested (Ibid.). Though no analytical summary tables or copies of laboratory results were included, a report generated by Enviroshield (Enviroshield, 1999) notes that a continuous oil film and strong petroleum odor was observed on the water table at GP-20A. Small globules of oil and a light petroleum odor were also noted in wells GP-30 through GP-32, GP-38 and GP-39.

The available analytical results do not indicate whether the detected PCB concentrations were reported as dry weight. In addition, UI's laboratory reports did not always show method minimum detection limits (MDLs). An MDL of 1 mg/kg was shown for several soil samples. CTDEEP has indicated that UI's in-house laboratory typically used a 1 mg/kg MDL for PCBs in soil and that an ND (< 1 mg/kg) on a UI laboratory report indicated a "flatline on the chromatogram" (Ibid.).

AEI's review of UI's clean-up report and other reports on file with the CTDEEP and EPA, coupled with follow-up soil borings in the area, indicated that soil cleanup to a criterion of 10 ppm was successful, except for two concentrations of 15 mg/kg PCBs detected in one follow-up boring on the southern edge of the excavated area.

Results of four rounds of post-remediation groundwater monitoring performed in 1999/2000 indicated that PCBs were not detected (via EPA Method 8082) in groundwater samples collected using dedicated bailers from monitoring wells MW-50 through MW-53. In addition, PCBs (via EPA Method 8082) were not detected above the reporting limit of 0.5 ppb in groundwater samples collected from monitoring wells MW-50 through MW-53 using a low-flow

sampling methodology in May and September 2001. AEI's examination of the gas chromatograms for those groundwater samples indicated that PCB congeners were unlikely to be present. AEI reported that UI was not able to retrieve the gas chromatograms for the soil or groundwater samples they tested, and believed those records had been destroyed (Ibid.).

Based on the remedial goal of <10 mg/kg PCBs established for the Bulkhead PCB Remediation Area, it is unclear whether soil containing PCB concentrations > 1 mg/kg but <10 mg/kg remains. The approximate limits of the bulkhead PCB excavation are depicted on Figure 4-7.

4.1.9 AOC-6 Capacitor Release / Outdoor Capacitor Banks 1-3 (Includes PCB Area 3.1)

The 1998 Phase I ESA (GEI, 1998a) described a 1984 spill report that indicated a capacitor "blew up" at an unspecified location on the Site. Anecdotal information provided by UI personnel regarding similar incidents was also noted in the Phase I. According to UI personnel, cleanup of the soil around the pad associated with the 1984 incident continued until samples exhibited PCB concentrations less than 50 mg/kg. The release reportedly occurred at what GEI identified as Capacitor Bank No. 1, located to the north of English Station, adjacent to the coal conveyor system. Although the release associated with Capacitor Bank 1 was the initial reason for conducting an investigation in this area of the Site, GEI later grouped all of the former Capacitor Banks into AOC-6. Therefore, AOC-6 included former Capacitor Banks 1, 2 and 3 located to the north of English Station, as well as Capacitor Bank 4, which is located at the southwest corner of English Station. Later investigation by AEI and others also identified the locations of the capacitor banks as PCB Areas 3.1 (Capacitor Banks 1, 2, and 3) and PCB Area 4.3 (Capacitor Bank 4). For the purposes of this SOS, PCB Area 4.3 (Capacitor Bank 4) is addressed as part of AOC 9.

During their 1998 Phase II/III, GEI collected nine soil samples, identified as PCB-11 through PCB-19 from the area around Capacitor Banks 1, 2, and 3, and four concrete samples, identified as CS-1 through CS-4 (1 sample each from Capacitor Banks 2 and 3, and 2 from Capacitor Bank 1) (GEI, 1998b). PCBs were not detected above the reporting limit of 1 ppm in the soil and/or concrete samples collected from in and around Capacitor Banks 2 and 3. PCBs were detected in both concrete samples collected from Capacitor Bank 1 (CS-1 and CS-2) at concentrations of 3 and 10 mg/kg and in soil sample PCB-17 collected from the eastern side of

Capacitor Bank 1 at a concentration of 2 mg/kg. Low concentrations of TPH were detected in soil samples collected from the area between Capacitor Banks 2 and 3 (PCB-13 and PCB-14), and from a soil sample collected from the western side of Capacitor Bank 1 (PCB-19).

GEI completed additional delineation of PCB impacts related to the former capacitor banks in their 2000 Supplemental Investigation (GEI, 2000b). The additional samples, identified as SS-01, SS-02, SS-03 and HA-02, were collected to further delineate the PCB impacts at soil sample PCB-17, collected during GEI's previous Phase II/III. PCBs were detected in soil sample SS-02 only, at a concentration of 23 mg/kg. Arsenic was also detected in soil samples HA-2, SS-01 and SS-03 at concentrations ranging from 116 mg/kg to 230 mg/kg.

Additional soil sampling completed by AEI between 2000 and 2002, confirmed the presence of PCB contamination along the eastern side of Capacitor Bank No.1 (AEI, 2002). Under AEI's direction, an area of PCB-impacted soil along the eastern side of Capacitor Bank 1 was excavated and disposed of offsite. Approximately 27 cubic yards of soil were removed. The excavation extended to a depth of 2.5 ft. Several confirmatory soil samples collected from the southern, eastern, western sides and the bottom of the excavation exhibited PCB concentrations >1 mg/kg but < 10 mg/kg. AEI collected an additional 31 concrete and asphalt samples from the pad and berm at Capacitor Bank 1. Results of the concrete and asphalt sampling indicated that PCBs remained present in the asphalt berm at concentrations ranging from 1.8 mg/kg to 55 mg/kg and in the concrete foundation at concentrations ranging from 1.2 mg/kg to 240 mg/kg. An additional four concrete samples each were collected from Capacitor Banks 2 and 3. None of the concrete samples from Capacitor Banks 2 or 3 exhibited detectable concentrations of PCBs.

Historic sample locations and the approximate limits of past excavation within AOC-6 are shown on Figures 4-8, 4-8A and 4-8B.

4.1.10 AOC-7 Former Waste Oil AST / Oil Pump House Area (Includes PCB Areas 5.3 through 5.6)

A former waste oil AST was identified by GEI during their 1998 Phase I ESA as having been located next to the southeastern corner of English Station (GEI, 1998a). An oil pump house that served high-pressure boiler units 7 and 8 was also located in this area. AOC-7 also encompasses PCB Areas 5.3 through 5.6, as identified by AEI and others during later

investigations of the Site. Historic sample locations at AOC-7 are depicted on Figures 4-9 and Figures 4-9A through 4-9C.

During their 1998 Phase II/III, GEI evaluated AOC-7 (Former Waste Oil AST) and AOC-13 (Former Wastewater Treatment Facility) together based on the close proximity of these AOCs to one another (GEI, 1998b). Investigation activities completed by GEI with respect to AOC-7 and AOC-13 included the following:

- Drilling of soil borings and collection of soil samples from locations AST-1, MW-18, MW-21, TB-18, TB-109, TB-110, TB-111; and
- Collection of sediment sample SED-02.

Elevated concentrations of TPH were detected in several soil samples collected from seven locations (AST-1, MW-18, MW-21, TB-18, TB-109, TB-110 and TB-111) across this area of the Site, ranging from 238 mg/kg to 16,263 mg/kg. The detected concentrations of TPH in several of the samples were above the one or more applicable RSR criteria. The highest concentration was detected in a shallow soil sample, AST-01, collected from below the former waste oil AST. Elevated PAH concentrations were detected in soil samples collected from three locations across the area (MW-21, TB-18, and TB-111). Concentrations of several of the PAHs in these samples were above the applicable RSR criteria. Lead was detected at a concentration of 2,160 mg/kg in boring TB-18, and was the highest concentration of lead detected in the samples collected from AOCs 7 and 13. GEI did not identify a specific source for the lead, but opined that it may be related to the presence of fill in the area. PCBs were detected in two samples from this area, AST-01 and SED-02 at concentrations of 2 and 1 mg/kg, respectively. Sediment sample SED-02 was collected from a sump reportedly associated with the former wastewater treatment system.

During GEI's 2000 Supplemental Field Investigation, AOCs 7 and 13 were evaluated separately (GEI, 200b). Investigation activities completed at this time by GEI with respect to AOC-7 included the following:

- Drilling of shallow borings and collection of soil samples from locations TB-207 through TB-210 to further evaluate concentrations of TPH, SVOC and PCBs detected at TB-110 and TB-111; and
- Drilling of soil borings and collection of soil samples from locations TB-223 through TB-225 to further evaluate impacts related to the former waste oil AST.

According to the Supplemental Field Investigation Report, elevated concentrations of SVOCs were detected in TB-208 and TB-209, with some constituents exceeding applicable RSR criteria. Of the three soil borings advanced within and adjacent to the waste oil AST area, ETPH was detected in samples collected from TB-224 and TB-225. PCBs were also detected in four samples collected from soil borings TB-224 and TB-225.

Investigations of the Site by AEI between 2001 and 2008 largely focused on evaluation and delineation of PCBs in various media. As such, sample data generated during this time consists primarily of PCB analytical results. AOC-7 encompasses the following AEI PCB Areas:

- PCB Area 5.3 – Exterior Area Adjacent to Oil Pump Room
- PCB Area 5.4 – Former Waste Oil Tank Area (including concrete structures identified as P09)
- PCB Area 5.5 – Tower GH-4 Area (including concrete structures identified as P05 and P06)
- PCB Area 5.6 – Former Storage Building Area (including concrete structures P07 and P08)

4.1.10.1 AOC-7 (PCB Area 5.3 – Exterior Area Adjacent to Oil Pump House)

AEI collected asphalt and soil samples from multiple depths at 21 locations across PCB Area 5.3. PCBs at concentrations >1 mg/kg and <10 mg/kg were detected in 6 of the 14 asphalt samples collected. Soil samples collected from 12 of the 21 sampling locations exhibited PCB concentrations >1 mg/kg, but only 3 of those 12 locations exhibited PCB concentrations >10 mg/kg. None of the samples collected from PCB Area 5.3 exhibited PCB concentrations >50 mg/kg. The results of the asphalt and soil sampling completed by AEI within PCB Area 5.3 indicates that most of that area contains soil with PCB concentrations >1 mg/kg and <10 mg/kg. Sample results from multiple depths indicate that the contamination is located within the top six feet of soil. An area of soil in the vicinity of locations 5TB-019, 5TB-171, and 5TB-173 also contains PCB concentrations >10 mg/kg but <50 mg/kg.

4.1.10.2 AOC-7 (PCB Area 5.4 - Former Waste Oil AST Area)

AEI collected 9 concrete samples from concrete structure P09, located to the immediate south of the Oil Pump Room. Analytical results for these samples indicate that PCBs were not

detected above the reporting limit of 0.5 ppm. A portion of a pipe trench that runs from the former fuel oil storage tanks to the Oil Pump House extends through PCB Area 5.4. The trench is covered with a series of pre-fabricated concrete covers that can be removed to provide access to the pipe trench. AEI collected 5 concrete samples from the panels and of the 5 samples collected, only 1 sample (5CO-029) exhibited PCB concentrations >1 mg/kg but <10 mg/kg. This sample was located in close proximity to the Oil Pump House and the former waste oil AST. Concrete samples collected from an unidentified concrete pad adjacent to the pipe trench indicate that PCBs are present at concentrations >1 mg/kg but <10 mg/kg at sample locations 5CO-037 and 5CO-038. These samples are also located in close proximity to the Oil Pump House. Results for soil samples collected from within PCB Area 5.4 indicate an area of PCB contamination in soil at concentrations >50 mg/kg around sample location 5TB-029. Limited areas of soil with PCB concentrations >10 mg/kg but <50 mg/kg remain present in the area of soil samples 5TB-027 and TB-225 which are located immediately adjacent to southern wall of the Oil Pump House. A limited area of soil with PCB concentrations >1 mg/kg but <10 mg/kg is present around soil sample locations TB-224, 5TB-025, and 5HA-235. Historic concrete, sediment and soil samples collected from around the former waste oil AST location are shown on Figure 4-9A.

4.1.10.3 AOC-7 (PCB Area 5.5 - Tower GH-4 Area)

According to plans and analytical results from work completed by AEI, an area within AOC-7, PCB Area 5.5 to the immediate east of the GH4 High Tension tower was excavated and removed from the Site. Concrete samples (identified as C1 through C5) collected from the base of the GH4 High Tension tower base did not exhibit detectable concentrations of PCBs. Though the depth of excavation is unclear, soil samples collected from within the northern portion of the excavation indicate that at depths greater than 4 ftbgs, PCB concentrations were below 10 mg/kg. Soil samples collected from within the southern portion of the excavation, indicate that PCB concentrations above 10 mg/kg area generally extended to a depth of 8 ftbgs. Based on soil sample data generated by AEI, soil with PCB concentrations >1 mg/kg and <10 mg/kg remains in the vicinity of the GH4 Tower. An area of soil around samples 5TB-168 and 5TB-032 contains PCB concentrations >10 mg/kg, and a soil sample from 5TB-032 exhibited a PCB concentration >50 mg/kg. Four samples were collected from concrete pad P05, located to the northwest of the GH4

tower. PCB analytical results for these four samples indicates that PCBs were not detected above the reporting limit of 0.5 ppm. Asphalt, concrete and soil sample locations, as well as the approximate limits of excavation in the Tower GH-4 area are shown on Figure 4-9B.

Soil borings were advanced across AOC 7 by HRP during their investigation of the Site in 2014. Two of the borings, SB093014-112 and SB093014-113 reportedly exhibited mild petroleum-like impacts at depths of 8.5 to 10 ftbgs and 14 to 15 ftbgs, respectively. Analytical results presented in the data tables included as part of HRP's 2015 report indicate that soil samples collected from 8-10 ftbgs in SB093014-112 and from 4-5 ftbgs in SB093014-113 exhibited elevated concentrations of ETPH, but no VOCs.

4.1.10.4 AOC-7 (PCB Area 5.6 - Former Storage Building Area)

Sampling completed by AEI within PCB Area 5.6 included concrete structures identified as P07 and P08. Concrete pad P07 was not sampled. According to figures and tables generated by AEI, 47 concrete samples were collected from pad P08. PCBs were detected in only two samples, at concentrations below 1 mg/kg. Two soil samples collected from along the southern bulkhead exhibited PCB concentrations above 1 mg/kg but below 10 mg/kg. Concrete and soil sample locations associated with pad P08 are shown on Figure 4-9C.

Elevated concentrations of TPH were detected in soil samples collected from an area between concrete pad P08 and the containment dike for the former fuel oil ASTs (AOC 8) by GEI during their 1998 Phase II/III investigation. The highest concentration of TPH, 35,520 mg/kg, was detected in soil sample SS-01, a shallow soil sample. PCBs were also detected in SS-01 at a concentration of 14 mg/kg.

As part of their 2014/2015 investigation of the Site, HRP collected 25 soil samples from 12 boring locations across AOC-7 (HRP, 2015). Generally, a shallow and a deep soil sample were collected from each boring location with soil sampling depths varying depending on field observations. PCBs were detected in 7 of the 25 soil samples collected. Of the 7 soil samples that exhibited detectable concentrations of PCBs, only soil sample SB-111814-125A (3.0-5.0 ftbgs) exhibited PCB concentrations >1 mg/kg but <10 mg/kg.

4.1.11 AOC-8 Former Fuel Oil ASTs (Includes PCB Area 5.7)

One 50,000-gallon No. 6 fuel oil and two 5,000-gallon No. 2 fuel oil ASTs were formerly located on the southern portion of the Site, adjacent to English Station. At some point in the mid-1950s or early 1960s, after the high pressure boiler systems were completed, English Station ceased using coal as a fuel source and instead began using No. 6 fuel oil.

GEI first identified the former ASTs as an AOC for the Site and evaluated potential releases related to the storage and usage of fuel oil during their 1998 Phase II/III Field Investigation (GEI, 1998b). At AOC-8, PCB and TPH impacts were found in shallow soil (i.e., 0-4 ftbgs) adjacent to the eastern end of the former No. 6 fuel oil AST and containment dike. PAHs were detected in five soil samples collected from within AOC-8; however, the highest detections of PAHs occurred in soil samples with relatively low or no detectable levels of TPH.

To further evaluate these impacts, GEI drilled four soil borings (TB-219 through TB-222) and collected five surface soil samples (SS-04 through SS-08) from the area east of the tank and containment dike during their 2000 Supplemental Field Investigation (GEI, 2000b). ETPH was detected in soil samples collected from TB-212, and TB-219 through TB-222. The highest concentrations (1,050 and 1,115 mg/kg) of ETPH were detected in soil samples collected from TB-220. The vertical distribution of ETPH across soil samples collected from multiple depths at single boring locations confirmed that TPH/ETPH impacts were found within the top 4 or 5 ftbgs. PCBs were detected in three of the five surface soil samples collected, and ranged in concentration from 1-3 mg/kg.

Investigations of the Site by AEI between 2001 and 2008 largely focused on the evaluation and delineation of PCBs in various media. As such, sample data generated during this time consists primarily of PCB analytical results. AOC-8 encompasses AEI PCB Area 5.7.

AEI collected 17 asphalt samples, identified as 5AS-020, 5TB-060 through 5TB-064, 5TB-066, 5TB-067, 5TB-154 through 5TB-157, 5TB-160 through 5TB-163, 5TB-227 and 5AS-020. According to analytical results, 5 of the asphalt samples had concentrations of PCBs ≥1 mg/kg but <10 mg/kg.

A total of 160 soil samples were collected from 45 separate locations during AEI's investigations of the Site. Analytical results for these samples indicate that high concentrations of PCBs were detected in soil immediately behind (i.e., on the northern side of) the southern

bulkhead. Soil samples 5HA-054, 5HA-057, 5HA-058, 5HA-059, 5HA-144, and 5HA-232 exhibited PCB concentrations ≥10 mg/kg. In the case of soil samples 5HA-058, 5HA-059, 5HA-144, and 5HA-232, PCB concentrations were >50 mg/kg and were some of the highest concentrations of PCBs (190 mg/kg – 13,000 mg/kg) detected in soil in the southern portion of the Site. In the vicinity of the highest PCB concentrations, the vertical extent of impacts was not well delineated. HRP's 2015 Section 4 Report (HRP, 2015) indicated that the areas around sample locations 5HA-058 and 5HA-059 and locations 5HA-144 and 5HA-232 would be classified as SEHs based on the historical concentrations of PCBs in these areas.

Outside of the bulkhead area, several soil samples collected from throughout AOC-8 exhibited concentrations >1 mg/kg but <10 mg/kg and were generally shallow (i.e. the top 2-3 feet of soil). One soil sample collected from TB-EEEEEE exhibited a PCB concentration of 42 mg/kg and was reportedly collected from a depth of 0.3-2.3 ftbgs. Deeper samples collected from the same location had PCB concentrations >1 mg/kg but <10 mg/kg.

AEI collected a number of sediment samples from a number of structures within AOC-8 including 4 samples collected from within the fuel oil piping trench (identified as 5SD-003 through 5SD-005 and 5SD-008), 1 sample from a catch basin identified as CB-05, and 1 sample (identified as 5SD-006) from a sump located along the western wall of the AST containment dike identified as "Sump 3". Neither the catch basin sample nor the sump sample exhibited PCB concentrations >1 mg/kg. However, all four of the sediment samples collected from the pipe trench exhibited PCB concentrations >1 mg/kg. Sediment samples 5SD-003 and 5SD-004 had PCB concentrations <10 mg/kg and in sample 5SD-004 PCBs were detected at 130 mg/kg.

AEI collected concrete samples from a number of structures located within AOC-8 during their investigations of the Site as follows:

- 12 concrete samples, identified as 5CO-168 through 5CO-175 and 5CO-505 through 5CO-508, were collected from the containment dike in which the former 50,000-gallon No. 6 fuel oil AST was situated (identified as "EN09" on AEI drawings);

- 6 concrete samples, identified as 5CO-162 through 5CO-167, were collected from the containment dike that formerly held the two 5,000-gallon No. 2 fuel oil ASTs;

- 4 concrete samples, identified as 5CO-114 through 5CO-117, were collected from the pre-fabricated concrete panels that cover the fuel oil piping trench; and

- 1 concrete sample, identified as 5CO-110, was collected from a pad identified as "P25" on AEI drawings.

PCB concentrations >1 mg/kg were not detected in the concrete samples described above.

As part of their 2014/2015 investigation of the Site, HRP collected 28 soil samples from 11 boring locations across AOC-8 (HRP, 2015). Generally, shallow (0-0.5 ftbgs), intermediate (1-2 ftbgs) and deeper (3-4 ftbgs) soil samples were collected from each boring location and analyzed for PCBs. PCBs were detected in 8 of the 28 soil samples collected. Of the 8 soil samples that exhibited detectable concentrations of PCBs, only soil sample SB-092914-97A (0-0.5 ftbgs) exhibited PCB concentrations >1 mg/kg. Historic sample locations associated with AOC-8 are depicted on Figure 4-10.

4.1.12 AOC-9 Transformer Areas (Includes PCB Areas 3.3, 4.1 and 4.3)

GEI noted several known and suspected PCB-containing equipment during their 1998 Phase I ESA of the Site (GEI 1998a):

- **Exterior Courtyard, Southwest Portion of English Station:** This area included two transformers (identified as 7A TFX and 37A TXF) situated atop a stone-filled base. These transformers were located along the southern exterior wall, outside of the Screen House. The transformers had green labels indicating a PCB content of less than 1.0 ppm. Also identified in this area was a capacitor bank (identified as Capacitor Bank 524) within a fenced enclosure with a gravel base. In later reports by AEI and others, the capacitor bank at this location is referred to as "Capacitor Bank #4." This capacitor bank and Capacitor Banks 1, 2 and 3 are discussed under Section 4.1.6 of this plan.

- **Along Western Exterior Wall of English Station:** Three pad-mounted transformers (identified as Service Transformers #1, 2, and 3) reportedly associated with the low-pressure boiler system were observed in this area by GEI. All three transformers were affixed with blue labels indicating PCB concentrations less than 50 ppm. Some staining on the transformer exteriors was noted.

- **Northwest Corner of English Station:** One large, pad-mounted transformer (Transformer "G"), situated above a concrete containment dike. The large transformer was affixed with a blue label indicating PCB concentrations less than 50 ppm. A tank associated with the transformer was labeled as containing less than 1.0 ppm PCBs. No staining or evidence of a release was noted. Two circuit breakers were also present in this area and were affixed with green labels,

indicating PCB concentrations less than 1.0 ppm. Both circuit breakers were located within a concrete containment dike.

- **English Station Interior, First Floor:** Five pad-mounted transformers reportedly containing "pure PCB oil" were observed by GEI inside English Station. The transformers were reportedly located within a bermed concrete area, with no evidence of releases noted.

- **Southern Portion of Coal Handling Area:** Three capacitor banks were observed in this area: two of the capacitor banks were reportedly located in a single enclosure at one location; a single capacitor bank was observed in another enclosure; and a third enclosure was observed to be empty. Tags on the capacitors reportedly indicated "No PCBs." In later reports by AEI and others, these capacitor banks are identified as Capacitor Banks 1, 2 and 3. Capacitor Banks 1, 2 and 3 are discussed under Section 4.1.6 of this plan.

- **Bulkhead, Western, Southern and Eastern Sides:** Three cathodic protection relays were observed by GEI along the western, southern and eastern sides of the bulkhead. According to the GEI report, two of the relays were affixed with blue labels, indicating PCB concentrations less than 50 mg/kg. The third relay was affixed with a green label, indicating PCB concentrations less than 1.0 mg/kg.

As noted previously, capacitors initially identified by GEI were subsequently broken out into separate AOCs and PCB Areas and, therefore, will not be discussed in this section. Transformer locations were further refined by AEI during their investigations of the Site, resulting in the addition of the following PCB Areas, which are discussed here:

- PCB Area 3.3 – Northwest Transformer and Capacitor Area;

- PCB Area 4.1 – Former Transformer Area West Side of English Station; and

- PCB Area 4.3 – Transformer and Capacitor Area at Southwest Corner of English Station.

The following discussions present general sample results from each of these areas, followed by discussions of sampling events that were focused on specific features, such as concrete enclosures and pads located in the areas. Historic sample locations within AOC-9/PCB Area 3.3 are shown on Figures 4-11, 4-11A, and 4-11B.

4.1.12.1 AOC-9 (PCB Area 3.3 - Northwest Transformer Area)

Several soil borings were completed after the remediation of soils in AOC-5 by UI during bulkhead repair activities. Soil samples collected from the borings were reportedly analyzed by UI. Multiple soil samples were collected from the boring locations and analyzed for PCBs only. Several of the post-remediation soil samples were collected from borings drilled in within the AOC-9 / PCB Area 3.3 portion of the Site are discussed here. A total of 8 soil borings, identified as GP-01 through GP-04, GP-09, GP-10, GP-11 and GP-15 were advanced in this area of the Site. Soil samples collected from GP-01, GP-02, GP-04 and GP-15 exhibited PCB concentration >1 mg/kg but <10 mg/kg. The soil samples exhibiting these concentrations were generally collected from depths of 8 to 12 ftbgs.

During their 2015 investigation of the Site, HRP collected soil samples from 28 locations within PCB Area 3.3 (HRP, 2015). Generally, shallow (0-0.5 ftbgs), intermediate (1-2 ftbgs) and deeper (3-4 ftbgs) soil samples were collected from each boring location and analyzed for PCBs. Soil samples collected from locations SB-091714-10, SB-091714-11, SB-091714-13, SB-091714-14 and SB-091714-16 exhibited PCB concentrations >1 mg/kg. The detected concentration of PCBs in a soil sample from SB-091714-16 was 13 mg/kg.

Within PCB Area 3.3, AEI collected 4 concrete (3CO-182 through 3CO-185) and 2 asphalt (3AS-40 and 3AS-41) samples from pad P22. None of the concrete or asphalt samples collected from P22 exhibited detectable concentrations of PCBs. AEI collected shallow (i.e. 0-2 ftbgs) soil samples from 5 locations within PCB Area 3.3, identified as 3GP-254, 3HA-114, 3HA-115, 3HA-116 and 3HA-231. PCBs were detected at locations 3GP-254, 3HA-115 and 3HA-231 at concentrations >1 mg/kg. At 3HA-115, PCBs were detected at 11.3 mg/kg. AEI collected deeper (i.e. 3-7 ftbgs) at locations TB-AAA and TB-BBB. PCBs at a concentration of 15 mg/kg were detected in soil sample collected from a depth of 5-7 ftbgs at TB-BBB. Analysis on deeper soil samples from this same boring did not exhibit detectable concentrations of PCBs. GEI collected a soil sample during installation of monitoring well MW-12, in AOC-9. Analytical results indicate that PCBs were not detected above 1 mg/kg. Sample locations at and around P22 are shown on Figure 4-11.

GEI collected a sediment sample (PCB-06) from a sump located within a structure later identified as Enclosure EN02 by AEI. The EN02 designation has been retained for this plan. Both

TPH (9,091 mg/kg) and PCBs (4.0 mg/kg) were detected in PCB-06. Later investigation of EN02 by AEI involved the collection of 29 concrete samples identified as TXP1-A1 through A5, TXP1-B1 through B5, TXP1-C1 through C5, TXP1-D1 through D4, TXP1-E1 through E5, and TXP1-F1 through F-5. Based on sample locations documented by AEI, it appears that the concrete samples collected from EN02 were collected on a 5-foot sampling grid. AEI also collected 4 wipe samples identified as TXFP-1 through 4 from an elevated steel deck atop EN02. Based on the analytical results for the AEI concrete samples, 13 of the 29 concrete samples exhibited PCB concentrations >1 mg/kg by <10 mg/kg. PCBs were not detected in any of the wipe samples. Sample locations collected from EN02 by GEI and AEI are shown on Figure 4-11A.

During their investigation of the Site, GEI collected a sediment sample (PCB-5) from within the concrete containment tub around Transformer G. AEI later refers to this concrete containment tub as Enclosure EN03, and that designation is retained in this plan. TPH was detected in PCB-5, at a concentration of 165 mg/kg. No PCBs were detected in sample PCB-5. Later investigation by AEI at EN03 focused on PCBs and included the collection of 25 concrete samples, identified as 3CO-041 through 3CO-064 and 3CO-503; 6 wipe samples, identified as 3HX-001 through 3HX-006; and 1 sediment sample, identified as 3SD-001. The concrete samples were collected from areas within the concrete containment surrounding Transformer G, the pedestal on which Transformer G is situated, and from the concrete containment area around the two circuit breakers in the eastern side of the containment. All 6 wipe samples were collected from the side of transformer G where staining was observed. Sediment sample 3SD-001 was collected from the western side of the enclosure, where accumulated sediment was observed. Of all the samples collected by AEI from EN03, PCBs were detected at 3SD-001 only, at a concentration of 2.6 mg/kg. Samples collected from EN03 by both GEI and AEI are shown on Figure 4-11B.

Concrete samples identified as 3CO-076 and 3CO-077 were collected by AEI from two smaller concrete structures identified as P20 and P21 in this area. Sample results indicate that PCBs were not detected above the reporting limit of 0.5 ppm in either of the samples.

4.1.12.2 AOC-9 (PCB Area 4.1 - Former Transformer Area on West Side of English Station)

This portion of the Site was referred to by GEI as the Western Transformer Yard. In this area, GEI collected 9 soil samples, identified as PCB-3, PCB-4, PCB-7 through PCB-10 and PCB-33 through PCB-35 (GEI, 1998b). PCBs and TPH were detected in soil sample PCB-9 concentrations of 1.0 ppm and 32 mg/kg, respectively. PCBs were not detected above the reporting limit of 1 ppm in any of the other soil samples GEI collected from this area at that time. Elevated concentrations of TPH were detected at soil sampling locations PCB-3 (9,203 mg/kg), PCB-4 (11,235 mg/kg) and PCB-7 (600 mg/kg) in the Western Transformer Yard.

During their investigation of AOC-9 / PCB Area 4.1, AEI collected asphalt samples from 17 locations, identified as 4AS-18, 4AS-19, 4AS-42 through 4AS-52, 4GP-245, 4HA-145, 4TB-210, and 4TB-218. PCBs were detected at concentrations >1 mg/kg but <10 in only 3 samples.

AEI collected soil samples from 36 locations across PCB Area 4.1. High concentrations of PCBs >50 mg/kg were detected at locations 4GP-246, 4HA-089, 4HA-124, 4HA-129, 4HA-505 and 4HA-512. The highest concentration of PCBs in these samples was detected in a sample collected from 4-6 ftbgs at 4GP-246 (700 mg/kg). Soil samples exhibiting PCB concentrations >10 mg/kg but <50 mg/kg included 4HA-088, 4HA-90, 4HA-125, 4HA-128 and 4HA-145. Soil samples exhibiting PCB concentrations >1 mg/kg but <10 mg/kg included 4GP-245, 4HA-086, 4HA-087, 4HA-121 through 4HA-123, 4HA-126, 4HA-127, 4HA-513, 4TB-091, 4TB-208, 4TB-209 and 4TB-211 through 4TB-214. Historic sampling locations within AOC-9/PCB Area 4.1 are shown on Figure 4-12.

During their 2014 investigation of the Site, HRP collected soil samples from 13 locations within PCB Area 4.1 (HRP, 2015). Generally, shallow (0-0.5 ftbgs), intermediate (1-2 ftbgs) and deeper (3-4 ftbgs) soil samples were collected from each boring location and analyzed for PCBs. Forty five asphalt samples were collected. A single asphalt sample collected from location SB-091914-36 exhibited PCB concentrations >1 mg/kg. All other samples were found to be <1 mg/kg PCBs.

Limited concrete sample was completed by AEI within PCB Area 4.1, and focused on a concrete structure identified as Enclosure EN04. AEI collected 6 concrete samples from this

structure, 4CO-078 through 4CO-081 and TXFP2-1 and TXFP2-2. PCBs were detected in sample TXFP2-1 only at a concentration of 8.1 mg/kg.

4.1.12.3 AOC-9 (PCB Area 4.3 – Southwest Transformer and Former Capacitor Area)

GEI collected three soil samples (PCB-02, PCB-20 and PCB-21) and one concrete sample (CS-6) in the vicinity of Capacitor Bank 4 during their Phase II/III investigation. PCBs were detected in soil sample PCB-02 at a concentration of 2,300 mg/kg. PCBs were not detected above 1 ppm in the other two soil samples or concrete sample (GEI, 1998b.). No additional samples were collected from Capacitor Bank No. 4 during GEI's 2000 Supplemental Field Investigation, reportedly due to the presence of underground utilities. Later sampling by AEI in 2004 in PCB Area 4.3 confirmed that the presence of high concentrations of PCBs adjacent to Capacitor Bank 4 were high enough to trigger notification to CTDEEP that the area qualified as a SEH. Historic sample locations within AOC-9/PCB Area 4.3 are shown on Figure 4-13. Historic sample locations around Capacitor Bank 4 are shown on Figure 4-13A.

GEI collected soil samples PCB-1, PCB-31 and PCB-32 from the containment tub in which transformers 7A TFX and 37A TXF were formerly located. This structure was later identified as Enclosure EN05 by AEI during their investigations of PCB Area 4.3. The EN05 designation will be maintained for this plan. All three samples exhibited PCB concentrations ranging from 53 mg/kg to 440 mg/kg. A low concentration (120 mg/kg) of TPH was also detected in soil sample PCB-32. GEI later collected another soil sample (HA-1) from EN05 and that sample exhibited a PCB concentration of 29 mg/kg. AEI collected soil samples from location 4HA-511 and confirmed the high concentrations initially identified by GEI within EN05. The detected concentrations of PCBs inside EN05 were high enough to consider this area a SEH. Soil samples collected by AEI at 4HA-511 exhibited PCB concentrations ranging from 130 to 1,100 mg/kg. AEI collected three concrete sample from along the wall of English Station, behind the two transformers at this location. PCBs were not detected above 0.5 ppm in any of the three samples. AEI also collected 6 wipe samples (4HX-08 through 4HX-13) from the two transformers. Analytical results from a wipe sample (4HX-11) collected from transformer 37A indicated PCBs were detected at a concentration of 120 µg/100 cm^2. PCBs were also detected, though at a much

lower concentration (7.9 µg/100 cm^2) in wipe sample 4HX-09 collected from transformer 7A. Sample locations for EN05 are shown on Figure 4-13B.

Outside of structure EN05, GEI collected soil samples from locations identified as TB-115, TB-116, TB-214 and TB-215. PCBs were detected in soil samples from TB-214 and TB-215, at concentrations >1 mg/kg but <10 mg/kg. AEI collected soil samples from 28 locations during their investigation of AOC-9 / PCB Area 4.3. Soil samples collected from locations 4GP-247, 4TB-068 through 4TB-075, 4TB-079, 4TB-83, 4TB-146, 4TB-148, 4TB-150, and 4TB-152 exhibited PCB concentrations >1 mg/kg but <10 mg/kg. Soil samples 4TB-076 through 4TB-078 and 4TB-082 exhibited PCB concentrations >10 mg/kg but <50 mg/kg. Soil sample 4GP-248 was the only sample outside of enclosure EN05 to exhibit a PCB concentration >50 mg/kg. Soil sample locations for AOC-9 / PCB Area 4.3 are shown on Figure 4-13.

During their 2015 investigation of the Site, HRP collected soil samples from 26 locations within PCB Area 4.3 (HRP, 2015). Generally, shallow (0-0.5 ftbgs), intermediate (1-2 ftbgs) and deeper (3-4 ftbgs) soil samples were collected from each boring location and analyzed for PCBs. Soil samples collected from locations SB-092314-58, SB-092314-61, SB-092414-66, SB-092414-68, SB-092414-69, SB-092414-73 and SB-092414-74 exhibited PCB concentrations >1 mg/kg but <10 mg/kg.

Other structures that were sampled during investigation of AOC-9 / PCB Area 4.3 include concrete pads identified as P15, P13A and P13B. AEI collected two concrete samples, identified as 4CO-124 and 4CO-125 from pad P15. PCBs were not detected above 0.5 ppm in either sample. AEI collected 17 concrete samples, identified as 4CO-113 and 4CO-132 through 4CO-147, from pad P13A. Of the 17 samples, PCBs were detected in one sample, 4CO-113, at a concentration of 1.6 mg/kg. Sample locations at pad P13A are shown on Figure 4.13C. AEI collected 5 concrete samples, identified as 4CO-119 to 4CO-123, from pad P13B. PCBs were not detected at concentrations above 1.0 mg/kg in any of the samples collected from P13B.

4.1.13 AOC-10 Former Interior Chemical Storage Areas Excluding English Station (Includes the Foam House and PCB Areas 4.2 and 4.4)

Although interior chemical storage within English Station and the adjacent buildings was identified by GEI during their Phase I ESA of the Site (GEI, 1998a), very little significant investigation with respect to releases has been completed within the interior chemical storage areas

in the Plant. Previous investigations of AOC 10 focused on the exterior investigation of interior releases that potentially had reached the exterior of the building. Consistent with the previous investigations, and given the current conditions present inside English Station and the lack of historical interior data, AOC-10 covers the out-buildings located along the western side of the Plant, including the Storage Building (PCB Area 4.2) and the Assembly Hall (PCB Area 4.4). The interior of English Station is discussed in more detail in Section 4.1.16.

The Storage Building is comprised of five individual rooms (identified as Rooms 1 through 5). AEI collected 16 concrete samples from the floor of the Storage Building. Concrete samples 4CO-082 through 4CO-091 were collected from Room 5. All but 2 of the 10 samples contained PCB concentrations above 1.0 mg/kg. The highest PCB concentrations detected in Room 5 were at sample locations 4CO-084 (94 mg/kg) and 4CO-085 (17 mg/kg). Samples collected from Rooms 1, 2, 3 and 4 all exhibited PCB concentrations above 1.0 mg/kg, and in the case of Rooms 1, 3 and 5, several samples exhibited concentrations of PCBs >50 mg/kg. The highest detected concentrations of PCBs were found in samples 4CO-157 (36,000 mg/kg) collected from Room 3, 4CO-161 (4,900 mg/kg) collected from Room 1.

In addition to the concrete samples collected from within the Storage Building, AEI collected several soil samples outside of the building along its southern and western sides. Soil samples 4HA-512, 4HA-505 and 4GP-246 collected from the south side of the building exhibited the highest concentrations of PCBs (67-9,200 mg/kg). The detected concentrations of PCBs in soil along the southern side of the Storage Building are high enough to classify these areas as SEHs. Soil Sample 4HA-513, the only soil sample collected on the west side of the building, exhibited a relatively low concentration of PCBs at 3.4 mg/kg. Sample locations for the Storage Building are depicted in Figure 4-14.

Eleven concrete samples were collected from the Assembly Hall building. PCBs were detected in 3 of the 11 samples collected at concentrations >1 mg/kg but <10 mg/kg. The three samples were collected in a storage room and bathroom located in the southern portion of the building. Sample locations for the Assembly Hall are depicted in Figure 4-15.

AOC-10 includes a small structure on the southern portion of the Site identified as the Foam House. To date, only limited wipe sampling has occurred inside this structure, with no PCBs having been detected. Sample locations in and around this structure are shown on Figure 4-10.

4.1.14 AOC-11 On-Site Fill Material

As indicated in Section 2.3.1, Ball Island, on which Station B and English Station were constructed, is a man-made island in the middle of the Mill River. As such, the subsurface materials from the ground surface to a maximum depth of up to approximately 20 feet below grade are comprised entirely of fill materials. Specifically, the fill materials were derived from dredging the Mill River (primarily from 1900 through the late 1930s, although on a more limited basis in later years as well) to maintain navigable shipping channels (AEI, 2003). As indicated in GEI's 1998 Phase II/III investigation report, the surficial fill materials underlying the Site are a combination of granular materials to moderately dense, slightly plastic silty clay. Cross-sections prepared by AEI as part of the 2003 Request for Widespread Polluted Fill corroborate this physical characterization of the fill. Specifically, the materials are reported by AEI to consist of coal dust/fragments (in the area of the former coal storage yard, AOC 12, as discussed in the next sections), a limited amount of cinders, some concrete and construction debris fragments, silt/sand/gravel mixtures, and silt and very fine sand mixtures overlying the organic silt of the marsh and tidal flats on which the island was created.

Over the course of the investigations of the Site, it was determined that PAHs, ETPH and metals are inherent to the fill material (although present in the fill material, PCBs are the result of releases to the fill). Likewise, the fill itself does not contain VOCs; any VOCs detected are the result of a release to the fill material. According to historical information presented in support of their request for the CTDEEP to grant a widespread polluted fill variance, AEI indicated that the Mill River bottom sediments that were ultimately dredged and used for creation of the island were heavily impacted by wastes from local industries discharging into the river. Specifically, AEI noted the presence of a manufactured gas plant adjacent to the site to the southwest, from which wastes had emanated historically, along with paper manufacturing and metal-works wastes from other industries formerly lining the river banks. Further, AEI went on to note that due to the tidal influence in the Mill River, sediments that were ultimately dredged would have been subject to transport both upstream and downstream under the various hydraulic scenarios (AEI, 2003).

By 2003, when AEI prepared the request for the widespread polluted fill variance for the Site, over 200 soil borings had been drilled on the Site and hundreds of soil samples analyzed for a variety of potential contaminants. Of particular note are soil samples that underwent a forensic

evaluation by Battelle in 2002 to evaluate the nature of the petroleum hydrocarbons found in the fill materials, such that there could be a determination made as to whether they were inherent to the fill or the result of a release to the fill. Specifically, groups of soil samples from the northern portion of the Site were evaluated separately from soil samples collected from the southern portion of the Site (by petrographic means and an expanded PAH analysis / "fingerprinting"). Although not specifically stated in either Battelle report prepared to document the forensic evaluation findings (Battelle, 2002a and Battelle, 2002b), it is likely that the samples from the northern portion of the Site were evaluated separately from those from the southern portion of the Site based on the expansion of the island over time to accommodate the building of English Station and its later addition and thus the different ages of the dredged material in the two areas.

The findings of the evaluation, as documented in two reports published by Battelle in 2002 and as summarized in AEI's 2003 request, indicated that in the majority of both sections of the Site, the petroleum hydrocarbons detected in the fill were not derived from releases of oil (distillate or residual); rather, they were associated with coal tar pitch or residuals associated with coal tar gasification. Battelle concluded that these contaminants came primarily from the river bottom dredge spoils, with the following exceptions. Battelle identified petroleum hydrocarbons consistent with what they characterized as small petroleum spills in the southeastern, southwestern and northwestern corners of the Site. In addition to the petroleum hydrocarbons inherent in the fill materials, Battelle's findings indicated the presence of coal-related constituents (primarily arsenic and PAHs) in the fill in the area of the former coal storage area (AEI, 2003; Battelle, 2002a and Battelle, 2003b).

4.1.15 AOC-12 Former Coal Storage Yard (Includes PCB Areas 3.2 and 6.1)

Portions of AOC-12 including PCB Areas 2.1, 2.2, and 6.1 are discussed in Section 4.1.4 of this Plan, along with other Site AOCs that are located on Parcel A.

4.1.15.1 AOC-12W (PCB Area 3.2 – Area Adjacent to PCB Bulkhead Remediation)

In PCB Area 3.2, AEI established a 10-foot sampling grid to further delineate PCB contaminated soil in the southwest corner of the coal yard, outside of the Bulkhead PCB

Remediation Area. Subsequent to the bulkhead remediation, soil sampling by Enviroshield had identified the presence of soil within PCB Area 3.2, with PCB concentrations >10 mg/kg.

During their investigation of the Site, AEI collected over 300 soil samples and identified an extensive area of soil exhibiting PCB concentrations >1 mg/kg but generally <10 mg/kg in the southwest portion of the former coal yard, between Tracks A and B. AEI also oversaw removal of a portion of soil north of Track A that was excavated to approximately 6 ftbgs, below the water table, and further excavated in its westernmost reach to 7.5 ftbgs. Verification samples collected on a 5-ft grid, with perimeter samples of the asphalt surface, were analyzed for PCBs on a dry weight basis. Verification sample results indicated that PCB concentrations in the soil samples were below the remedial goal of 10 mg/kg. The excavation was backfilled with clean fill from off site; however, a cap was not installed over the excavated area. Based on the results of the verification soil sampling in the vicinity of the excavation and the results for soil samples collected from numerous borings to the northeast of the excavation area, soil with PCB concentrations >1 mg/kg but <10 mg/kg remains in this area. Historic sample locations and past excavation limits are shown on Figure 4-16.

4.1.15.2 AOC-12E (PCB Area 6.2 – Mill River East Branch Area)

Early investigation of the area of the Site later identified as AOC-12E attributed the regular detections of metals and PAHs to the widespread presence of fill across the Site and to former coal handling operations. Subsequent investigations completed within AOC-12E by AEI and others have identified the presence of PAHs and metals at concentrations above the I/C DEC across most of the area. In addition, ETPH was detected in a single shallow (0-2 ftbgs) soil sample collected from a boring identified as TB-X by AEI during their investigation of AOC-12E. The detected concentration of ETPH at this location was above the I/C DEC. The location of this area is depicted on Figure 4-17.

While PAHs and metals are widespread throughout AOC-12E, PCBs are generally absent, with the exception of an area to the immediate north of English Station. In 2012, GeoQuest completed an investigation of AOC-12E (PCB Area 6.2) that included the collection of soil samples from the entire length of the paved access road, from the Site gate along Grand Avenue to the main entrance to English Station. PCB concentrations detected in the samples collected

along the access road were below 1.0 mg/kg. However, PCBs were detected at concentrations >50 mg/kg in a number of soil samples (identified as EXT-13A, B, D, F G, J, W, X) collected from in front of English Station during the same GeoQuest investigation. Several of the detected concentrations were high enough to qualify as a SEH. Samples collected by GeoQuest in 2012 are shown on Figures 4-2A and 4-18.

4.1.16 AOC-13 Former Wastewater Treatment System (Includes PCB Areas 5.1 and 5.2)

According to the 1998 Phase I by GEI (GEI, 1998a), a former wastewater treatment system was located in the southeastern portion of the Site. Remnants of the treatment system, including concrete pads and a below grade pumping station, were observed by GEI during the Phase I. Only limited investigation of this area was completed by GEI during their 1998 Phase II/III investigation of the Site (GEI, 1998b), and no significant levels of contamination were identified. Historic sample locations within AOC-13/PCB Areas 5.1 and 5.2 are shown on Figure 4-19.

During AEI's investigation of the Site, they split AOC-13 into two PCB Areas as follows:

- PCB Area 5.1 – Former Dumpster Area; and
- PCB Area 5.2 – Former Wastewater Treatment Area.

4.1.16.1 AOC-13 (PCB Area 5.1 - Former Dumpster Area)

Three concrete structures identified as having been used to stage waste dumpsters are located on the eastern side of English Station and were identified by AEI as P01A, P01B, and P01C. AEI collected 6 concrete samples from P01A, identified as 5CO-001 through 5CO-006. All six samples were found to have PCB concentrations >10 mg/kg. Samples 5CO-001, 5CO-003, 5CO-005 and 5CO-006 exhibited PCB concentrations >50 mg/kg.

Five concrete samples, identified as 5CO-007 through 5CO-010 and 5CO-501 were collected from P01B. All five samples were found to have PCB concentrations >1 mg/kg. Concrete samples 5CO-008 and 5CO-009 exhibited PCB concentrations >10 mg/kg but <50 mg/kg.

Two concrete samples, identified as 5CO-011 and 5CO-012 were collected from P01C. PCBs were not detected above 0.5 ppm in either of these two samples. The locations of all concrete samples collected from P01A, P01B and P01C are shown on Figure 4-19A.

Outside of the concrete pads, AEI collected asphalt samples from 17 boring locations identified as 5TB-001 through 5TB-011 and 5TB-175 through 5TB-180. PCBs were detected at concentrations >1 mg/kg but <10 mg/kg at locations 5TB-004, 5TB-006 through 5TB-011.

AEI collected 72 soil samples from 20 boring locations across PCB Area 5.1. Generally, soils were sampled to a maximum depth of approximately 6 ftbgs. Of the 72 soil samples collected, PCBs were detected in soil samples collected from 3 locations: 5TB-005, 5TB-011 and TB-WWWWW. The detected concentrations of PCBs in samples 5TB-005 and 5TB-011 were >1 mg/kg but <10 mg/kg. The detected concentration of PCBs in sample TB-WWWWW (53 mg/kg) was >50 mg/kg. All of the soil samples that exhibited detectable concentrations of PCBs were collected from the top 5 feet of soil.

During their 2015 investigation of the Site, HRP collected soil samples from 9 locations within PCB Area 5.1 (HRP, 2015). Generally, shallow (0-0.5 ftbgs), intermediate (1-2 ftbgs) and deeper (3-4 ftbgs) soil samples were collected from each boring location and analyzed for PCBs. Select soil samples were also analyzed for ETPH, SPLP ETPH, and VOCs. Soil samples collected from locations SB-111914-130 and SB-111914-134 and an asphalt sample collected from SB-111914-135 exhibited PCB concentrations >1 mg/kg but <10 mg/kg. Elevated concentrations of ETPH were also detected in soil samples collected from SB-111814-130 (2,800 mg/kg). Historic sample locations within AOC-13/PCB Area 5.1 are shown on Figure 4-19.

4.1.16.2 AOC-13 (PCB Area 5.2–Former Wastewater Treatment System Area)

Two concrete structures identified by AEI as P02 and P04 are located with PCB Area 5.2. Six concrete samples, identified as 5CO-013 through 5CO-018 were collected from P02 and analyzed for PCBs. None of the concrete samples collected from P02 exhibited detectable concentrations of PCBs. 17 asphalt samples, identified as 5AS-014 through 5AS-016 and 5AS-026 through 5AS-039, and two concrete samples identified as 5AS-016 and 5AS-039 were collected from P04. Of the 17 asphalt samples collected, samples 5AS-016, 5AS-029 through 5AS-031, and 5AS-035 exhibited PCB concentrations >1 mg/kg but <10 mg/kg. Neither of the two concrete samples exhibited detectable concentrations of PCBs. Sample locations for structures P02 and P04 are shown on Figure 4-19B.

A sediment sample, 5SD-007, was collected from a structure identified by AEI as Sump 4. PCBs were detected in this sample at a concentration of 1.8 mg/kg. A sludge sample, SEPTIC EAST, was collected by AEI from a structure identified as Septic East within PCB Area 5.2. No PCBs were detected in the sludge sample collected from this structure. Sediment and sludge sample locations are shown on Figure 4.19.

Asphalt samples were collected from 9 locations, identified as 5AS-023 through 5AS-026, 5GP-038, 5TB-013, 5TB-014, 5TB-220 and 5TB-225. The asphalt samples collected from 5TB-014 and 5TB-220 exhibited concentrations of PCBs >1 mg/kg but <10 mg/kg. None of the other asphalt samples exhibited detectable concentrations of PCBs.

A total of 44 soil samples were collected by AEI from 13 locations across PCB Area 5.2. Soil sampling locations within PCB Area 5.2 include 5GP-026, 5GP-038, 5HA-141 through 5HA-143, 5TB-012 through 5TB-014, 5TB-220 and 5TB-225, TB-PPPPP, TB-YYYYY and TB-ZZZZZ. Soil samples collected from 5GP-026, 5GP-038, 5HA-141, 5HA-142, 5TB-014 and 5TB-220 exhibited PCB concentrations above 1 mg/kg. Soil samples from locations 5HA-141, 5HA-142 and 5TB-014 exhibited PCB concentrations >10 mg/kg but <50 mg/kg. These soil samples were generally shallow, with the maximum sample depth being approximately 4 ftbgs.

During their 2015 investigation of the Site, HRP collected soil samples from 3 locations, identified as SB-111814-126, SB-111814-127, and SB-111814-128, within PCB Area 5.2 (HRP, 2015). Generally, shallow (0-0.5 ftbgs), intermediate (1-2 ftbgs) and deeper (3-4 ftbgs) soil samples were collected from each boring location and analyzed for PCBs. Select soil samples were also analyzed for ETPH, SPLP ETPH, and VOCs. PCBs at a concentration of 1.2 mg/kg and ETPH at a concentration of 10,000 mg/kg were detected in a deep (i.e. 13-15 ftbgs) soil sample collected from location SB-111814-127. Soil samples collected from the other two locations within PCB Area 5.2 contained low concentrations of ETPH (100-200 mg/kg) and no detectable levels of PCBs. Asphalt and soil sample locations for PCB Area 5.2 are shown on Figure 4-19.

4.1.17 AOC-15 Oil Stained Area North of English Station / Release to Catch Basin 4

During a visit to the Site in August 2014, Partner observed pavement staining beneath an asbestos abatement decon trailer, the asbestos waste trailer, and a supply Connex box. The staining appeared to emanate from the building, but the specific source of the staining and mechanism of

deposition could not be determined at the time (Partner, 2015). The source of the staining was subsequently identified to be leaking drums and oil ASTs in an adjacent "Oil Room" located inside English Station.

When asbestos abatement activities were underway in 2011/2012, Classic Environmental built their asbestos waste "bag-out" unit at the exterior door located in the Oil Room. As a result, Classic Environmental was carrying bagged asbestos waste by hand through the Oil Room to the exterior door, where it was removed from the building and loaded onto the asbestos waste trailer. It is not known if this activity disturbed tanks and containers in the Oil Room and contributed to a release of oil to the floor of the room (Ibid.).

A sediment sample, identified as CB-091514-1, was collected from a nearby catch basin (Catch Basin CB-4) by HRP Associates during their 2014 investigation (HRP, 2015), at the request of CTDEEP. PCBs were measured at <1 mg/kg in that sample; however, ETPH was measured at 160,000 mg/kg. The catch basin is located immediately adjacent to the asbestos waste trailer. The staining leads from the exterior of the Oil Room to the catch basin. HRP also collected soil samples at a location approximately 18 feet northeast of the catch basin (SB-111914-139) in September 2014. PCBs were not detected above the reporting limit 05 0.5 ppm in samples collected at SB-111914-139 from the surface to 4 ftbgs.

Due to the presence of the oil staining and the potential presence of uncontained liquids and/or releases associated with conditions in the Oil Room, the USCG issued Administrative Order 002-14 to the property owner and UI on September 19, 2014. The Order required a response plan to be submitted by September 24, 2014, and commencement of removal actions by September 26, 2014. When this did not happen, the USCG initiated response activities, which included deployment of a 3,000-foot boom around the Site in the Mill River, and removal of free liquid wastes and drummed materials adjacent to the Oil Room.

Historical drawings obtained from UI indicate that Catch Basin CB-4 and two other catch basins beneath the Ash Bunkers along the northern exterior wall of English Station are piped to a discharge point along the eastern side of the Site. Based on the releases in the vicinity of the oil room and Catch Basin CB-4, and the limited data available, this area will need to be evaluated further. The location of the catch basins and their discharge locations are depicted on Figure 4-1. The location of catch basin sample CB-091514-1 is shown on Figure 4-20.

4.1.18 AOC-16 English Station Interior (Includes PCB Area 7)

Limited investigation inside English Station has occurred since it ceased operation in the early 1990's. Several areas inside the building are known (e.g. Oil Storage Room, Oil Pump Room) or suspected (e.g. Machine Shop, Chemical Storage Area) to have used/stored petroleum products and chemicals. Additionally, electrical equipment in various locations of English Station are known or suspected to contain PCB oils. While a thorough evaluation of interior releases at English Station is planned, activities conducted in recent years have left much of the building in disrepair. Most notably, asbestos abatement and demolition activities that were halted as a result of a Cease and Desist Order (refer to Section 2.1.3 for details) have rendered much of the building inaccessible for the purposes of evaluation. Additionally, several areas of the Plant have been found to be structurally unsafe to work in/around. Asbestos abatement, cleanup of demolition debris, and efforts to stabilize certain areas of the Plant are scheduled to occur in advance of any evaluation of releases inside English Station. Evaluation of the interior spaces of English Station will be detailed in a future Addendum to this Plan.

4.1.19 AOC-17 Drainage Structures Associated With/Beneath English Station

As with AOC-16 above, a thorough evaluation of releases and the migration of any such releases via drainage structures beneath English Station is planned. However, a thorough investigation/evaluation of the drainage structures will be deferred until such time as asbestos abatement, cleanup of demolition debris, and efforts to stabilize certain areas of the Plant are completed, as interior drainage structures may currently be hidden by existing debris. Investigation/evaluation of the drainage structures beneath English Station and the migration of possible releases to them will be detailed in a future Addendum to this Plan.

4.1.20 AOC-18 Loading Docks and Overhead Doors

Exterior areas around loading docks and overhead doors associated with the on-site buildings, and particularly English Station, have been evaluated as part of the investigation of other AOCs and PCB Areas. As such, no specific investigative activities for these previously investigated areas are proposed. However, investigation activities proposed for other AOCs and PCB Areas in which loading docks and overhead doors are present but were not previously

investigated will be designed to evaluate potential spills and releases that may have occurred as a result of the handling of petroleum products and chemicals at these locations.

4.1.21 Site-Wide Groundwater Conditions

Groundwater beneath the Site was initially characterized during the 1998 GEI Phase II/II. At that time, 20 overburden monitoring wells were installed across the Site, generally to depths of 15 ftbgs, with three additional deeper monitoring wells (identified with a "D" in the well nomenclature) installed to depths of approximately 40 ftbgs. Monitoring wells installed during GEI's investigation of the Site were identified as MW-01 through MW-07, MW-09A, MW-10, MW-12 through MW-22, MW-04D, MW-14D, and MW-17D. All wells were reportedly constructed of 2-inch diameter polyvinyl chloride (PVC) well screen and riser, and utilized a 0.01-inch slot screen size. Analytical results for groundwater samples obtained as part of GEI's investigation did not exhibit concentrations of PAHs, metals or PCBs above the SWPC or VC numerical values. Low concentrations of VOCs, below RSR numerical criteria, were detected in some of the monitoring wells sampled. During their investigation of the Site, GEI conducted hydraulic conductivity testing and an evaluation of the effects of the tides on Site groundwater. The results of these evaluations are discussed in Section 2.3.2 of this Plan.

At about the same time as GEI's investigation of the Site, Enviroshield was conducting an environmental investigation of an area adjacent to the bulkhead remedial excavation on behalf of UI. As part of their investigation, Enviroshield installed several groundwater monitoring wells to the north of the bulkhead remediation area, including four 4-inch diameter monitoring wells identified as MW-50 through MW-53. All four of these wells were shallow and installed to depths ranging from 7.5 ftbgs to 13 ftbgs. Subsequent sampling of these wells by Enviroshield did not identify the presence of detectable concentrations of PCBs (Enviroshield, 2000).

According to the 2001 Remedial Action Plan (RAP) for the Former Coal Yard Area, AEI installed and sampled an additional 12 groundwater monitoring wells as part of their evaluation of groundwater during their work on the Site in 2001. No other details regarding the new wells were included in the RAP. In AEI's 2002 Site Wide PCB Characterization and Cleanup Plan, specifically Volume 2 - Appendix I, analytical data is presented for groundwater samples collected from wells MW-A, MW-BS, MW-BD, MW-C, MW-D, MW-E, MW-F, MW-G, MW-H, MW-I

MW-J, and MW-K. These appear to correspond to the 12 additional monitoring wells referred to in the earlier AEI RAP. Analytical data is also presented for groundwater samples collected from all 24 previously-installed monitoring wells. According to the laboratory analytical reports for two separate rounds of sampling conducted in 2001 (various dates from May 29, 2001 through July 25, 2001 and from September 11 – 14, 2001) included as Appendix I of the Site Wide PCB Characterization and Cleanup Plan, groundwater samples collected from these wells were analyzed for ETPH, metals, PCBs, VOCs and SVOCs/PAHs. The analytical results from both rounds of sampling are generally consistent and indicate that select metals (including copper, arsenic, lead, selenium and zinc) were present in the groundwater at various well locations in excess of the SWPC. In addition, one or more PAHs were also detected in the groundwater at various locations in excess of the SWPC. There were detections of VOCs noted, however, none of the reported concentrations exceeded the applicable RSR criteria. Most notable, there were no PCBs detected above reporting limits in any of the groundwater samples collected as part of AEI's 2001 sampling events.

As part of their investigation of the Site in 2014/2015, HRP collected a round of groundwater samples from 21 of the existing monitoring wells on the Site, including MW-4S, MW-5, MW-7, MW-9A, MW-12, MW-16, MW-17D, MW-18, MW-19, MW-21, MW-22, MW-A, MW-BD, MW-BS, MW-C, MW-D, MW-E, MW-H, MW-J, MW-K and MW-P. Groundwater samples collected from these wells were reportedly analyzed for VOCs and PCB homologs. Analytical results for the groundwater samples indicate that PCBs were detected in three wells only (MW-16, MW-17 and MW-21), at concentrations below the SWPC. Trace concentrations of VOCs were detected at concentrations below the applicable RSR criteria in monitoring wells MW-12, MW-16, MW-18, and MW-BD.

Historic analytical results for groundwater samples collected from the Site have indicated that ETPH, several metals, VOCs, and SVOCs/PAHs are present at several well locations, generally at levels below the applicable RSR criteria. Although many of the existing wells were sampled by HRP during their work on the Site in 2014/2015, the current condition and viability of the wells is not known. A well condition survey will be required as an initial part of the investigation to determine the need for the installation of additional wells to constitute a proper well network for this Site (see Table 5-1A).

4.2 Presentation of the Conceptual Site Model (CSM) and Data Gap Identification

The CSM is presented in table format in Table 4-1. The CSM was prepared on an AOC-specific basis. For each AOC discussed in Section 4 and, as applicable, for each sub-area (such as PCB Areas), the following information is summarized:

- the known or potential contaminants of concern (COCs);
- the status of known releases to various environmental media (soil, on-site sediment or groundwater);
- known or potential release mechanisms;
- media affected or potentially affected;
- fate and transport considerations; and
- associated data gaps.

5.0 FIELD INVESTIGATION PLAN FOR ENVIRONMENTAL MEDIA

5.1 Approach

The following sections provide a description of the approach that will be used to conduct the Site investigations, including a discussion of data quality objectives, sampling methodologies, and QA/QC procedures. Information on proposed sample locations is provided in Tables 5-1A through 5-1C. Proposed sample locations for each AOC/PCB Area are shown on Figures 5-1 through 5-18.

5.2 Site Preparation and Subsurface Investigation Considerations

In an effort to reduce on- and off-site cross contamination due to personnel and equipment mobilizations, all on-site personnel, subcontractors and equipment that is to be used on the Site will enter and exit the Site from one designated point of access. Prior to the initiation of equipment mobilization activities, polyethylene tracking pads will be secured to the asphalt along the Site access point and in areas of the Site that were identified as SEHs in previous investigations. An investigation-derived waste (IDW) storage area will be established and polyethylene tracking pads will be secured to the asphalt in this area as well. In addition, on-site personnel, subcontractors and equipment mobilizations will be instructed to avoid or cover (polyethylene sheeting) areas of observed surface staining.

A worker and equipment decontamination area will be constructed on the Site, likely in an area between the areas of investigation and IDW storage, and the Site access point. Decontamination procedures are discussed in more detail in Section 5.10.7.

A consideration in the performance of subsurface investigations at the Site is the existing bulkhead system and it structural stability. The entire water edge perimeter of the site is supported by an interlocking steel bulkhead system that varies in design and construction at various locations around the site. The bulkhead was installed in three separate phases starting in 1998, in response to a partial failure of an original wood bulkhead along a portion of the east side of the site. Due to the various designs for the steel bulkhead, excavation and off-site disposal of Site soils was required in some areas to support the installation and support of the bulkhead system. The bottom of the steel sheeting also varies, due to varying structural factors. The bulkhead design can be

generally be broken down into the following categories, with the locations and details for each installation type shown on drawings provided by COWI Marine North America:

1. Drilled soil anchor system consisting of steel wire cable or steel rod, with the anchors extending approximately 100 feet back from the bulkhead face and angled down at a steep angle. The exposed ends of the cable/rod secure a structural steel whaler that runs along the outside of the steel sheet piles in a continuous line several feet below the top of the bulkhead;

2. Concrete relieving platform poured directly along the top of the bulkhead and extending down 6-8 feet and back 10-15 feet from the back of the sheet piles. Anchors for the steel whaler are fastened into the relieving platform. The width of the relieving platforms vary by location, depending upon the interference that was being avoided. Soil was removed and disposed to construct the relieving platforms;

3. Steel rod/wire cable tieback holding the steel whaler and anchored to the original wooden bulkhead concrete deadman. This method was used in an area along the west side where the wood bulkhead collapsed. This area was excavated and the original concrete deadman uncovered. Clean soil was used as backfill within the area excavated;

4. Soldier piles driven to a deeper depth to support the bulkhead in a cantilever fashion with no tiebacks. This method was used along the south face, in the vicinity of the former oil tank; and

5. Horizontally-angled tiebacks extending from two faces of the bulkhead angled with each other. This method was used in the northwest corner along Station B, where the bulkhead is angled.

To maintain the integrity of the bulkhead, all of these various bulkhead support elements will need to be considered when performing the work necessary to collect soil samples, install monitoring wells and perform soil excavation. In particular, soil anchors, tiebacks and deadmen will need to be carefully located in the field to ensure that drilling and sampling activities don't strike these elements. Excavation activities may require engineering design and analysis to ensure protection of bulkhead integrity. In addition to the newer bulkhead system, there are remnants of the original wood bulkhead and its support tieback/deadmen elements that will also interfere with subsurface activities. Damage to these should not impact the newer bulkhead, but may require additional effort to advance borings and excavations to the desired depth where they are encountered.

5.3 Soil Investigation

5.3.1 Data Quality Objectives (DQOs) for Soil Samples

Data collected during the soil investigations are intended to evaluate the current contaminant concentrations for the purpose of creating a soil remedial strategy to complete the requirements of the CO. The number of environmental sampling locations proposed in each AOC was determined based on previously collected soil data and Site observations (i.e., the presence of areas of staining, cracks in asphalt or concrete and low-lying areas), in combination with an evaluation of likely release mechanisms. Based upon the past use of the property and historic generation of hazardous waste, the property was deemed to be an Establishment as defined in the Connecticut Transfer Act Section 22a-134 and thus, is subject to the requirements of the Connecticut RSRs. The overall quality assurance objective for laboratory analysis of soil samples is to provide a laboratory QA/QC program that is sufficient to ensure that data quality objectives are achieved. The data collected from the property will be subjected to the Reasonable Confidence Protocol (RCP) (CTDEEP, 2010b) as well as additional data quality assessment and data usability evaluations conducted in accordance with the CTDEEP's *Laboratory Quality Assurance and Quality Control Data Quality Assessment (DQA) and Data Usability Evaluation (DUE)* (CTDEEP, 2010c).

5.3.2 Soil Sampling Methodology

The soil investigation activities will include the collection of soil samples using several different methods. Surface and/or shallow soil samples will be collected utilizing a hand/bucket auger, while deeper soil samples will be collected by means of direct-push GeoProbe® Macro-Core methods. In addition, in the event that soils samples need to be collected from beneath an area covered by a concrete surface, a concrete coring machine will be utilized to access sub-slab soils.

A hand or bucket auger may be employed for the purpose of collecting surface or shallow soil samples. Hand or bucket auguring is conducted utilizing a four-inch diameter stainless steel auger bucket with cutting heads which are attached to a stainless steel t-handle with extensions (as needed). Auger holes will be advanced one bucket at a time until the appropriate sample depth is achieved. Once the sample depth is reached, the bucket used to advance the hole will be removed

and a decontaminated or clean bucket will be attached, placed in the hole, filled with soil, and then carefully removed. If VOC analysis is to be performed, the associated sample will be collected directly from the bottom of the boring and not from the auger bucket. If not within reach, the sample will be collected directly from the auger bucket or from minimally disturbed material immediately after the auger bucket is emptied.

For the collection of soils from depths greater than that which is practicable with the use of a hand-auger, direct-push sampling methods will engage a GeoProbe® Macro-Core. The Macro-Core sampler is a solid barrel, direct-push sampler equipped with a piston-rod point assembly used primarily for collection of either continuous or depth-discrete subsurface soil samples. A driller will advance the Macro-Core to the desired sample depth, at which time, a discrete sample will be collected from that interval. The Macro-Core will be split open by the driller and the soils contained within will be observed and characterized for amount of recovery, color, grain size, moisture content, odors and stains. All soils will be screened with a PID for volatile vapors being emitted from soils.

Soil samples submitted to the laboratory for VOC analysis will be collected in accordance with EPA Method 5035 and the CTDEEP's *Guidance for Collecting and Preserving Soil and Sediment Samples for Laboratory Determination of VOCs* (February 28, 2006). This method outlines the collection of soil samples (without homogenization and with minimal disturbance) into extraction solvents. Soil samples collected for all other analytical methods will be transferred from the hand-auger or Macro-Core to a dedicated, decontaminated stainless-steel bowl. The soil will then homogenized by mixing with a dedicated, laboratory-decontaminated stainless-steel spoon prior to placement in the appropriate laboratory-supplied sample containers. All samples will be placed on ice in a cooler for delivery to the laboratory under proper chain-of-custody protocols.

5.4 On-Site Sediment Investigation

5.4.1 DQOs for Sediment Samples

Data collected during the sediment investigations are intended to evaluate the current contaminant concentrations in sediments for the purpose of ultimately creating a sediment disposal plan. In the case of this Site, sediments are considered as any sediment-like materials located

within discharge or run-off collection units or bermed areas located on the Site. Sediment samples will be collected from those areas in which sediments are observed. Sediment sample analytical results will be used for waste characterization for waste disposal purposes.

5.4.2 Sediment Sampling Methodology

Sediment samples will be collected by means of a spade, shovel, trowel or scoop. The sediment sampling device will be chosen based on the depth of water at each specific sampling location. Once the appropriate sampling device is chosen, a sediment sample will be collected from a location that is representative of a sediment depositional area or in accordance with the site-specific work plan. Sediments will be characterized based on color, grain size, odors and stains. For sediment samples collected for VOC analysis, the sample will be placed directly into the appropriately preserved VOA vials. An aliquot will also be placed in an unpreserved glass container for moisture content analysis. For samples not being analyzed for VOCs, the sample will be transferred from the sampling device into a decontaminated stainless-steel bowl for homogenization. In the bowl, excess water will be decanted using measures that maintain fine sediments within the sample. Once the sample is homogenized, it will be placed in the appropriate laboratory-provided glassware and placed on ice in a cooler for delivery to the laboratory under proper chain-of-custody protocols.

5.5 Groundwater Investigation

5.5.1 DQOs for Groundwater Samples

Data collected during the groundwater investigation are intended to evaluate the current groundwater contaminant concentrations for the purpose of creating a groundwater remedial strategy to complete the requirements of the PCO. The number of monitoring wells to be installed at the Site as well as the number of groundwater samples to be collected will be based on former groundwater sampling results, spatial site representation and current data gaps. The data collected from the property will be subjected to the CTDEEP RCP as well as additional DQA/DUE conducted in accordance with CTDEEP guidance (CTDEEP, 2010c).

5.5.2 Groundwater Sampling Methodology

Both the installation and sampling of groundwater monitoring wells are described below.

5.5.2.1 Monitoring Well Installation

A number of groundwater monitoring wells were installed on the property during previous environmental investigation activities. As a part of the groundwater investigation program, a monitoring well reconnaissance will be conducted in order to evaluate the integrity of the existing wells and determine which on-site monitoring wells are suitable for use in an updated groundwater monitoring program. Following the reconnaissance, additional monitoring wells will be installed at the Site. Monitoring wells will be installed utilizing a hollow-stem auger drill rig. Well screen and riser lengths may vary for each well. Screen lengths for wells will be a maximum of 10-feet in length. Well riser lengths will be field-determined to accommodate either a flush-mounted or stick-up protective casing. The driller and drilling oversight personnel will maintain accurate written logs of the well construction details.

Once completed, the wells will be developed using a surge block and pump. Fine-grained material around the well screen will be drawn into the well and removed by agitating the well water with a surge block and simultaneously pumping water from the well using a centrifugal suction pump at a low discharge rate. A centrifugal pump outfitted with ASTM drinking water grade polyethylene tubing will be used for removing the water from the well. The polyethylene tubing will be replaced between each well. The dedicated new tubing will be rinsed with deionized water prior to its use. The volume of groundwater extracted from each monitoring well during development will be recorded and the progress of development will be determined by periodically monitoring turbidity. Development will continue until turbidity is 30 nephelometric turbidity units (NTUs) or less. If the 30 NTU criterion is not achievable, a goal of 10% of the turbidity value on successive well volumes will be used.

5.5.2.2 Groundwater Sampling

A period of at least two weeks will elapse between well development and groundwater sampling. Prior to the initiation of sampling activities, the water level in each monitoring well will be measured to the nearest 0.01 ft with an electronic water-sensing device and recorded in a field

notebook. The water level indicator will be decontaminated with deionized water prior to each use, unless visual observations (e.g., oil, odors) indicate additional decontamination is necessary.

Sampling of each well will be completed using a peristaltic pump outfitted with new silicon and polyethylene tubing (dedicated to each location to minimize the potential for cross-contamination) and a properly calibrated multi-parameter monitoring device attached to a flow-through cell. Field parameters, including pH, temperature, specific conductance, dissolved oxygen, turbidity, and oxidation/reduction conditions will be monitored in accordance with low-flow purging and sampling procedures. Once the parameters have stabilized to within the prescribed tolerances on three successive readings recorded at three to five-minute intervals, samples will be collected directly into the appropriate laboratory-supplied containers and placed on ice in a cooler for delivery to the laboratory under proper chain-of-custody protocols.

5.6 On-Site Surface Water Investigation

5.6.1 DQOs for Surface Water Samples

Data collected during the surface water investigation are intended to evaluate the current contaminant concentrations in on-site surface water for the purpose of creating a surface water disposal plan. In the case of this Site, surface waters are considered to be any ponded, pooled or sitting water that has collected in on-site structures that are able to retain water (e.g., former wastewater treatment facility containment area). Surface water samples will be collected in those areas in which sitting water is observed on-site. Surface water analytical results will be used for waste characterization for waste disposal purposes.

5.6.2 Surface Water Sampling Methodology

Surface water samples will be collected utilizing a dip sampler, a peristaltic pump outfitted with dedicated tubing or directly into the laboratory-provided container. If not collected directly into the laboratory-provided container, the collected sample will be poured or pumped into the appropriate laboratory provided container from the sampling device and placed on ice in a cooler for delivery to the laboratory under proper chain-of-custody protocols.

5.7 Concrete Sampling

5.7.1 Data Quality Objectives for Concrete Sampling

A concrete investigation of exterior concrete surfaces and slabs will be conducted as a part of the on-site investigation and remedial activities. The purpose of the concrete sampling will be to identify PCB-contaminated areas of concrete as well as to verify PCB concentrations in concrete that was characterized during previous environmental investigations. Under the regulations at 40 CFR 761, the concrete at the Site that has been contaminated with PCBs would be considered a PCB remediation waste, as defined at 40 CFR 761.3.

5.7.2 Concrete Sampling Methodology

All concrete samples will be collected in accordance with the procedures described in the EPA Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)* (EPA, 2011). Each concrete sample will be collected from the surface of the floor to a depth of 1/2–inch into the floor utilizing a hammer-type drill to pulverize the concrete. Clean, dedicated plastic sample spoons will be used to scoop up the pulverized concrete, which will then be placed into properly labeled, laboratory-supplied sample jars and placed in a cooler with ice. The same sampling methodology will be used for sampling other solid media, such as asphalt and wood.

5.8 PCB Wipe Sampling

5.8.1 Data Quality Objectives for PCB Wipe Sampling

PCB wipe sampling will be conducted as part of the on-site environmental investigation in order to identify possible release areas at the Site. In addition to identifying new on-site release areas, wipe sampling will also aid in verifying previously identified release areas. Wipe samples will be collected from non-porous surfaces located on the exterior portions of the Site.

5.8.2 Wipe Sampling Methodology

All wipe samples will be collected using the standard wipe test as defined at 40 CFR 761.123. Specifically, at each location selected for sampling, a disposable 10 centimeter (cm) by 10 cm template will be affixed to the location and the 10 cm x 10 cm section of the non-porous

surface being sampled will be wiped with a gauze pad saturated with hexane. Once the surface is wiped completely, the gauze pads will be placed in clean, laboratory-supplied glass vials, capped and labeled.

5.9 Investigation-Derived Waste (IDW) Management

IDW generated during field investigations activities are anticipated to include used personal protective equipment (PPE), plastic sheeting, and decon fluids. IDW containing PCBs will be handled and disposed of in accordance with the requirements of 40 CFR 761.

5.9.1 Decontamination Solutions

Decontamination solutions generated as a result of cleaning investigation or sampling equipment that may come into contact with hazardous materials and PPE decontamination solutions will be segregated and then collected in U.S. Department of Transportation (USDOT) approved 55-gallon drums and shipped off-site for disposal following any necessary waste characterization by the receiving disposal facility.

5.9.2 Expendable Equipment

Used PPE that has been decontaminated will be collected and disposed of as a nonhazardous solid waste. PPE that cannot be decontaminated will be placed in a separate USDOT approved 55-gallon drum and disposed of in the same manner as the waste in which it has come into contact. Used disposable sample equipment will also be disposed of in the same manner as the waste in which it has come into contact. All used PPE and disposable sample equipment will be disposed of in accordance with all local, state and federal requirements.

All decontamination wastes, PPE, and polyethylene that comes in contact with PCB Remediation Wastes will be disposed of as PCB Remediation Wastes. These wastes will be segregated as to matrix (e.g., aqueous, non-aqueous liquids, or solid materials) and stored in drums or lined containers prior to transport from the Site for disposal.

5.10 Quality Assurance/Quality Control (QA/QC) Procedures

QA/QC procedures are discussed in the following sections. For the purpose of the discussions, the party conducting the sampling is referred to as the environmental consultant while

the party conducting the chemical analyses is referred to as the laboratory. The discussion also includes references to the environmental consultant's Project Manager and Field Team Leader and to the laboratory's Project Manager, Section Leader and analyst or technician.

5.10.1 Measurement Quality Objectives

5.10.1.1 Precision

Precision is the agreement among a set of replicate measurements without consideration of the "true" or accurate value (i.e., variability between measurements of the same material for the same analyte). Precision is measured in a variety of ways including statistically, such as calculating variance or standard deviation. Field work and laboratory precision will follow the precision guidelines laid out in the CTDEEP Laboratory Quality Assurance and Quality Control Guidance Reasonable Confidence Protocols (RCP) Guidance Document dated November 2007 and revised December 2010 (CTDEEP, 2010b).

Field precision is assessed through the collection and measurement of field duplicates (one extra sample in addition to the original field sample). Field duplicates will be collected at a frequency of one per twenty investigative samples per analytical parameter for each environmental medium sampled. Precision will be measured through the calculation of relative percent difference (RPD). The resulting information will be used to assess sampling and analytical variability. Field duplicate RPDs must be <30% for aqueous samples and <50% for solid samples. These criteria apply only if the sample and/or duplicate results are >5x the reporting limit; if both results are <5x the reporting limit, the criterion will be doubled.

Laboratory precision will be assessed through the analysis of MS/matrix spike duplicate (MSD) samples and/or field duplicates. MS/MSD samples will be performed at a frequency of one per twenty investigative samples per matrix per parameter. Laboratory duplicate samples will be performed at a frequency of one per twenty investigative samples per matrix per parameter.

5.10.1.2 Accuracy

Accuracy is the closeness of agreement between an observed value and an accepted reference value. The difference between the observed value and the reference value includes components of both systematic error (bias) and random error.

Accuracy in the field is assessed through the adherence to all field instrument calibration procedures, sample handling, preservation, and holding time requirements, through the collection of equipment blanks prior to the collection of samples for each type of equipment being used, and through the use of trip blanks with each shipment of samples for VOC analysis.

Laboratories assess the overall accuracy of their instruments and analytical methods (independent of sample or matrix effects) through the measurement of "standards", materials of accepted reference value. Accuracy will vary from analysis to analysis because of individual sample and matrix effects. In an individual analysis, accuracy will be measured in terms of method blank results, the percent recoveries (%Rs) of surrogate compounds in organic analyses, or %Rs of spiked compounds in MSs and/or MSDs and/or LCSs in all analyses. This gives an indication of expected recovery for analytes tending to behave chemically like the spiked or surrogate compounds. Upon selection of a laboratory for this project, the laboratory will be asked to provide their accuracy control limits.

5.10.1.3 Representativeness

Representativeness is a qualitative parameter which expresses the degree to which data accurately and precisely represent either a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition within a defined spatial and/or temporal boundary. To ensure representativeness, the sampling locations have been selected to provide coverage over a wide area and to highlight potential trends in the data.

Representativeness in the field is dependent upon the proper design of the sampling program and will be satisfied by ensuring that the work plan is followed, that proper sampling, sample handling, and sample preservation techniques are used, and the use of field screening to allow for the collection of more samples in a specified area.

Representativeness in the laboratory is ensured by using the proper analytical procedures, appropriate methods, and meeting sample holding times.

5.10.1.4 Completeness

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under normal conditions.

"Normal conditions" are defined as the conditions expected if the sampling plan was implemented as planned.

Field completeness is a measure of the amount of (1) valid measurements obtained from all the measurements taken in the project and (2) valid samples collected. The field completeness objective is greater than 90 percent.

Laboratory completeness is a measure of the amount of valid measurements obtained from all valid samples submitted to the laboratory. The laboratory completeness objective is greater than 95 percent.

5.10.1.5 Comparability

Comparability expresses the confidence with which one data set can be compared to another. Field comparability is dependent upon the proper design of the sampling program and will be satisfied by ensuring that the work plan is followed and that proper sampling techniques are used. Maximization of comparability with previous data sets is expected because the sampling design and field protocols are consistent with those previously used.

Comparability in the laboratory is expected due to the use of recognized EPA or equivalent analytical methods and the reporting of data in standardized units.

5.10.1.6 Sensitivity

Sensitivity is the ability of the method or the instrument to detect the contaminants of concern at the level of interest. Project reporting limits (RLs) will be based on the lowest concentration calibration standard for organic parameters and the analysis of a low-level standard for metals analyses, as required by the analytical methods. The laboratory will utilize RCP methods, which should ensure that all laboratory RLs meet the Connecticut RCP and the most stringent levels of the applicable CT RSRs. For samples analyzed for waste characterization purposes, the RLs must meet the RCRA limits for hazardous waste determination (defined at 40 CFR 261.24).

5.10.2 Field Quality Control Samples

Field QC samples will include equipment blanks, field duplicates, MS/MSDs, cooler temperature blanks and trip blanks.

5.10.2.1 Equipment Blanks

Equipment blanks will be collected in order to determine the cleanliness of sample collection equipment. Equipment blanks will consist of pouring analyte-free water over decontaminated sampling equipment and will be used to check for procedural contamination at the Site that may cause sample contamination and to ensure that the decontamination procedure has been adequately carried out. The equipment blank will be collected by pouring laboratory-supplied, high performance liquid chromatography (HPLC)-grade, American Society for Testing and Materials (ASTM) Type II water over the decontaminated sample collection equipment and into the appropriate sample containers. Equipment blanks will be collected from equipment that is used for sample collection. One equipment blank will be collected for each type of equipment used, each day a field decontamination event is conducted. Equipment blanks will be collected at the beginning of the day's sampling event and will accompany the samples collected that day. Equipment blanks will be submitted for the same parameters as the associated sample matrix.

5.10.2.2 Field Duplicates

Field duplicates are an additional aliquot of the same sample submitted for the same parameters as the original sample. Field duplicates will be used to assess the sampling and analytical reproducibility. The procedure for collecting field duplicate samples consists of alternating the collection of the sample between the sample collection bottle and the duplicate bottle. Field duplicates will be submitted at a frequency of one per twenty investigative samples for each sampled medium for all parameters.

5.10.2.3 MS/MSDs

MSs and/or MSDs are an additional aliquot of the same sample submitted for the same parameters as the original sample. However, the additional aliquot is spiked with the compounds of concern. Matrix spikes provide information about the effect of the sample matrix on digestion

and/or measurement methodology. MS/MSDs will be submitted at a frequency of one per every twenty investigative samples per matrix for each parameter.

5.10.2.4 Temperature Blanks

Cooler temperature blanks consist of a laboratory-supplied sample container filled with non-preserved water (potable or distilled) and are included in all coolers. The laboratory uses these temperature blanks to ensure that proper preservation of the samples has been maintained during sample shipment. The temperature of these blanks must be 4 º Celsius (C) ±2º to demonstrate that proper preservation has been maintained. The laboratory records the results of the temperature blanks on the chain-of-custody immediately upon receipt of the samples at the laboratory, prior to inventory and refrigeration.

5.10.2.5 Trip Blanks

Trip blank samples will be supplied by the laboratory and will consist of pre-preserved vials containing methanol. Trip blanks samples will be submitted to the laboratory with every cooler containing VOC soil samples and will only be analyzed for VOCs. Trip blanks will be used to evaluate contamination introduced during shipment.

5.10.3 Sample Sequence

An attempt will be made to coordinate a sampling sequence hierarchy from less likely to more likely contaminated locations to reduce the potential for cross-contamination between locations. Additionally, surface water and sediment samples will generally be collected in a downstream to upstream fashion to minimize impacts of water/sediment disturbances on subsequent sampling locations.

5.10.4 Sample Documentation Requirements

5.10.4.1 Field Notes

Field team members will keep a field logbook to document all field activities. Field logbooks will provide the means of recording the chronology of data collection activities performed during the investigation. As such, entries will be described in as much detail as possible so that a particular situation could be reconstructed without reliance on memory.

The logbook will be a bound notebook with water-resistant pages. Logbook entries will be dated, legible, and contain accurate and inclusive documentation of the activity. The title page of each logbook will contain the following:

- Person to whom the logbook is assigned,
- The logbook number,
- Project name and number,
- Site name and location,
- Project start date, and
- End date.

Entries into the logbook will contain a variety of information. At the beginning of each entry, the date, start time, weather, and names of all sampling team members present will be entered. Each page of the logbook will be signed and dated by the person making the entry. All notebooks will have consecutively numbered pages. All entries will be made in permanent ink, signed, and dated and no erasures or obliterations will be made. If an incorrect entry is made, the information will be crossed out with a single strike mark which is initialed and dated by the sampler. The correction shall be written adjacent to the error.

Field activities will be fully documented. Information included in the logbook will include, but may not be limited to the following:

- Chronology of activities, including entry and exit times;
- Names of all people involved in sampling activities;
- Level of personal protection used;
- Any changes made to planned protocol;
- Names of visitors to the Site during sampling and reason for their visit;
- Sample location and identification;
- Changes in weather conditions;
- Dates (month/day/year) and times (military) of sample collection;

- Measurement equipment identification (model/manufacturer) and calibration information;
- Sample matrix (e.g., soil, sediment, surface water, etc.);
- Sample collection methods and equipment;
- Sample depths;
- Whether grab or composite sample collected;
- How sample is composited, if applicable;
- Sample description (color, odor, texture, etc.);
- Sample identification code;
- Tests or analyses to be performed;
- Sample preservation and storage conditions;
- Any field measurements made such as pH, temperature, conductivity, etc.;
- Equipment decontamination procedures;
- QC sample collection;
- Unusual observations;
- Record of photographs;
- Sketches or diagrams; and
- Signature of person recording the information.

Field logbooks will be reviewed on a daily basis by the environmental consultant's Field Team Leader. Logbooks will be supported by standardized forms. Documents that may be included in the project file for the investigations include: field documents, correspondence, photographs, laboratory data, reports, subcontract agreements, authorizations, logs, and sketches.

5.10.4.2 Chain-of-Custody Records

Chain-of-custody records are initiated by the samplers in the field. A chain-of-custody record will accompany the sample from initial sample container selection and preparation at the

laboratory to the field for sample containment and preservation and through its return to the laboratory. If samples are split and sent to different laboratories, a copy of the chain-of-custody record will be sent with each sample. The environmental consultant will retain one copy of the chain-of-custody upon relinquishing the sample. The field portion of the custody documentation should include: (1) the project name; (2) signatures of samplers; (3) the sample number, date and time of collection, and whether the sample is grab or composite; (4) signatures of individuals involved in sampling; and (5) if applicable, air bill or other shipping number.

On a daily basis, samples will be transferred to the custody of the respective laboratories, via third-party commercial carriers or via laboratory courier service.

5.10.4.3 Sample Labeling

Each sample collected during field activities will be assigned a unique ID that distinguishes it from samples collected during previous field investigation activities. The sample identification will include information that reflects the general area from which the sample was collected, a sample number, the sample matrix, and reference to the depth interval from which the sample was collected.

The sample identification will first include a two or three letter abbreviation that refers to the consultant/entity collecting the sample. The remainder of the sample identification will include information that reflects the general area from which the sample was collected, a sample number, the sample matrix, and reference to the depth interval from which the sample was collected. For example, a soil sample collected by TRC from the location identified as number 3 within the confines of AOC-1 as identified on the Site mapping (see Figures 4-1, 4-2A and 4-2B) would be designated as TRC-AOC1-SO-3 where the terminology indicates:

TRC: indicates that TRC is the consultant collecting the sample

AOC1: indicates a sample collected from AOC-1

SO: indicates a soil sample

3: indicates the 3rd sequential sample of this media collected from AOC-1 as part of the current investigation

Where samples will be used to evaluate conditions at more than one AOC, the sample name shall bear the AOC number associated with the primary AOC being evaluated.

Should supplemental investigations be conducted within an AOC already investigated, supplemental samples will simply continue to be numbered sequentially (e.g., TRC-AOC1-4, TRC-AOC1-5, TRC-AOC1-6, etc).

Where samples will be used to evaluate conditions at more than one AOC, the sample name shall bear the AOC number associated with the primary AOC being evaluated. The sample media elements of the nomenclature to be utilized for samples collected as part of the investigation are included as follows:

Sample Media:

SO: Soil

SED: On-Site Sediment

GW: Groundwater

SW: On-Site Surface Water

CO: Concrete

AS: Asphalt

WP: Wipe Sample

QA/QC samples will also require specific identification and labeling. The following approach will be used when identifying QA/QC samples during the investigation:

- Field duplicate samples will be labeled as blind duplicates by giving them sample numbers indistinguishable from a normal sample.
- Cooler temperature blanks will be spelled out and included on one line of the chain-of-custody.
- Equipment blanks will be spelled out and the associated matrix will be identified (e.g. Equipment Blank, Sediment).
- Trip blanks will be spelled out and will include the date shipped (e.g., Trip Blank - 040104).
- MS/MSDs will be noted in the "Remarks" column of the chain-of-custody.

5.10.5 Sample Handling and Shipping

Appropriate sample containers will be used so no chemical alteration occurs between the collection of samples in the field and the receipt of samples at the laboratory. The sample bottles will be prepared and shipped to the field by the subcontracted analytical laboratory(ies) under the direction of the Laboratory QC Coordinator. The sample bottles will be transported to the Site within a sealed shipping cooler.

Sample containers will be selected to ensure compatibility with the potential contaminants and to minimize breakage during transportation. Sample bottles, holding times and preservation requirements for aqueous, soil and sediment samples are listed on Table 5-2. Other solid samples (e.g., concrete and asphalt) will meet the criteria specified for soil samples.

Sample labels will be filled out at the time of sampling and will be affixed to each container to identify the project name and/or sample location, sample number, sampler's initials, date and time of collection, number of containers per parameter (e.g., 1 of 2, etc.), preservatives added, and analyses requested for the sample. Sample labels will be completed for each sample using waterproof ink unless prohibited by weather conditions. For example, a logbook notation would explain that a pencil was used to fill out the sample label because the pen would not function in wet weather.

After the bottles for a given sample location have been filled, they will be immediately preserved and placed in a shipping cooler. Samples will be stored in such a way as to protect them from temperature extremes, light, breakage and water damage. Each glass sample container will be placed in an individual bubble wrap bag before being placed in the cooler. Field personnel will add bags of crushed ice or ice packs to the shipping coolers as the samples are collected.

Samples will be delivered to the laboratory for analysis as soon as practical after the number of samples and sample containers are sufficient to comprise a shipment, preferably the same day the samples are collected. However, in most cases, surface water, soil, sediment and groundwater samples will be shipped within 24 hours of collection. Samples will be stored in coolers at a temperature of 4º C. During sampling and sample shipment activities, the environmental consultant's Project Manager (or his/her designee) will contact the laboratory daily to provide information about impending shipments.

5.10.6 Sample Custody

Custody is one of several factors that are necessary for the admissibility of environmental data as evidence in a court of law. Custody procedures help to satisfy the two major requirements for admissibility: relevance and authenticity. Sample custody is addressed in three parts: field sample collection, laboratory analysis, and final evidence files. A sample or evidence file is considered to be under a person's custody if:

- the item is in the actual possession of a person;
- the item is in the view of the person after being in actual possession of the person;
- the item was in the actual physical possession of the person but is locked up to prevent tampering; or
- the item is in a designated and identified secure area.

5.10.6.1 Field Custody Procedures

Samples will be collected following the sampling procedures documented earlier in Section 5.3 through 5.8 of this document. Documentation of sample collection is described in Section 5.10.4 of this document. Sample chain-of-custody and packaging procedures are summarized below. These procedures will ensure that the samples will arrive at the laboratory with the chain-of-custody intact.

- The field sampler is personally responsible for the care and custody of the samples until they are transferred or dispatched properly. Field procedures have been designed such that as few people as possible will handle the samples.
- All bottles will be identified by the use of sample labels with sample numbers, sampling locations, date/time of collection, and type of analysis. The sample numbering system is presented in Section 5.10.4.3 of this document.
- Sample labels will be completed for each sample using waterproof ink unless prohibited by weather conditions. For example, a logbook notation would explain that a pencil was used to fill out the sample label because the pen would not function in wet weather.
- Samples will be accompanied by a properly completed chain-of-custody form. The sample numbers and locations will be listed on the chain-of-custody form. When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the record. This record documents

the transfer of custody of samples from the sampler to another person, to a mobile laboratory, to the permanent laboratory, or to/from a secure storage location.

- All shipments will be accompanied by the chain-of-custody record identifying the contents. A minimum of two copies of the chain-of-custody record will accompany the shipment to the laboratory, and copies will be retained by the sampler and placed in the project files. The laboratory will maintain one file copy, and the completed original will be returned to the environmental consultant's Project Manager. A copy of the completed original will be returned as part of the final analytical report.

- Samples will be properly packaged for shipment and dispatched to the appropriate laboratory for analysis, with a separate signed custody record enclosed in and secured to the inside top of each sample box or cooler. Shipping containers will be secured with strapping tape and custody seals for shipment to the laboratory. The custody seals will be attached to the front right and back left of the cooler and covered with clear plastic tape after being signed by field personnel. The cooler will be strapped shut with strapping tape in at least two locations.

- If the samples are sent by common carrier, the air bill will be used. Air bills will be retained as part of the permanent documentation. Commercial carriers are not required to sign off on the custody forms since the custody forms will be sealed inside the sample cooler and the custody seals will remain intact.

- Samples remain in the custody of the sampler until transfer of custody is completed. This consists of delivery of samples to the laboratory sample custodian, and signature of the laboratory sample custodian on chain-of-custody document as receiving the samples and signature of sampler as relinquishing samples.

5.10.6.2 Laboratory Custody Procedures

The environmental consultant's Project Manager or his/her designee will notify the laboratory of upcoming field sampling activities and subsequent sample transfer to the laboratory. This notification will include information concerning the number and type of samples to be shipped, as well as the anticipated sample arrival date. Samples will be received and logged in by a designated sample custodian or his/her designee. The sample custodian is responsible for maintaining sample custody and for maintaining all associated custodial documentation records. Upon sample receipt, the sample custodian will:

- Examine the shipping containers to verify that the custody tape is intact,

- Examine all sample containers for damage (i.e., breakages or leaks),

- Determine if the temperature required for the requested testing program has been maintained during shipment using the cooler temperature blanks and document the temperature on the chain-of-custody records,
- Compare samples received against those listed on the chain-of-custody,
- Verify that sample holding times have not been exceeded,
- Examine all shipping records for accuracy and completeness,
- Determine sample pH (if applicable) of aqueous samples and record on chain-of-custody forms,
- Sign and date the chain-of-custody immediately (if shipment is accepted), note the time that the samples were received and attach the air bill (if applicable),
- Note any problems associated with the coolers and/or samples on the cooler receipt form and notify the laboratory's Project Manager, who will be responsible for contacting the environmental consultant's Project Manager,
- Attach laboratory sample container labels with unique laboratory identification and test, and
- Place the samples in the proper laboratory storage.

Following receipt, samples will be logged in according to the following procedure:

- The samples will be entered into the laboratory tracking system. At a minimum, the following information will be entered: project name or identification, unique sample numbers (both client and internal laboratory), type of sample, required tests, date and time of laboratory receipt of samples, and field ID provided by field personnel.
- The laboratory's Project Manager will be notified of sample arrival.

The completed chain-of-custody, air bills, and any additional documentation will be placed in the final evidence file.

5.10.7 Field Equipment Decontamination Procedures

Reusable sampling equipment which is used to obtain samples for laboratory analysis will be thoroughly decontaminated prior to each use using the following procedures.

1. Wash and scrub with low phosphate detergent (e.g., Alconox) in tap water;

2. Rinse with tap water;
3. Distilled and deionized water rinse ;
4. Air dry on clean polyethylene sheeting ;
5. Wrap in aluminum foil, shiny side out, for transport (if not being used immediately).

Direct-push Macro-Core shoes which will contact soil will be decontaminated by soap and water wash (Alconox and tap water) and tap water rinse between uses. Drilling equipment which comes into contact with potentially grossly contaminated soil will be steam cleaned before use and between boreholes.

All moveable equipment, tools, and sampling equipment that has contacted PCB Remediation Wastes will be decontaminated prior to leaving the Site. Decontamination procedures will comply with either §761.79(b)(3)(i)(A), §761.79(b)(3)(ii)(A) or §761.79(c)(2).

5.10.8 Data Validation and Reporting

Data validation is the process of reviewing data and associated quality control criteria, and accepting, qualifying, or rejecting it on the basis of quality control criteria. Both field data evaluation and data validation are discussed below.

Appropriate QC measures will be used to ensure the generation of reliable data from sampling and analysis activities. Proper collection and organization of accurate information followed by clear and concise reporting of the data is a primary goal in this project.

5.10.8.1 Data Reporting

For all analyses, the laboratory will report results which are below the laboratory's RL; these results will be qualified as estimated (J) by the laboratory. Results for soil and sediment samples must be reported on a dry weight basis. The laboratory will provide all data in RCP data package format.

5.10.8.2 Field Data Evaluation

Measurements and sample collection information will be transcribed directly into the field logbook or onto standardized forms. If errors are made, results will be legibly crossed out, initialed

and dated by the person recording the data, and corrected in a space adjacent to the original (erroneous) entry. Daily reviews of the field records by the environmental consultant's Field Team Leader will ensure that:

- Logbooks and standardized forms have been filled out completely and that the information recorded accurately reflects the activities that were performed.
- Records are legible and in accordance with good record keeping procedures (i.e., entries are signed and dated, data are not obliterated, changes are initialed, dated, and explained).
- Sample collection, handling, preservation, and storage procedures were conducted in accordance with the protocols described in this document, and that any deviations were documented and approved by the appropriate personnel.

5.10.8.3 Analytical Data Validation

Analytical data validation will include procedures within the laboratory and independent of the laboratory.

Data from laboratory analyses will be reviewed by the laboratory prior to release. Prior to being released as final, laboratory data will proceed through a tiered review process. Data verification starts with the analyst or technician who performs a 100 percent review of the data to ensure the work was done correctly the first time. It is the responsibility of the analyst or technician to ensure that the verification of data in his or her area is complete. The data reduction and initial verification process must ensure that:

- Sample preparation and analysis information is correct and complete;
- Results are correct and complete;
- The appropriate Standard Operating Procedures (SOPs) have been followed and are identified in the project records;
- Proper documentation procedures have been followed;
- All non-conformances have been documented; and
- Project-specific requirements have been met.

Following the completion of the initial verification by the analyst or technician, a systematic check of the data will be performed by an experienced peer, Laboratory Section Leader,

or designee. This check will be performed to ensure that initial review has been completed correctly and thoroughly. Included in this review will be an assessment of the acceptability of the data with respect to:

- Adherence of the procedure used to laboratory SOPs and any project-specific methods and specific instructions;
- Correct interpretation of data (e.g., mass spectra, chromatographic interferences, etc.);
- Correctness of numerical input when computer programs are used (checked randomly) and numerical correctness of calculations and formulas (checked randomly);
- Acceptability of QC data;
- Documentation that instruments were operating according to method specifications (calibrations, performance checks, etc.);
- Documentation of dilution factors, standard concentrations, etc.;
- Sample holding time assessment; and
- Nonconforming events have been addressed by corrective action as defined on a nonconformance memo.

A third-level review will be performed by the Laboratory's Project Manager before results are submitted to the environmental consultant. This review serves to verify the completeness of the data report and to ensure that project requirements are met for the analyses performed. The items to be reviewed will include:

- Results are present for every sample in the analytical batch or reporting group;
- Every parameter or target compound requested is reported;
- The correct units and correct number of significant figures are utilized;
- All non-conformances, including holding time violations, and data evaluation statements that impact the data quality, are accompanied by clearly expressed comments from the laboratory; and
- The final report is legible, contains all the supporting documentation required by the project, and is in either the standard format or in the client-required format.

A narrative to accompany the final report will be finalized by the laboratory's Project Manager. This narrative will include relevant comments, including data anomalies and non-conformances.

The environmental consultant will be responsible for performing an independent validation of the analytical data. The data validation will be performed by a person with prior data validation experience in accordance with the CTDEEP's Laboratory Quality Assurance and Quality Control Data Quality Assessment and Data Usability Evaluation (DQA/DUE) Guidance Document dated May 2009 and revised in December 2010 (CTDEEP, 2010c).

Upon completion of the validation, a report will be prepared. This report will summarize the samples reviewed, elements reviewed, any non-conformances with the established criteria, and validation actions (including data qualifiers).

6.0 FIELD INVESTIGATION PLAN FOR BUILDING MATERIALS

6.1 Approach

The following sections provide a description of the approach that will be used to conduct the building inspections and investigations, including a discussion of objectives, current conditions, the inspection process, proposed sampling locations, and sampling methodologies.

Refer to Section 6.4.3.2 (Sequence of Events and Generalized Schedule to Develop Full Scope of Study for English Station) for inspection activities that will be conducted prior to the field investigation described in this section.

6.2 Asbestos Investigation

6.2.1 Objectives for Asbestos Investigation

The objective of the asbestos investigation is to identify, document, and assess asbestos and asbestos-containing materials; determine if such materials are friable, damaged, unstable and accessible or may be disturbed by other actions required by the PCO; and determine how to conduct the abatement of the asbestos in accordance with all applicable laws (including EPA 40 CFR 61, OSHA Asbestos 29 CFR 1926.1101, and CT DPH Standards for Asbestos Abatement 19a-332a-1 to 19a-332a-16) and develop a plan for doing so.

Although previous inspection efforts identified the presence of asbestos-containing materials in the Site buildings, subsequent events have caused significant changes to the findings contained in previous inspection reports. These events included asbestos abatement projects, demolition projects, water intrusions, and site vandalism/scavenging. The descriptions presented below reference site photos. The photos can be found in Appendix C of this report.

Asbestos abatement projects have been conducted in various locations of the buildings, eliminating a portion of the previously identified materials. Based upon current observations, it is assumed that accessible, previously identified asbestos-containing materials have been removed during abatement activities conducted in the mechanical spaces and switch cell areas on the west side of the English Station building, as well as in the Turbine Room, as there is no sign of insulation materials on remaining (bare) piping systems in these areas. An active asbestos abatement project in the Boiler Room was abruptly halted in 2012; extensive amounts of asbestos-containing debris,

created by the removal process, exist on surfaces throughout the low pressure boiler area (Photos 1 and 2). It appears that asbestos removal activities may have included the use of high-pressure water hoses to remove asbestos-containing insulation from boiler surfaces; this had the effect of distributing wet asbestos debris onto adjacent and lower surfaces. Thousands of waste bags containing asbestos waste generated during the asbestos abatement project are piled in multiple locations throughout the low pressure boiler area, including on raised walkways (Photos 3 and 4).

Water intrusion through roof and/or wall openings has also had an impact on existing asbestos-containing materials (Photos 5 and 6). Asbestos-containing materials impacted by water intrusion exist in various states of disrepair, often in close proximity to intact asbestos-containing materials.

Vandalism and/or metal scavenging efforts have occurred in the building, impacting suspect asbestos-containing materials (Photos 7 and 8). These materials must be sampled to determine potential asbestos content prior to future demolition activities and disposal of materials.

Demolition activities in the Turbine Room and Switch Cell areas have revealed previously unidentified suspect materials (Photos 9 and 10). These materials must be sampled to determine potential asbestos content prior to future demolition activities and disposal of materials.

Inspection of all Site buildings must be conducted to document current conditions, locations, and quantities of remaining asbestos-containing materials, asbestos-containing debris and wastes (any remaining bags after the make safe program is complete), and to determine potential asbestos content of previously unidentified materials. Inspection results will be used to determine specific methods of abatement that will be utilized for individual components or materials.

6.2.2 Inspection Process

Inspection of Site buildings is to be conducted as a walk-through visual survey of each room and/or area of the building.

The inspection must be conducted by State of Connecticut licensed asbestos inspectors. Due to existing conditions of asbestos-containing materials, inspectors must conduct inspections while utilizing proper PPE.

The inspection is to begin with a systematic visual assessment of all accessible interior/exterior areas of the project area in order to identify asbestos-containing material and note its specific location and condition. All asbestos-containing material, including intact materials, damaged materials, debris, and suspect materials, must be identified and assessed. The inspectors will assess the current conditions of identified asbestos-containing materials, document locations and quantities of damaged asbestos-containing materials, document locations and quantities of asbestos-containing debris and waste bags, and identify suspect asbestos-containing materials that were not previously identified.

6.2.3 Asbestos Sampling Methodology

Suspect asbestos-containing materials not previously identified will be sampled to determine asbestos content prior to any activities that may disturb them, in compliance with EPA Asbestos National Emissions Standard for Hazardous Air Pollutants (NESHAP) regulations. The state of the art methodology, and industry standard, for surveying and evaluating buildings and structures to determine the presence of asbestos-containing material will be performed in accordance with current EPA Asbestos Hazard Emergency Response Act (AHERA) (40 CFR Part 763 Subpart E) sampling guidelines.

Inspection and sample collection will be conducted by State of Connecticut licensed asbestos inspectors following the AHERA protocols.

When previously unidentified suspect material is encountered, the inspector(s) will collect representative bulk samples of suspect homogenous asbestos-containing material identified in accordance with AHERA sampling protocols (2-3-5-7 AHERA sampling scheme). Destructive sampling and wall coring techniques will be utilized to gain access to suspect ACM covered or concealed by other building materials.

Bulk samples, supported by proper chain-of-custody procedures, will be analyzed by polarized light microscopy (PLM), EPA 600/R93/116 with visual area estimation (vae) quantification in order to determine asbestos content.

The laboratory performing sample analysis will be approved to perform PLM analysis by the CT DPH and an active participant in the National Voluntary Laboratory Accreditation Program (NVLAP).

6.3 Hazardous Materials Investigation

6.3.1 Objectives for Hazardous Materials Investigation

The objectives of the hazardous material investigation are to investigate the presence of lead and mercury as part of the overall hazardous building materials survey and identify non-hazardous and hazardous waste and other hazardous materials. Identification of these materials is required to determine which materials will need to be removed to meet the requirements of the PCO.

6.3.2 Hazardous Materials Sampling Methodology

6.3.2.1 Other Hazardous/Regulated Materials Inventory (e.g., PCBs, Mercury, CFCs)

A visual inspection of all building structures and the exterior areas of the Site will be performed to identify and quantify any suspect PCB-containing transformers, fluorescent light ballasts, suspect mercury-containing fluorescent light lamps or thermostat switches. Additional hazardous/regulated items identified will also be inventoried, and may include: chlorofluorocarbon (CFC)-containing devices, universal waste, used electronics, batteries, on-site oils, drums, chemicals, storage tanks, staining, biological hazards, tires, etc. Hazardous materials identified at the site by the inspectors will be reviewed by a Certified Hazardous Materials Manager (CHMM) to determine and classify the potential hazards of each material identified and the handling/disposal methods that are required.

6.3.2.2 Lead Paint

A lead paint inspection of all building structures will be performed using EPA-trained and State of Connecticut-licensed lead inspectors. The method used for the lead paint inspection will be X-ray fluorescence (XRF) utilizing an on-site spectrum analyzer. The XRF detector is a portable unit designed to make fast, accurate, non-destructive measurements of lead concentrations in dry painted surfaces with a detection limit of 0.1 milligrams per square centimeter (mg/cm^2). Representative measurements of the painted building components will be conducted throughout the subject building areas to determine the general presence of any detectable levels of lead paint. In addition, areas of defective lead paint will also be noted during the inspection.

Representative composite building material samples (composite paint and substrate) of building structures/debris will be collected to represent projected building material disposal waste streams on a percent-by-weight basis in accordance with the CTDEEP May 2007 Guidance Document (CTDEEP, 2007). Materials projected to be recycled, and therefore not disposed of at a landfill (e.g. steel, unpainted concrete, unpainted brick) will be excluded from the waste stream sample in accordance with CTDEEP guidance. The samples will be analyzed following the TCLP, EPA-1311/7420, for leachable lead (a metal that is regulated under the Resource Conservation and Recovery Act or RCRA) in accordance with 40 CFR Part 261 Appendix II. TCLP analysis will characterize the projected building material waste stream as either hazardous or non-hazardous waste prior to demolition disposal. TCLP analysis will be performed by a laboratory approved by the American Industrial Hygiene Association (AIHA), Environmental Lead Laboratory Accreditation Program (ELLAP) and the CT DPH.

6.4 PCB Characterization

The goal of the PCB characterization portion of the Site investigation is to characterize PCB-contaminated areas associated with building materials, under EPA (40 CFR Part 761) and CTDEEP (22a-463 through 469a) PCB regulations, within the boundaries of the Site. This includes:

- Verification of PCB concentrations in building structures identified during previous environmental investigations;
- Characterization of oily wastes and impacted building surfaces (from spills, releases or tracking);
- Characterization of PCB constituents in suspect bulk building material products (caulk, paint, flooring, roofing, mastics, fireproofing, soundproofing, waterproofing, sealants, etc.) and impacted porous building material substrates and soil/groundcover immediately adjacent to these bulk building material products.

6.4.1 Objectives for PCB Characterization

The objectives for meeting the goals of the PCB characterization effort outlined above are discussed in more detail below for the various potentially impacted building materials at the Site.

6.4.1.1 PCB Releases to Building Materials

The objective of the building surfaces investigation is the characterization of oily wastes and impacted building surfaces (from spills, releases or tracking) in accordance with EPA (40 CFR Part 761) and CTDEEP (22a-463 through 469a) PCB regulations within the building structures on the Site. This includes verifying PCB concentrations in building structures identified from previous environmental reports.

6.4.1.2 Bulk Building Material Products

Bulk building material products, including caulk, paint, flooring, roofing, mastics, fireproofing, soundproofing, waterproofing, sealants and other suspect materials, have been identified by the EPA and CTDEEP as potentially containing PCBs, particularly those installed from ~1950 to 1979. As part of the site inspection, bulk building material products will be located and properly characterized in regards to PCB constituents. Should bulk building material products be sampled and identified as containing PCB content at levels regulated as either CTDEEP regulated products (>1 ppm) or EPA PCB Bulk Product Waste (>50 ppm), any impacts into adjacent associated porous substrate materials (concrete, brick, wood, etc.) and/or surrounding groundcover/soils will also be characterized.

6.4.2 Proposed Sampling Locations and Analyses for Parcel A (Station B)

6.4.2.1 PCB Releases to Building Materials

No additional investigative samples are required for characterization of PCB releases to building materials within Station B. Refer to Sections 3.1.9 – Section 3.1.13 and Section 4.1.1 for a summary of the previous PCB investigative findings and remediation performed within Station B.

6.4.2.2 Bulk Building Material Products

A limited survey/walkthrough was performed in order to estimate the number of samples that will be required in order to fully characterize the suspect bulk building material products at Parcel A. During the walkthrough, suspect bulk building material products (such as paints, caulks, tar coatings, roofing materials, etc.) were observed on the interior/exterior of Station B, the

interior/exterior of other satellite buildings/structures, and on debris scattered within Parcel A. Sample quantities for bulk building material products are summarized in Table 6-1.

6.4.3 Proposed Sampling Locations and Analyses for Parcel B

6.4.3.1 PCB Releases to Building Materials / Bulk Building Material Products

Due to previously unknown conditions within English Station, the PCO objectives for the SOS regarding PCB characterization of the building materials could not be fully addressed at the time this SOS was prepared. There are extensive areas of the floor (particularly in the boiler room and turbine areas), that could not be properly assessed due to excessive building debris, which may be covering evidence of potential PCB spills or releases. To meet the objectives of the PCO, a Sequence of Events (described in the following section) has been developed to characterize and remove the building debris within these areas of English Station. Following the completion of the Sequence of Events, a separate Addendum will be issued which addresses the PCO objectives for PCB characterization of building materials for the SOS of the English Station, and the entirety of Parcel B.

6.4.3.1 Sequence of Events to Develop Full Scope of Study for English Station

The conditions currently present in selected parts of the English Station building structure, particularly the eastern side where the boilers are situated, do not allow for the thorough assessment that would be necessary to develop a detailed SOS for PCBs and other hazardous materials. The objective of the efforts outlined briefly herein is to prepare for the removal of the asbestos waste/debris as part of a "make-safe" effort, and a controlled process for removal of debris from the existing rubble pile to allow for floor surfaces to be revealed. Once the floor surfaces are uncovered, they can then be inspected for stains or other evidence of spills/releases that can be subsequently assessed.

The proposed sequence of events that are proposed in order to accomplish this "make-safe" task is as follows:

1) Secure Site and Create Clean Corridor / Implement Best Management Practices to Prevent Contaminant Tracking
2) Perform Screening to Support "Make-Safe" Abatement Work

a. Based on visual observations, samples of debris (including paint chips) covering the floors of select locations will be collected and analyzed for hazardous building materials.
b. A representative number of asbestos waste bags staged on the floor surface in several areas inside the building will be opened and inspected for signs of paint, to assess the potential for hazardous building materials to be intermixed with the bagged asbestos.
c. Intact pipe insulation that is identified as having been painted will be sampled to determine if hazardous building materials are present in the paint.

3) Coincident with the sampling efforts, a determination will be made as to what will need to be done from a structural standpoint to allow for working in areas in which walking was previously deemed to be unsafe.
4) A report of findings will be generated for UI's review and approval and subsequent regulatory review.

5) An Alternate Work Practices (AWP) document will be developed for submittal to the CT DPH.
6) A design package containing technical specifications to direct a contractor in removal of the asbestos waste/debris in the Boiler Room and removal of debris from the rubble pile in the Turbine Room will be developed.
7) UI will implement the bid process to procure a licensed abatement contractor.
8) Notification will be provided to CT DPH upon award of the abatement contract.
9) Abatement will be conducted in the Boiler House.
10) A site visit will be performed following the abatement work in order to identify evidence of spills/releases, the presence of floor drains and other key structures.
11) A Scope of Study addendum will be prepared that focuses on the additional investigation activities interior to the building that will be required to fully assess the presence of PCBs and other materials.

6.4.4 PCB Sampling Methodology

6.4.4.1 Bulk Building Material Products

The building investigation for Bulk Building Material Products will be performed following techniques generally employed in the Building Sciences industry to identify, locate and sample homogeneous building materials (i.e., AHERA asbestos sampling guidelines). Sampling methodology will involve collecting a minimum of three grab samples per homogenous material type to refute PCB presence, per EPA protocols. Since PCBs were banned from production and use by the EPA in 1979, any buildings or structures that can be shown to have been constructed post-1979 will be excluded from the bulk building material products PCB inspection program. PCB bulk building material product samples will be analyzed at a laboratory approved by the CT DPH utilizing EPA Method 8082 (PCB) with EPA Method 3540C (Soxhlet extraction) as required by EPA Region 1. Refer to Section 5.10 for applicable QA/QC procedures.

6.4.4.2 Adjacent Porous Substrates & Groundcover/Soils

If the results of the bulk building material products sampling program indicate the presence of either CTDEEP regulated products (>1 ppm) or EPA PCB Bulk Product Waste (>50 ppm), then a sampling program will be implemented to identify the PCB migration impact into both the surrounding porous material substrates (brick, concrete, wood, etc.) and adjacent ground cover (soils, concrete, asphalt, etc.) to determine if such materials would also be classified as PCB bulk product waste and/or PCB remediation waste (>1 ppm). Sampling will be conducted in accordance with EPA regulations 40 CFR 761 Subpart N for PCB Remediation Waste characterization (a minimum of 3 samples per bulk material/substrate/soil combination), modified to reduce the maximum sampling efforts from the prescribed 1 sample per 10 lineal feet (LF) while obtaining reliable representative data. All samples of porous material substrates will be collected following the EPA Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)* (EPA, 2011). PCB substrate and ground cover samples will be analyzed at a laboratory approved by the CTDPH, utilizing EPA Method 8082 (PCB) with EPA Method 3540C (Soxhlet extraction) as required by EPA Region 1. Also refer to Sections 5.7 Concrete Sampling and Section 5.10 QA/QC procedures where applicable.

7.0 INVESTIGATION SUMMARY REPORT

Following the completion of the studies described herein, an Investigation Summary Report will be prepared. The report will include the following:

- A detailed description of the investigation performed;
- Identification of the type, quantity and location of asbestos, nonhazardous and hazardous wastes or other hazardous materials on the Site;
- A definition of the extent and degree of soil, sediment within the boundary of the Site, ground water, and surface water pollution as well as all contamination of the Plant and any other structures on the Site and contents therein;
- An evaluation of remedial action alternatives that address the on-site impacts relative to future industrial/commercial Site use, considering the following:
    - RSR I/C DEC and I/C VC for all contaminants (other than PCBs);
    - For PCBs, for direct exposure outside the buildings, compliance with 40 CFR Part 761 and with the inaccessible soil provisions of §22a-133k-2(b)(3) of the RSRs;
    - For PCBs, for direct exposure inside the buildings, compliance with the high occupancy standards in 40 CFR Part 761; and
    - For PCBS, for direct exposure under the buildings, compliance with the more stringent of the high occupancy standards in 40 CFR Part 761 and the inaccessible soil provisions of §22a-133k-2(b)(3) of the RSRs; and
    - The RSR PMC provisions, for both PCBs and for releases into fill (the Fill Variance exempts the PMC provisions with respect to the fill itself).
- A schedule for performing each alternative;
- A list of permits and approvals required for each alternative; and
- A preferred alternative from among those evaluated and justification for its selection.

The remedial action alternatives presented in the report will reflect abatement of asbestos only for that asbestos that is friable, damaged, unstable, and accessible or that may be disturbed by other remedial actions and the manner in which that abatement can be accomplished while complying with all applicable laws. Finally, the report will include a detailed program and schedule to perform the preferred on-site remedial actions, including the preparation of required

permit applications and obtaining the associated permits and approvals needed to implement the actions.

8.0 PROPOSED SCHEDULE

The following schedule represents an estimate of the sequence and duration of the activities that are required to remediate the English Station Site in compliance with Partial Consent Order COWSPCB 15-001. This schedule includes many assumptions of the findings of the remedial design and effort that will be required for characterization and remediation efforts based on information gathered from previous investigations at the Site and visual assessment performed after receiving access to the property on August 10, 2016. The schedule will be updated with the most current information as the activities in the schedule are performed. The key milestones that will be tracked are Activity A1550 – Notify DEEP Remedial Actions Complete (Soil), Activity A2330 – Prepare Building Remediation Results Report (Station B), and Activity A1680 – Prepare Building Remediation Results Report (English Station). These activities are expected to be completed within 3 years of the Access Date for the project, which was August 10, 2016. If at any time, the schedule indicates that these key milestones cannot be completed within the 3 year timeframe, UI will provide an explanation for the variance and seek approval for a revised schedule.

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FIGURES

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES:
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Legend.dwg --- PLOT DATE: June 22, 2017 - 1:50PM --- LAYOUT: Legend

SITE FEATURE LEGEND

- EDGE OF PAVEMENT
- PROPERTY / STREET LINE
- CHAIN LINK FENCE
- GUARDRAIL
- NEW BULKHEAD
- GAS LINE
- OVERHEAD WIRE
- CONCRETE WALL
- APPROXIMATE EXTENT OF EXCAVATION
- PCB AREA BOUNDARY
- AOC BOUNDARY
- PIPE TRENCH
- EXISTING BUILDING
- P20 CONCRETE PAD
- CONCRETE PAD (ELEVATED)
- ASPHALT APRON
- RECENT FILL
- WATER GATE
- GAS GATE
- ROUND CATCH BASIN
- RECTANGULAR CATCH BASIN
- UTILITY POLE
- FIRE HYDRANT
- MANHOLE
- V VAULT
- H HATCHWAY
- I2 INTAKE CHANNEL
- D2 DISCHARGE CHANNEL
- T TRANSFORMER
- CIRCUIT BREAKER
- CATHODIC BULKHEAD PROTECTION DEVICE

- 4AS-007 ASPHALT SAMPLE POINT
- 3CO-040 CONCRETE SAMPLE POINT
- CS-1 CONCRETE SAMPLE POINT – COLLECTED BY GEI
- 4CO-078 CONCRETE SAMPLE POINT FROM WALL
- 3HX-004 HEXANE WIPE SAMPLE POINT
- 4XX-001 MISCELLANEOUS SAMPLE POINT
- 3SD-001 SEDIMENT SAMPLE POINT
- PCB-05 SEDIMENT SAMPLE POINT – COLLECTED BY GEI
- 4HA-513 SOIL SAMPLE POINT
- TB-KKK SAMPLE LOCATION WHERE BOTH POROUS MEDIA (ASPHALT OR CONCRETE) AND SOIL SAMPLES WERE COLLECTED
- HA-1 SOIL SAMPLE POINT – COLLECTED BY OTHERS
- 3SW-001 SURFACE WATER SAMPLE POINT
- MW-H / TB-W SOIL SAMPLE FROM GROUND WATER MONITORING WELL
- MW-01 SOIL SAMPLE FROM GROUND WATER MONITORING WELL – INSTALLED BY OTHERS

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADDED SITE FEATURE LEGEND	MM

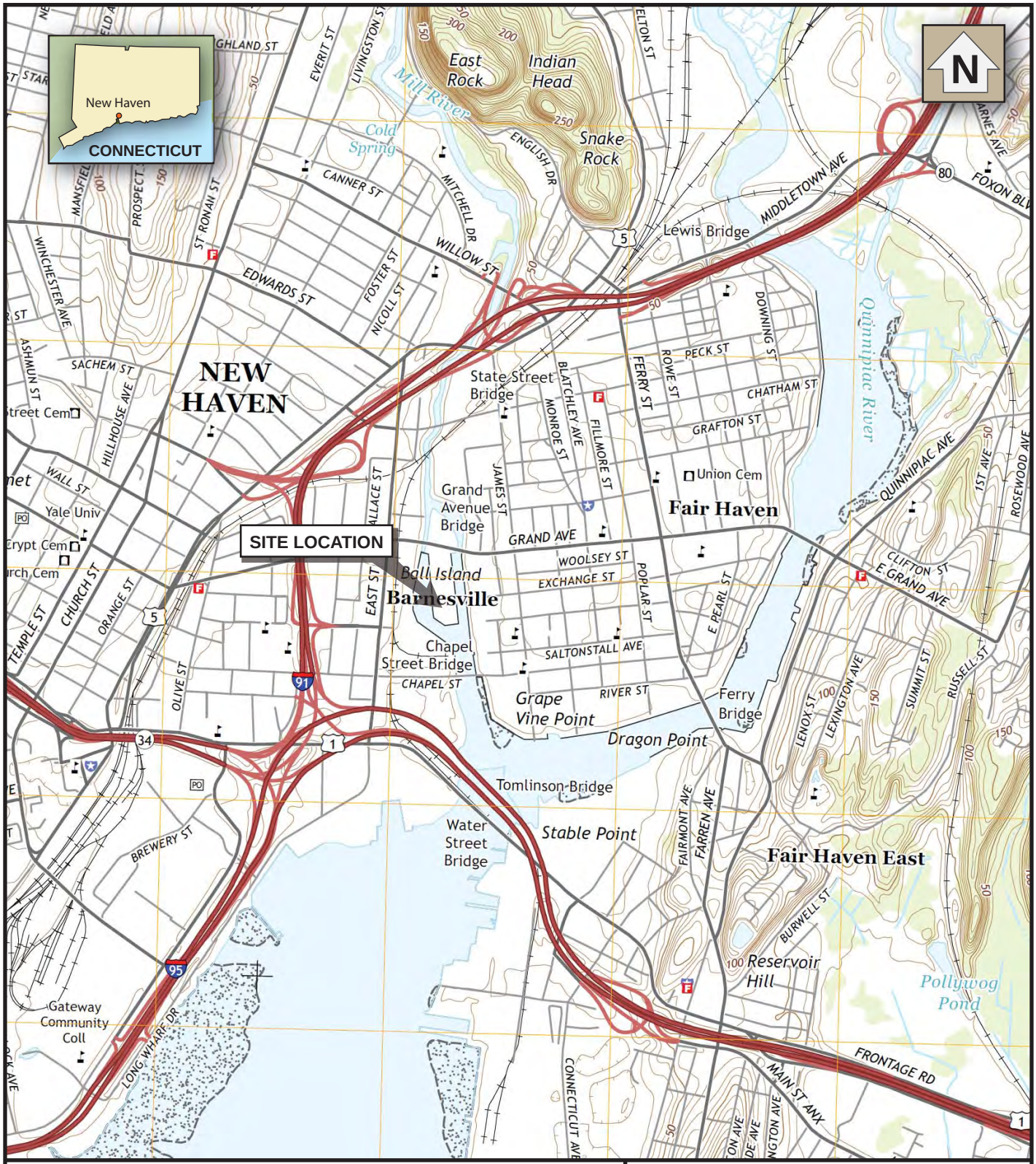
PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
SITE FEATURE LEGEND

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		
DATE:	10/07/2016		

TRC
21 Griffin Road North
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Legend.dwg



0 2000
Approximate Scale FT

0 1
Approximate Scale MILE

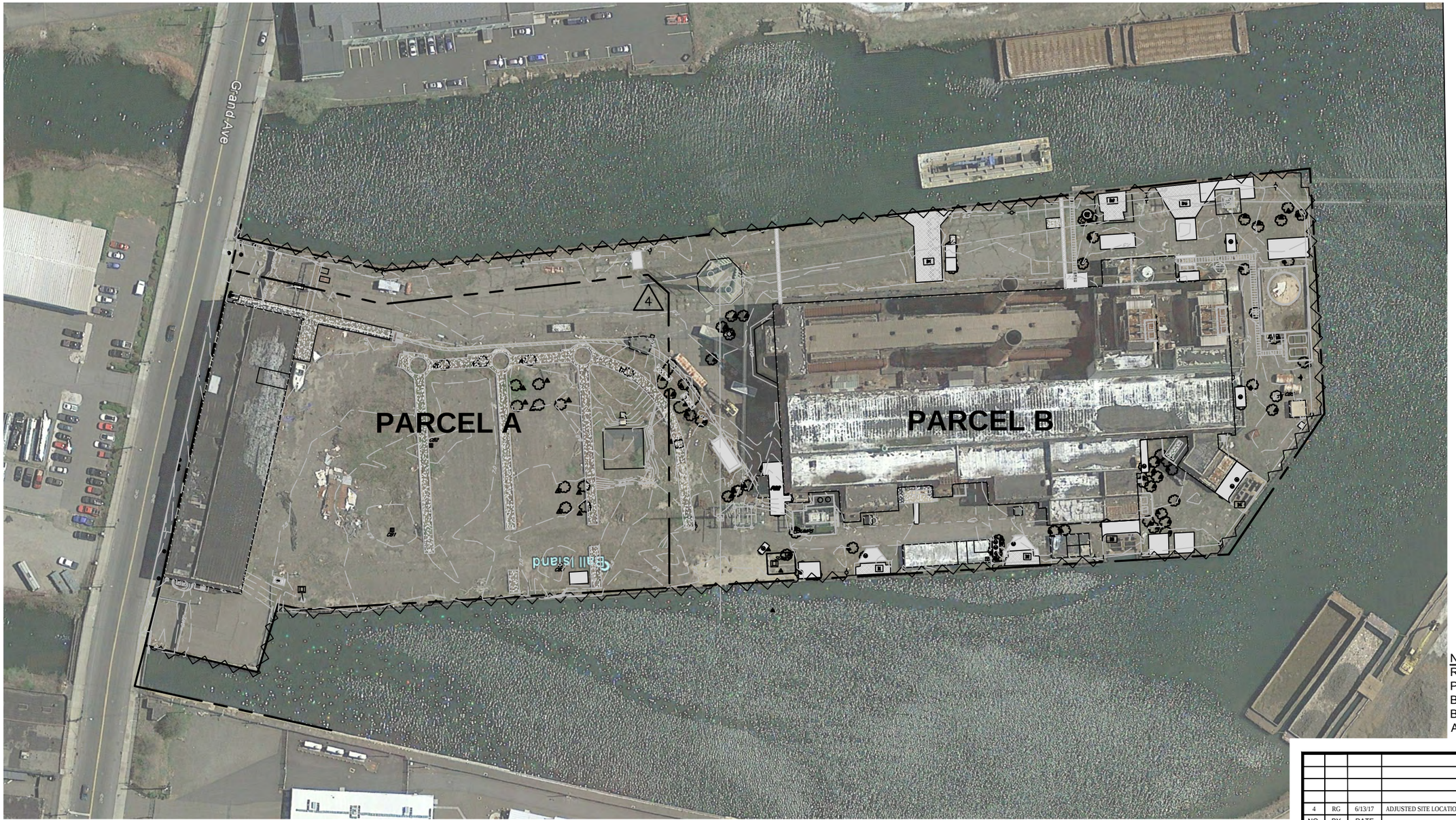
1:24000
BASE CREATED WITH 7.5' USGS TOPOGRAPHIC MAP
NEW HAVEN, CT 2015

TRC
21 Griffin Road North
Windsor, CT 06095
Phone: 860.298.9692

ENGLISH STATION
510 GRAND AVENUE, NEW HAVEN, CT

FIGURE 1-1
SITE LOCATION MAP

DATE: 10/2016 | PROJECT NO. 263951.0000.000000



NOTE:
REVISION 4 INCLUDES A PROPERTY LINE ADJUSTMENT BASED ON THE 11/28/16 SURVEY BY GODFREY-HOFFMAN & ASSOC.

SOURCE:
- MAP TITLED "FIGURE 3N, MASS ANALYSIS PCB SAMPLE POINT LOCATIONS-NORTH, PREPARED FOR QUINNIPIAC ENERGY, LLC., ENGLISH STATION, 510 GRAND AVENUE, NEW HAVEN, CT." DATED: 3/1/10, SCALE: 1"=20', BY ADVANCED ENVIRONMENTAL INTERFACE, INC.
- AERIAL IMAGE FROM GOOGLE EARTH PRO, DATE OF IMAGE: 04/20/2016

N E S W
CT State 1983

0 100' 200'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

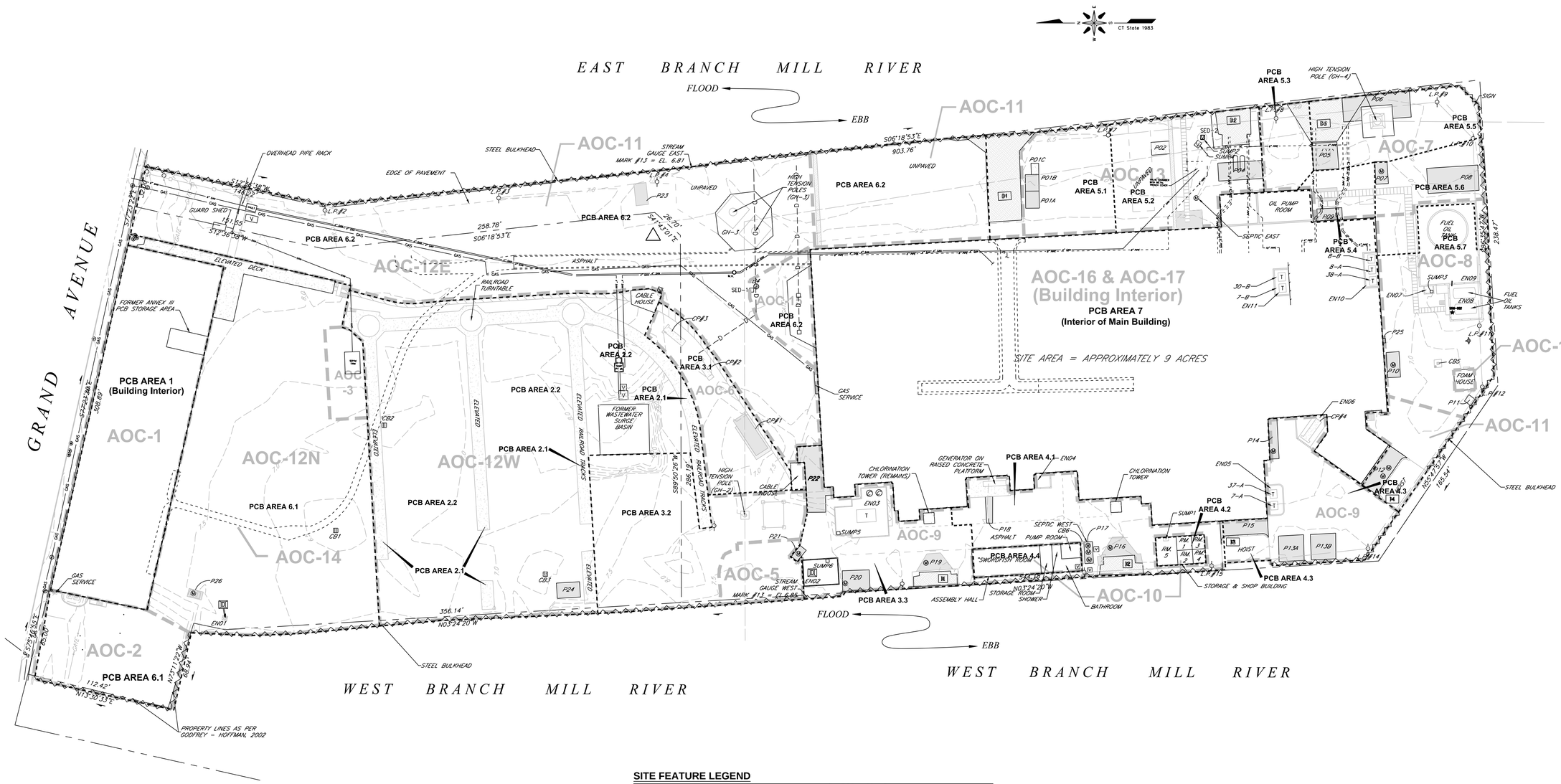
PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
SITE PLAN AND APPROXIMATE PARCEL BOUNDARIES

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 2-1**
APPROVED BY:	MM		
DATE:	10/07/2016		

TRC
21 Griffin Road North
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg



Areas Of Environmental Concern

AOC-1	Station B-Building Interior
AOC-2	Station B Underground Storage Tank Area
AOC-3	Former Septic System
AOC-4	Past Spills - Unspecified Locations
AOC-5	Bulkhead PCB Remediation Area
AOC-6	Capacitor Release Area/Outdoor Capacitor Banks
AOC-7	Former Waste Oil AST and Oil Pump House
AOC-8	Former Fuel Oil Storage ASTs
AOC-9	Transformer Areas
AOC-10	Interior Chemical Storage Areas Excluding English Station
AOC-11	On-site Fill Material - Site wide
AOC-12E	Coal Storage, Handling, and Waste Disposal Areas
AOC-12N	Coal Storage, Handling, and Waste Disposal Areas
AOC-12W	Coal Storage, Handling, and Waste Disposal Areas
AOC-13	Former Wastewater Treatment Facility
AOC-14	Former Cooling Water Discharge Tunnel
AOC-15	Catch Basin Release & Oil Stain Area
AOC-16	English Station Interior
AOC-17	Drainage Structures Associated With/Beneath English Station

General Notes

[1] Several base maps were used for site features. These contain some discrepancies that have not been resolved. Locations are approximate.
[2] Not all structural details have been shown within buildings and enclosures.
[3] Enclosures *EN01* through *EN11* are enclosed either by four concrete walls, or by three concrete walls and a building wall. Enclosure is not synonymous with containment.
[4] Four concrete pads formerly held capacitors: *CP#1, CP#2, CP#3, CP#4. CP#1* is at grade; the others are elevated.
[5] In a survey of monitoring wells on 13 April 2004, AEI could not find the following wells, and they are presumed excavated or otherwise destroyed: MW-01, MW-02, MW-13, MW-20, MW-N, and MW-O.
[6] Godfrey-Hoffman Associates, LLC supplied a General Location Survey base map: Project 01-182; January 4, 2002 with revisions to November 28, 2016; scale 1 inch = 40 feet.
[7] This Figure is not intended for construction purposes.

PCB Investigation Areas

PCB Area 1: Station B Interior
Area 1.1 Mezzanine and First Floor, except Annex III
Area 1.2 Former Annex III
Area 1.3 Basement

PCB Area 2: Former Coal Yard
Area 2.1 Elevated Railroad Tracks and Foundations
Area 2.2 Remainder of Former Coal Yard

PCB Area 3: Electrical Infrastructure and Excavation
Area 3.1 Former Capacitor Area
Area 3.2 United Illuminating Remediation Area
Area 3.3 Transformer and Capacitor Area

PCB Area 4: Southwest Corner
Area 4.1 Former Transformer Area
Area 4.2 Storage and Shop Building Interior
Area 4.3 Transformer and Former Capacitor Area
Area 4.4 Assembly Hall Interior

PCB Area 5: Southeast Corner
Area 5.1 Former Dumpster Area
Area 5.2 Former Wastewater Treatment Area
Area 5.3 Oil Pump House Area
Area 5.4 Former Waste Oil Tank Area
Area 5.5 Tower GH-4 Area
Area 5.6 Former Storage Building Area
Area 5.7 Fuel Oil Tank Area

PCB Area 6: Balance of Site, Except English Station
Area 6.1 Former Station B Area
Area 6.2 Mill River East Branch Area

PCB Area 7: English Station Interior

SITE FEATURE LEGEND

- EDGE OF PAVEMENT
- PROPERTY / STREET LINE
- CHAIN LINK FENCE
- GUARDRAIL
- NEW BULKHEAD
- GAS LINE
- OVERHEAD WIRE
- CONCRETE WALL
- APPROXIMATE EXTENT OF EXCAVATION
- PCB AREA BOUNDARY
- AOC BOUNDARY
- PIPE TRENCH
- EXISTING BUILDING
- P20 CONCRETE PAD
- CONCRETE PAD (ELEVATED)
- ASPHALT APRON
- RECENT FILL
- WATER GATE
- GAS GATE
- ROUND CATCH BASIN
- RECTANGULAR CATCH BASIN
- UTILITY POLE
- FIRE HYDRANT
- MANHOLE
- V VAULT
- H HATCHWAY
- I2 INTAKE CHANNEL
- D2 DISCHARGE CHANNEL
- T TRANSFORMER
- CIRCUIT BREAKER
- CATHODIC BULKHEAD PROTECTION DEVICE
- 4AS-007 ASPHALT SAMPLE POINT
- 3CO-040 CONCRETE SAMPLE POINT
- CS-1 CONCRETE SAMPLE POINT – COLLECTED BY GEI
- 4CO-078 CONCRETE SAMPLE POINT FROM WALL
- 3HX-004 HEXANE WIPE SAMPLE POINT
- 4XX-001 MISCELLANEOUS SAMPLE POINT
- 3SD-001 SEDIMENT SAMPLE POINT
- PCB-05 SEDIMENT SAMPLE POINT – COLLECTED BY GEI
- 4HA-513 SOIL SAMPLE POINT
- TB-KKK SAMPLE LOCATION WHERE BOTH POROUS MEDIA (ASPHALT OR CONCRETE) AND SOIL SAMPLES WHERE COLLECTED
- HA-1 SOIL SAMPLE POINT – COLLECTED BY OTHERS
- 3SW-001 SURFACE WATER SAMPLE POINT
- MW-N / TB-W SOIL SAMPLE FROM GROUND WATER MONITORING WELL
- MW-01 SOIL SAMPLE FROM GROUND WATER MONITORING WELL – INSTALLED BY OTHERS

NOTE:
REVISION 4 INCLUDES A PROPERTY LINE ADJUSTMENT BASED ON THE 11/28/16 SURVEY BY GODFREY-HOFFMAN & ASSOC.

SOURCE:
MAP TITLED "FIGURE 3N. MASS ANALYSIS PCB SAMPLE POINT LOCATIONS-NORTH, PREPARED FOR QUINNIPIAC ENERGY, LLC., ENGLISH STATION, 510 GRAND AVENUE, NEW HAVEN, CT." DATED: 3/1/10, SCALE: 1"=20', BY ADVANCED ENVIRONMENTAL INTERFACE, INC.

0 40' 80'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

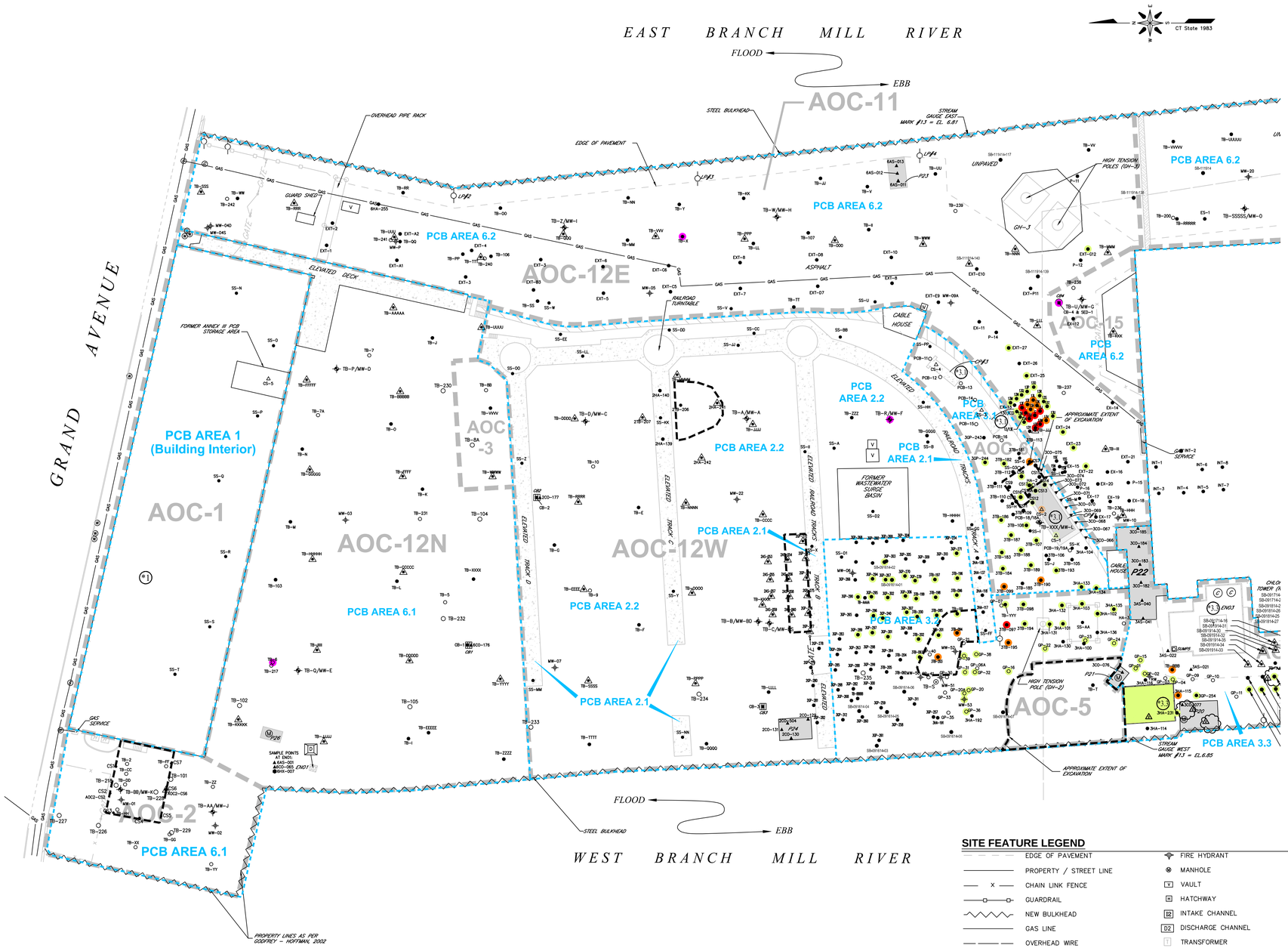
TITLE:
SITE FEATURES, AOCs, AND PCB AREAS

DRAWN BY:	KDH
CHECKED BY:	RG
APPROVED BY:	ST
DATE:	10/07/2016
PROJ. NO.:	263951-000001-000000

FIGURE 4-1

TRC
21 Griffin Road North
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg



General Notes for Figures 4.2A and 4.2B

[1] Several base maps were used for site features and Sample Point locations. These contain some discrepancies that have not been resolved. Locations are approximate.

[2] Not all structural details have been shown within buildings and enclosures.

[3] Enclosures *EN01* through *EN11* are enclosed either by four concrete walls, or by three concrete walls and a building wall. Enclosure is not synonymous with containment.

[4] Four concrete pads formerly held capacitors: *CP#1, CP#2, CP#3, CP#4. CP#1* is at grade; the others are elevated.

[5] Most Sample Point locations were field-located and have not been surveyed. Not all Sample Points are mapped.

[6] Figures 3N and 3S show only those groundwater monitoring wells for which soil analytical data are available.

[7] The format of some Sample Point identifications has been modified to facilitate database operations.

[8] Sample Point identifications starting in June 2004 have the following format: 3CO-040.
The first number defines the PCB Area: Areas 1 through 7.
The two letters define the matrix or type of sample.
The last two or three numbers give the sample number within the series.
Duplicate samples are indicated by "D" following the sample number or depth.

[9] AS indicates an asphalt sample, drilled to a depth of ½ inch.
CO indicates a concrete sample, drilled to a depth of ½ inch.
HX indicates a hexane wipe sample from a steel or painted steel surface.
XX indicates a miscellaneous sample. These include oil, sludge, floor tiles, and material from a canister.
SD indicates a sediment sample from a catch basin, pipe trench, or sump.
GP, HA, and TB indicate soil samples, taken respectively by Geoprobe ®, hand auger or other hand tool, and drilling rig. Surface samples may include asphalt, concrete, or stone.
SW indicates a surface water sample taken from one of the enclosures.

[10] In general, asphalt and concrete samples have been taken based on a five-foot grid (~1.5-meter) and soil samples on a ten-foot grid. Some Sample Point locations were adjusted because of site conditions.

[11] A series of detail Figures show additional Sample Points and PCB criteria exceedance data. These are indicated on Figures 3N and 3S as follows.
*1 = See Figure 4-3
*3.1 = See Figures 4-8A & 4-8B
*3.3 = See Figures 4-11A & 4-11B
*4.2 = See Figure 4-14
*4.3 = See Figures 4-13A, 4-13B, & 4-13C
*4.4 = See Figure 4-15
*5.1 = See Figure 4-19A
*5.2 = See Figure 4-19B
*5.4 = See Figure 4-9A
*5.5 = See Figure 4-9B
*5.6 = See Figure 4-9C

[12] Godfrey-Hoffman Associates, LLC supplied a General Location Survey base map: Project 01-182; January 4, 2002 with revisions to June 21, 2002; scale 1 inch = 40 feet.

[13] These Figures are not intended for construction purposes.

PCB Investigation Areas

PCB Area 1: Station B Interior
Area 1.1 Mezzanine and First Floor, except Annex III
Area 1.2 Former Annex III
Area 1.3 Basement

PCB Area 2: Former Coal Yard
Area 2.1 Elevated Railroad Tracks and Foundations
Area 2.2 Remainder of Former Coal Yard

PCB Area 3: Electrical Infrastructure and Excavation
Area 3.1 Former Capacitor Area
Area 3.2 United Illuminating Remediation Area
Area 3.3 Transformer and Capacitor Area

PCB Area 4: Southwest Corner
Area 4.1 Former Transformer Area
Area 4.2 Storage and Shop Building Interior
Area 4.3 Transformer and Former Capacitor Area
Area 4.4 Assembly Hall Interior

PCB Area 5: Southeast Corner
Area 5.1 Former Dumpster Area
Area 5.2 Former Wastewater Treatment Area
Area 5.3 Oil Pump House Area
Area 5.4 Former Waste Oil Tank Area
Area 5.5 Tower GH-4 Area
Area 5.6 Former Storage Building Area
Area 5.7 Fuel Oil Tank Area

PCB Area 6: Balance of Site, Except English Station
Area 6.1 Former Station B Area
Area 6.2 Mill River East Branch Area

PCB Area 7: English Station Interior

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC

SITE FEATURE LEGEND

- EDGE OF PAVEMENT
- PROPERTY / STREET LINE
- CHAIN LINK FENCE
- GUARDRAIL
- NEW BULKHEAD
- GAS LINE
- OVERHEAD WIRE
- CONCRETE WALL
- APPROXIMATE EXTENT OF EXCAVATION
- PCB AREA BOUNDARY
- AOC BOUNDARY
- PIPE TRENCH
- EXISTING BUILDING
- P20 CONCRETE PAD
- CONCRETE PAD (ELEVATED)
- ASPHALT APRON
- RECENT FILL
- WATER GATE
- GAS GATE
- ROUND CATCH BASIN
- RECTANGULAR CATCH BASIN
- UTILITY POLE
- FIRE HYDRANT
- MANHOLE
- VAULT
- HATCHWAY
- INTAKE CHANNEL
- DISCHARGE CHANNEL
- TRANSFORMER
- CIRCUIT BREAKER
- CATHODIC BULKHEAD PROTECTION DEVICE
- 4AS-007▲ ASPHALT SAMPLE POINT
- 3CO-040▲ CONCRETE SAMPLE POINT
- CS-1△ CONCRETE SAMPLE POINT – COLLECTED BY GEI
- 4CO-078▲ CONCRETE SAMPLE POINT FROM WALL
- 3HX-004● HEXANE WIPE SAMPLE POINT
- 4XX-001✕ MISCELLANEOUS SAMPLE POINT
- 3SD-001■ SEDIMENT SAMPLE POINT
- PCB-05□ SEDIMENT SAMPLE POINT – COLLECTED BY GEI
- 4HA-513● SOIL SAMPLE POINT
- TB-KKK▲ SAMPLE LOCATION WHERE BOTH POROUS MEDIA (ASPHALT OR CONCRETE) AND SOIL SAMPLES WERE COLLECTED
- HA-1○ SOIL SAMPLE POINT – COLLECTED BY OTHERS
- 3SW-001★ SURFACE WATER SAMPLE POINT
- MW-H ✣ TB-W SOIL SAMPLE FROM GROUND WATER MONITORING WELL
- MW-01⊕ SOIL SAMPLE FROM GROUND WATER MONITORING WELL – INSTALLED BY OTHERS

SOURCE:
MAP TITLED "FIGURE 3N, MASS ANALYSIS PCB SAMPLE POINT LOCATIONS-NORTH, PREPARED FOR QUINNIPIAC ENERGY, LLC., ENGLISH STATION, 510 GRAND AVENUE, NEW HAVEN, CT." DATED: 3/1/10, SCALE: 1"=20', BY ADVANCED ENVIRONMENTAL INTERFACE, INC.

NO.	BY	DATE	REVISION	APP'D
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	REMOVED AOC PAST SAMPLE LOCATION FIGURE LOCATIONS	MM
2	RG	2/27/17	CUMULATIVE REVISIONS FROM FIGURES 4-9 THRU 4-13	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
HISTORIC SAMPLE LOCATIONS - PARCEL A

DRAWN BY:	KDH	PROJ. NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	ST		**FIGURE 4-2A**
DATE:	10/07/2016		

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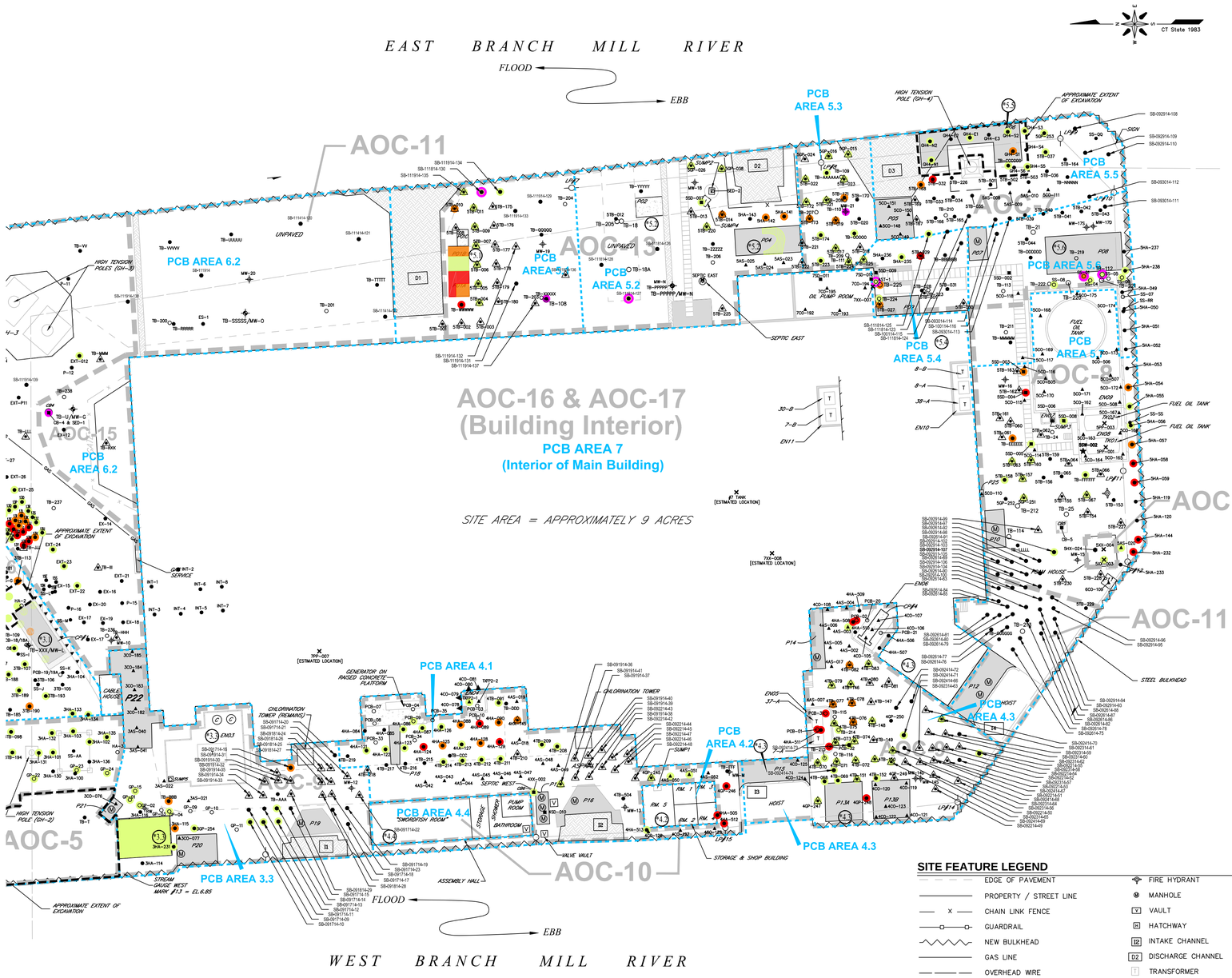
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg



0 30' 60'
GRAPHIC SCALE

General Notes for Figures 4.2A and 4.2B

[1] Several base maps were used for site features and Sample Point locations. These contain some discrepancies that have not been resolved. Locations are approximate.

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[5] Most Sample Point locations were field-located and have not been surveyed. Not all Sample Points are mapped.

[6] Figures 3N and 3S show only those groundwater monitoring wells for which soil analytical data are available.

[7] The format of some Sample Point identifications has been modified to facilitate database operations.

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The first number defines the PCB Area: Areas 1 through 7.
The two letters define the matrix or type of sample.
The last two or three numbers give the sample number within the series.
Duplicate samples are indicated by "D" following the sample number or depth.

[9] AS indicates an asphalt sample, drilled to a depth of ½ inch.
CO indicates a concrete sample, drilled to a depth of ½ inch.
HX indicates a hexane wipe sample from a steel or painted steel surface.
XX indicates a miscellaneous sample. These include oil, sludge, floor tiles, and material from a canister.
SD indicates a sediment sample from a catch basin, pipe trench, or sump.
GP, HA, and TB indicate soil samples, taken respectively by Geoprobe ®, hand auger or other hand tool, and drilling rig. Surface samples may include asphalt, concrete, or stone.
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[10] In general, asphalt and concrete samples have been taken based on a five-foot grid (~1.5-meter) and soil samples on a ten-foot grid. Some Sample Point locations were adjusted because of site conditions.

[11] A series of detail Figures show additional Sample Points and PCB criteria exceedance data. These are indicated on Figures 3N and 3S as follows.
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*3.3 = See Figures 4-11A & 4-11B
*4.2 = See Figure 4-14
*4.3 = See Figures 4-13A, 4-13B, & 4-13C
*4.4 = See Figure 4-15
*5.1 = See Figure 4-19A
*5.2 = See Figure 4-19B
*5.4 = See Figure 4-9A
*5.5 = See Figure 4-9B
*5.6 = See Figure 4-9C

[12] Godfrey-Hoffman Associates, LLC supplied a General Location Survey base map: Project 01-182; January 4, 2002 with revisions to June 21, 2002; scale 1 inch = 40 feet.

[13] These Figures are not intended for construction purposes.

PCB Investigation Areas

PCB Area 1:	**Station B Interior**
Area 1.1	Mezzanine and First Floor, except Annex III
Area 1.2	Former Annex III
Area 1.3	Basement
PCB Area 2:	**Former Coal Yard**
Area 2.1	Elevated Railroad Tracks and Foundations
Area 2.2	Remainder of Former Coal Yard
PCB Area 3:	**Electrical Infrastructure and Excavation**
Area 3.1	Former Capacitor Area
Area 3.2	United Illuminating Remediation Area
Area 3.3	Transformer and Capacitor Area
PCB Area 4:	**Southwest Corner**
Area 4.1	Former Transformer Area
Area 4.2	Storage and Shop Building Interior
Area 4.3	Transformer and Former Capacitor Area
Area 4.4	Assembly Hall Interior
PCB Area 5:	**Southeast Corner**
Area 5.1	Former Dumpster Area
Area 5.2	Former Wastewater Treatment Area
Area 5.3	Oil Pump House Area
Area 5.4	Former Waste Oil Tank Area
Area 5.5	Tower GH-4 Area
Area 5.6	Former Storage Building Area
Area 5.7	Fuel Oil Tank Area
PCB Area 6:	**Balance of Site, Except English Station**
Area 6.1	Former Station B Area
Area 6.2	Mill River East Branch Area
PCB Area 7:	**English Station Interior**

LEGEND

🔴	SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
🟠	SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
🟡	SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
🟣	SAMPLE LOCATION WITH TPH/ETPH > I/C DEC

SITE FEATURE LEGEND

— — —	EDGE OF PAVEMENT	⊕	FIRE HYDRANT
———	PROPERTY / STREET LINE	Ⓜ	MANHOLE
—— X ——	CHAIN LINK FENCE	V	VAULT
—□——□—	GUARDRAIL	H	HATCHWAY
/\/\/\/\	NEW BULKHEAD	I2	INTAKE CHANNEL
———	GAS LINE	D2	DISCHARGE CHANNEL
—— —— ——	OVERHEAD WIRE	T	TRANSFORMER
═══	CONCRETE WALL	Ⓒ	CIRCUIT BREAKER
■ ■ ■ ■	APPROXIMATE EXTENT OF EXCAVATION	D	CATHODIC BULKHEAD PROTECTION DEVICE
- - - -	PCB AREA BOUNDARY	4AS–007 ▲	ASPHALT SAMPLE POINT
▬ ▬ ▬	AOC BOUNDARY	3CO–040 ▲	CONCRETE SAMPLE POINT
▥	PIPE TRENCH	CS–1 △	CONCRETE SAMPLE POINT – COLLECTED BY GEI
▨	EXISTING BUILDING	4CO–078 ▲	CONCRETE SAMPLE POINT FROM WALL
P20	CONCRETE PAD	3HX–004 ⬢	HEXANE WIPE SAMPLE POINT
░	CONCRETE PAD (ELEVATED)	4XX–001 ✕	MISCELLANEOUS SAMPLE POINT
░	ASPHALT APRON	3SD–001 ■	SEDIMENT SAMPLE POINT
▩	RECENT FILL	PCB–05 □	SEDIMENT SAMPLE POINT – COLLECTED BY GEI
Ⓦ	WATER GATE	4HA–513 ●	SOIL SAMPLE POINT
Ⓖ	GAS GATE	TB–KKK △	SAMPLE LOCATION WHERE BOTH POROUS MEDIA (ASPHALT OR CONCRETE) AND SOIL SAMPLES WERE COLLECTED
◍	ROUND CATCH BASIN	HA–1 ○	SOIL SAMPLE POINT – COLLECTED BY OTHERS
▥	RECTANGULAR CATCH BASIN	3SW–001 ★	SURFACE WATER SAMPLE POINT
ϕ	UTILITY POLE	MW–H TB–W ⊕	SOIL SAMPLE FROM GROUND WATER MONITORING WELL
		MW–01 ⊕	SOIL SAMPLE FROM GROUND WATER MONITORING WELL – INSTALLED BY OTHERS

SOURCE:
MAP TITLED "FIGURE 3S, MASS ANALYSIS PCB SAMPLE POINT LOCATIONS-SOUTH, PREPARED FOR QUINNIPIAC ENERGY, LLC., ENGLISH STATION, 510 GRAND AVENUE, NEW HAVEN, CT." DATED: 3/1/10, SCALE: 1"=20', BY ADVANCED ENVIRONMENTAL INTERFACE, INC.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/14	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	REMOVED AOC PAST SAMPLE LOCATION FIGURE LOCATIONS	MM
2	RG	2/27/17	CUMULATIVE REVISIONS FROM FIGURES 4-9 THRU 4-13	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
HISTORIC SAMPLE LOCATIONS - PARCEL B

DRAWN BY: KDH
CHECKED BY: RG
APPROVED BY: ST
DATE: 10/07/2016
PROJ. NO.: 263951-000001-000000

FIGURE 4-2B

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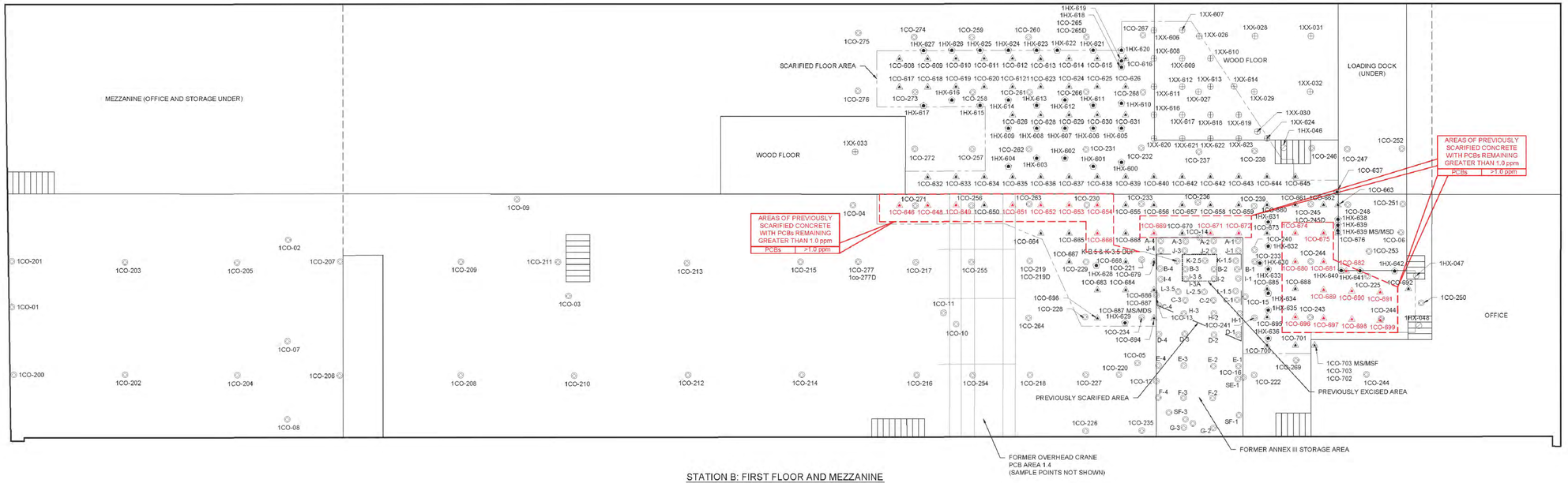
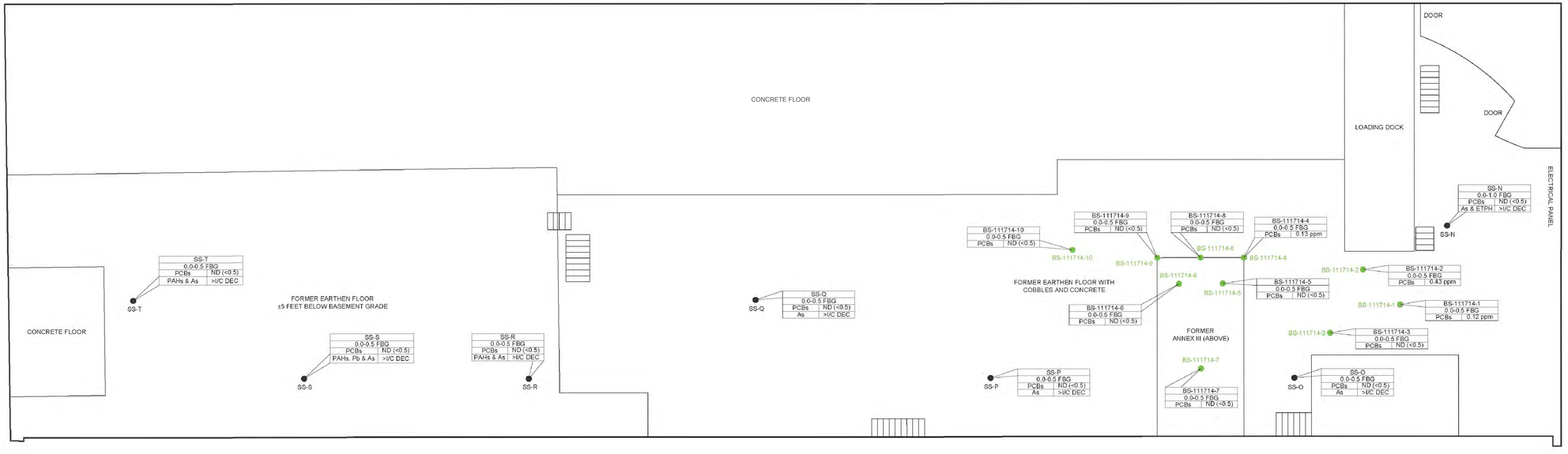
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg

24x36 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 22, 2017 - 1:49PM --- LAYOUT: Figure 4-2B



STATION B: FIRST FLOOR AND MEZZANINE



STATION B: BASEMENT

LEGEND

- PREVIOUS SOIL SAMPLE POINT
- SOIL SAMPLE LOCATION (2014)
- PREVIOUS CONCRETE SAMPLE POINT
- PREVIOUS HEXANE WIPE SAMPLE POINT
- PREVIOUS WOOD SAMPLE POINT
- PREVIOUS MASS SAMPLES (SAMPLES IN RED EXCEED 1.0 ppm)
- PREVIOUS WIPE SAMPLES

Notes:
a. ND = None Detected
b. Section 4 Subsurface Investigation (2014) sample point locations are illustrated in green. All historic sample point locations are based on previous figures prepared by others, including those referenced in the General Notes section of this figure. Exceedances identified in historic samples are based on previous data that were reviewed and included in Appendix A of the Section 4 Subsurface Investigation report.

SOURCE:
MAP TITLED "FIGURE NO. 3, STATION B BUILDING INTERIOR, FORMER ENGLISH STATION, 510 GRAND AVENUE, NEW HAVEN, CT." DATED: 02/09/2015; SCALE: 1"=10', BY HRP ASSOCIATES, INC.

0 40' 80'
GRAPHIC SCALE

GENERAL NOTES:
a. The following base maps and figures were used for Site features and sample point locations:
a.a. "SPLP PCB SAMPLE POINT LOCATIONS AND DETECTIONS" by Advanced Environmental Interface, Inc., project no. AEI-00T-030e; drawing No. 00T-04D; dated 3/1/10; Figure 6.
a.b. "PCB SAMPLE LOCATIONS ON PARCEL A" by Advanced Environmental Interface, Inc., project no. AEI-00T-030e; drawing no. 00T-07A; dated: 3/9/07; Plate A
a.c. "PCB AREA 1, STATION B INTERIOR" by Advanced Environmental Interface, Inc., project no. AEI-00T-030e; drawing no. 00T-07B; dated: 3/1/07; Plate B
a.e. "SOIL SAMPLE ANALYTICAL SUMMARY (NORTHERN PORTION OF SITE) EXCEEDANCES OF INDUSTRIAL/COMMERCIAL DIRECT EXPOSURE CRITERIA" by Advanced Environmental Interface, Inc., project no. AEI-00T-030; drawing no. 00T-03C.1; dated: 1/17/03; Plate 3-2a
a.f. "SOIL SAMPLE ANALYTICAL SUMMARY (SOUTHERN PORTION OF SITE) EXCEEDANCES OF INDUSTRIAL/COMMERCIAL DIRECT EXPOSURE CRITERIA" by Advanced Environmental Interface, Inc., project no. AEI-00T-030; drawing no. 00T-03C.2; dated: 1/17/03; Plate 3-2b
a.g. "SOIL SAMPLE ANALYTICAL SUMMARY - EXCEEDANCES OF GB POLLUTANT MOBILITY CRITERIA" by Advanced Environmental Interface, Inc., project no. AEI-00T-030; drawing no. 00T-03D; dated: 1/15/03; Plate 3-1
a.h. "MASS ANALYSIS PCB SAMPLE POINT LOCATIONS AND EXCEEDANCES - SOUTH" by Advanced Environmental Interface, Inc., project no. AEI-00T-039e; drawing no. 00T-04C; dated: 3/1/10; Figure 4B.
a.i. "MASS ANALYSIS PCB SAMPLE POINT LOCATIONS AND EXCEEDANCES - NORTH" by Advanced Environmental Interface, Inc., project no. AEI-00T-039e; drawing no. 00T-04C; dated: 3/1/105; Figure 4N.
a.j. "MASS ANALYSIS PCB SAMPLE POINT LOCATIONS - SOUTH" by Advanced Environmental Interface, Inc., project no. AEI-00T-030e; drawing no. 00T-04B; dated: 3/1/10; Figure 3S.
a.k. "MASS ANALYSIS PCB SAMPLE POINT LOCATIONS - NORTH" by Advanced Environmental Interface, Inc., project no. AEI-00T-030e; drawing no. 00T-04B; dated: 3/1/10; Figure 3N.
a.l. "SITE FEATURES, AOCs, AND PCB AREAS" by Advanced Environmental Interface, Inc.; project no. AEI-00T-030e; drawing no. 00T-04A; dated: 3/1/10; Figure 2.
a.m. "SUMMARY OF UNITED ILLUMINATING'S SOIL AND CONCRETE PCB RESULTS FOR BULKHEAD REMEDIATION AREA" by Advanced Environmental Interface, Inc., Project no. AEI-00T-060e; drawing no. 00T-04F; dated: 3/1/10; Figure 5.
a.n. "IDE Parcel A PCB Cleanup Plan/Interim Status Report" by Advanced Environmental Interface, Inc., AEI Project 00T-050e; dated: May 19, 2008.
a.o. "INTERIOR SAMPLE LOCATION MAP" by GeoQuest, Inc.; project no. 1020; dated: March 9, 2012; Figure 5-C.
a.p. "SITE LAYOUT MAPS SHOWING SAMPLE LOCATIONS" by GeoQuest, Inc.; sumbitted to CT DEEP on March 14, 2012.
a.q. "GENERAL LOCATION SURVEY PROPERTY" by Godfrey-Hoffman Associates, LLC; project 01-182; dated: January 4, 2002; Sheet 1 of 1.
a.r. "PROPOSED SITE CHARACTERIZATION SOIL BORINGS AND MONITORING WELLS" by Stantec; job number: 191711159; dated: 11/08/2013; Figure 1.
b. Figures referenced in general note a contain some discrepancies that have not been resolved.
c. Locations are approximate.

PROJECT:	UNITED ILLUMINATING ENGLISH STATION POWER PLANT 510 Grand Avenue New Haven, Connecticut
TITLE:	AOC-1 STATION B BUILDING INTERIOR HISTORIC SAMPLE LOCATIONS AND REMEDIATION AREAS
DRAWN BY:	KDH
CHECKED BY:	RG
APPROVED BY:	MM
DATE:	10/07/2016
PROJ. NO.:	263951-000001-000000
	FIGURE 4-3

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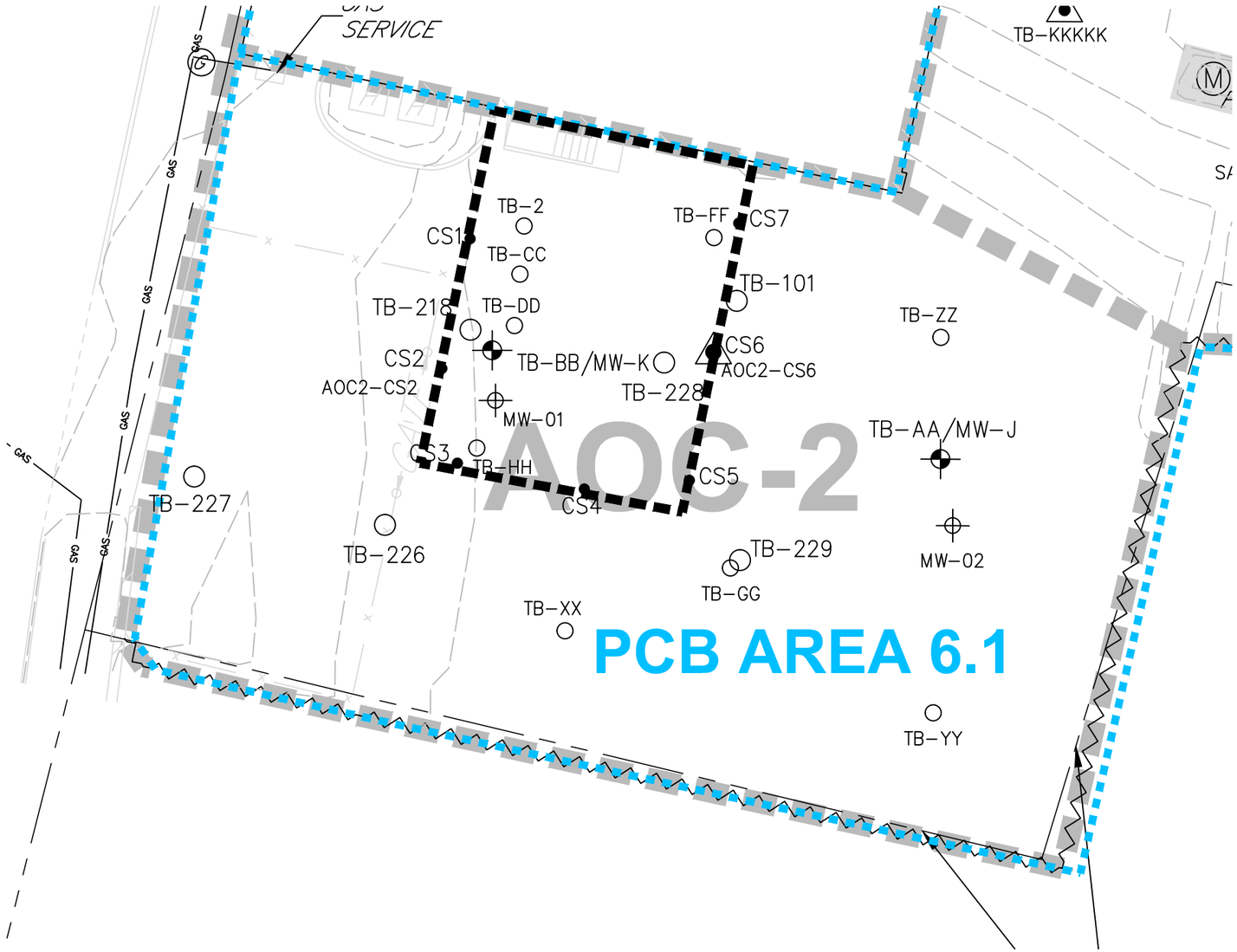
21 Griffin Road North
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Figure 4-3.dwg



0 15' 30'

GRAPHIC SCALE

N E S W

CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-2
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 4-4**
APPROVED BY:	MM		
DATE:	01/04/2017		

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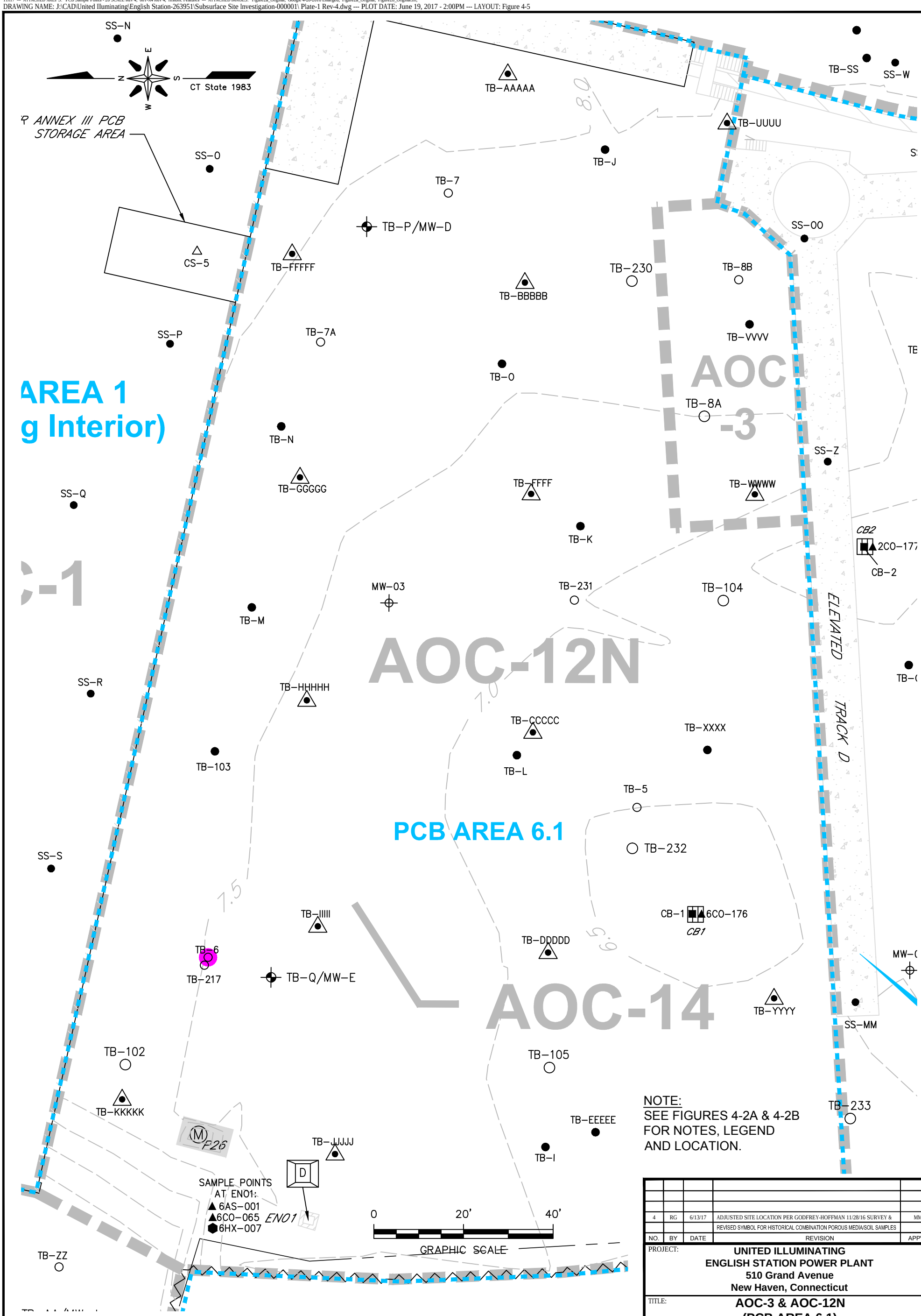
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:00PM --- LAYOUT: Figure 4-5



NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-3 & AOC-12N (PCB AREA 6.1) HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 4-5**
DATE:	10/07/2016		

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Phone: 860.298.9692
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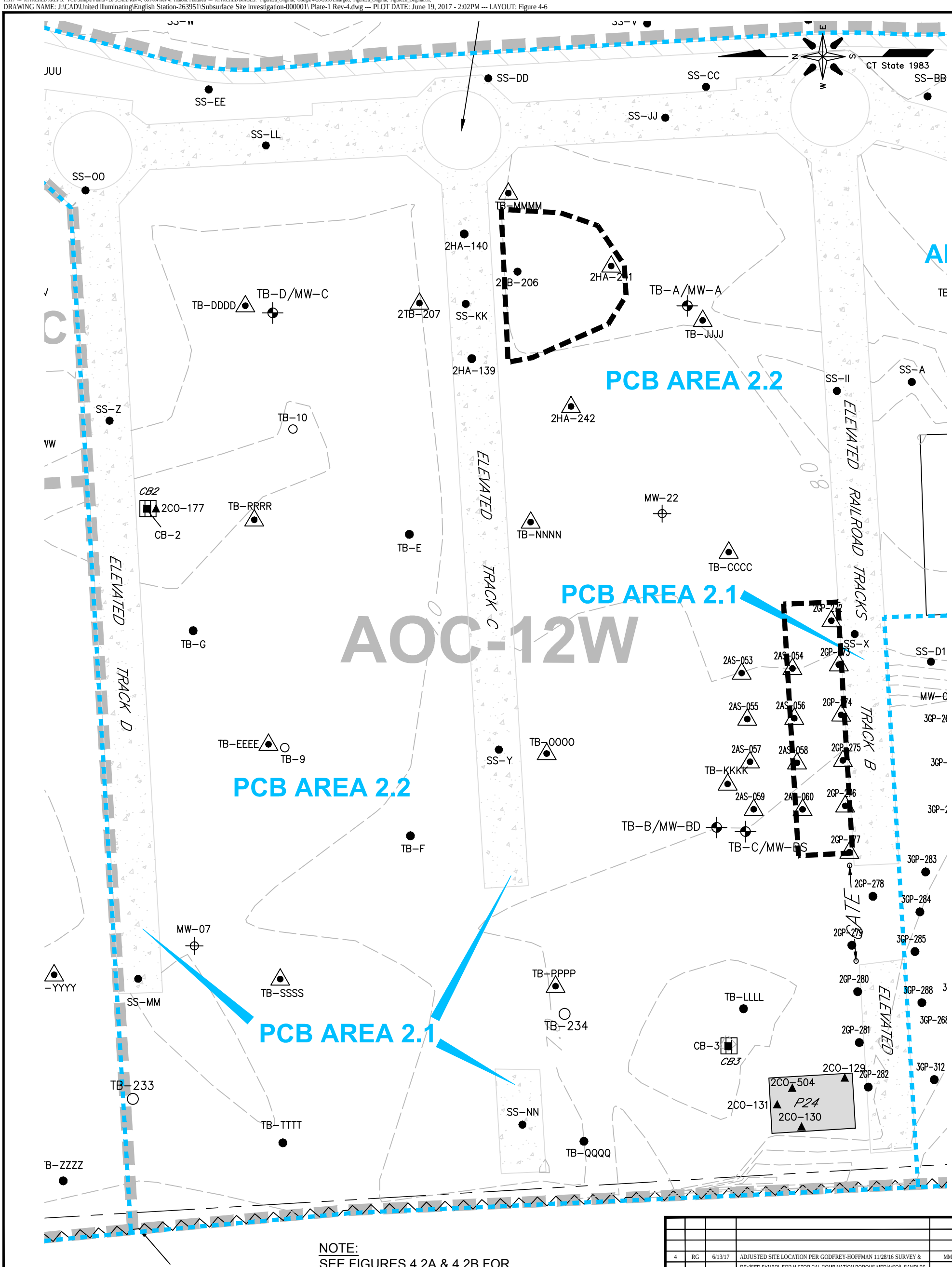
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:02PM --- LAYOUT: Figure 4-6



NOTE:
SEE FIGURES 4.2A & 4.2B FOR NOTES, LEGEND AND LOCATION.

0 20' 40'
GRAPHIC SCALE

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- APPROXIMATE LIMIT OF EXCAVATION

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12W
(PCB AREAS 2.1 & 2.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 4-6**
DATE:	10/07/2016		

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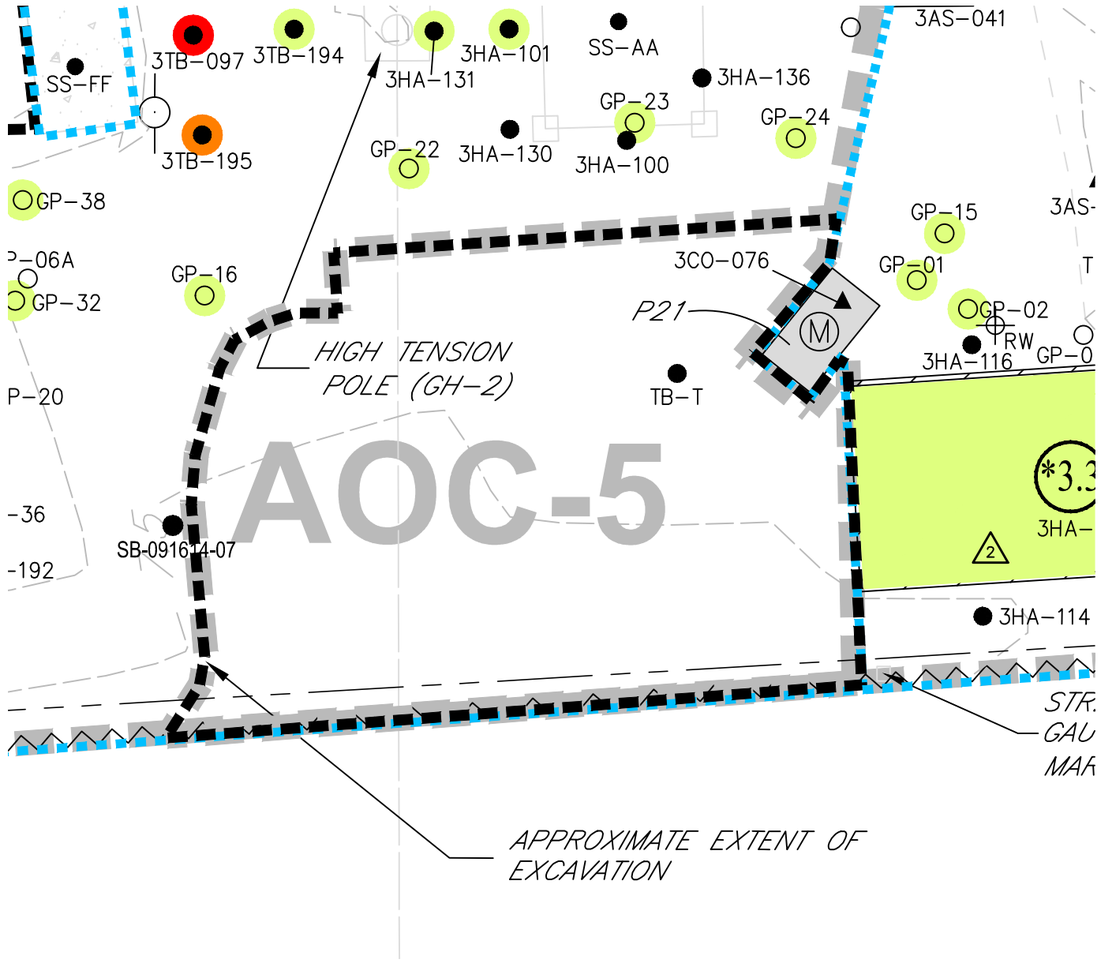
FILE NO.: Plate-1 Rev-4.dwg



CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-5
BULKHEAD PCB REMEDIATION AREA

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 4-7**
DATE:	10/07/2016		

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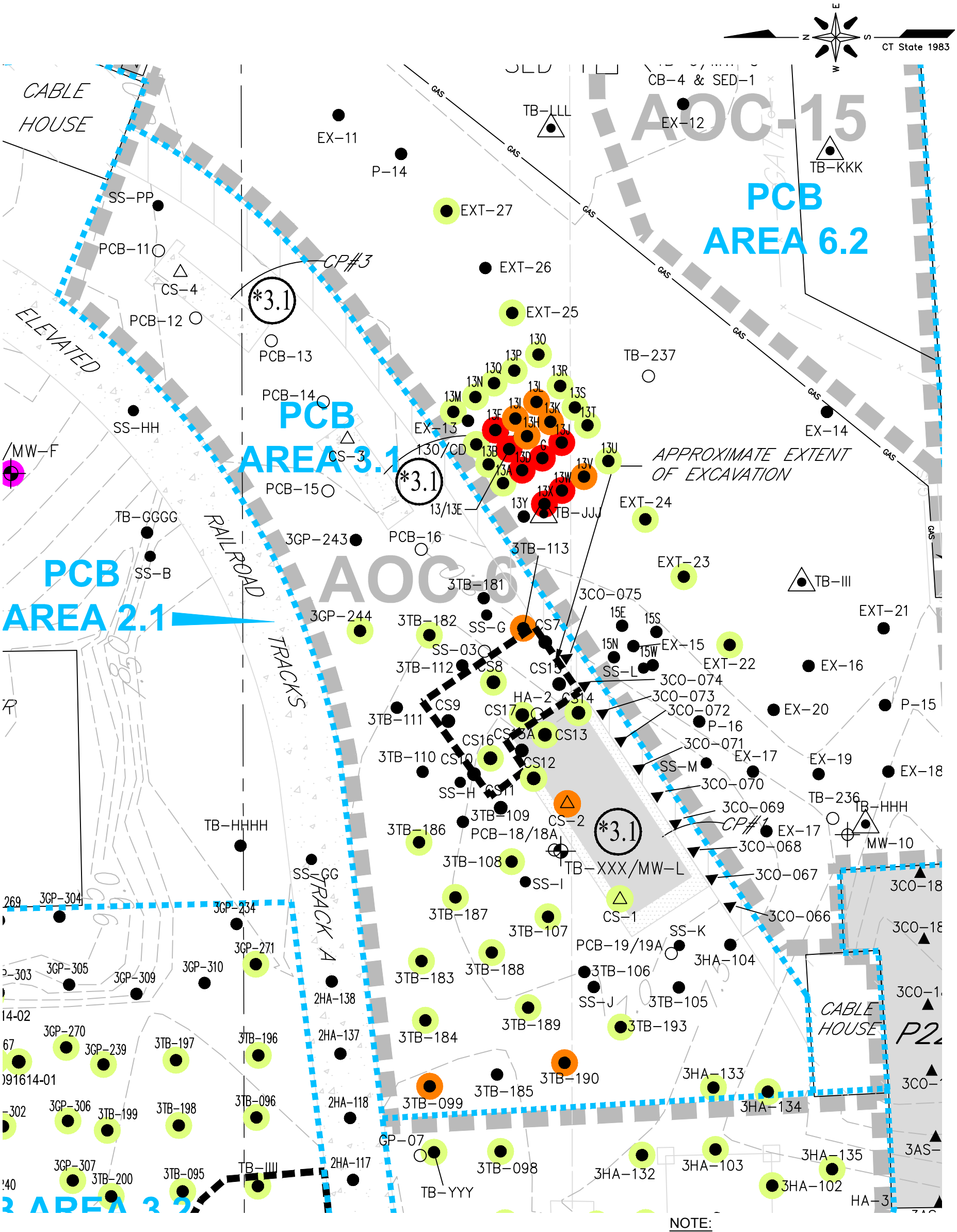
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:05PM --- LAYOUT: Figure 4-8



NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- APPROXIMATE LIMIT OF EXCAVATION

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-6
(PCB AREA 3.1)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 4-8**
DATE:	10/07/2016		

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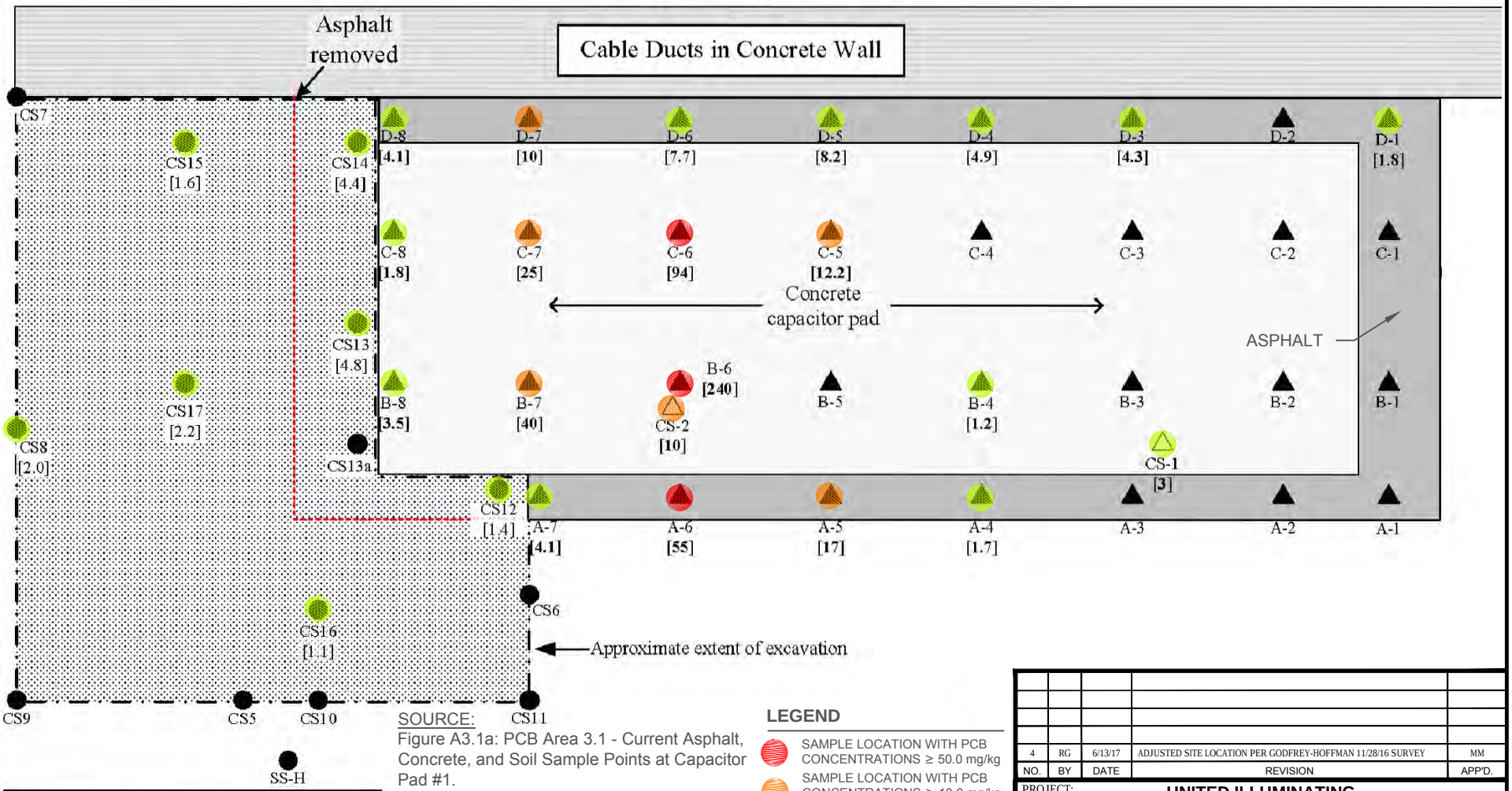
FILE NO.: Plate-1 Rev-4.dwg

Capacitor Pad #1



LEGEND

- A-1 — Asphalt or Concrete Sample Point -AEI
- CS-2 — Concrete Sample Point—GEI
- CS9 — Soil Sample Point -AEI
- [3.5] — PCB Criterion Exceedance in Milligrams Per Kilogram

SOURCE:
Figure A3.1a: PCB Area 3.1 - Current Asphalt, Concrete, and Soil Sample Points at Capacitor Pad #1.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 3.1 - Historic Asphalt, Concrete, and Soil Sample Locations at Capacitor Pad 1

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-8A**
DATE:	10/07/2016		

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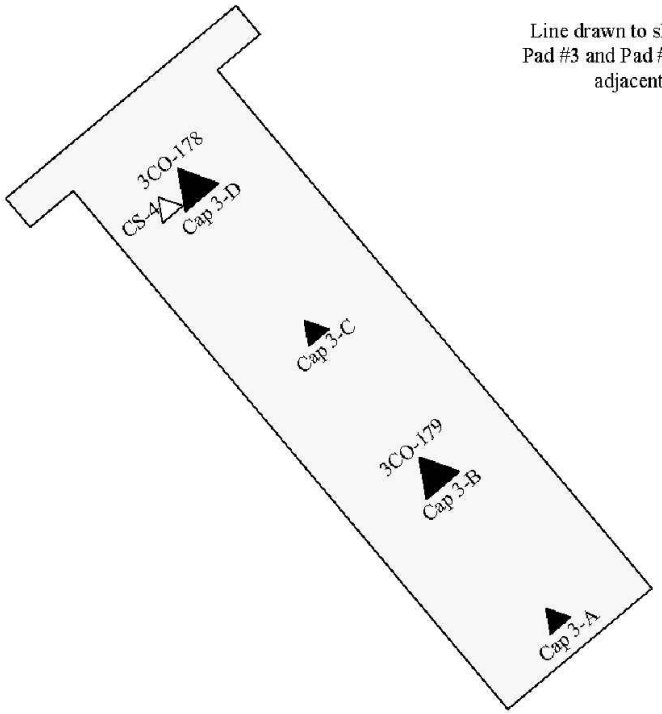
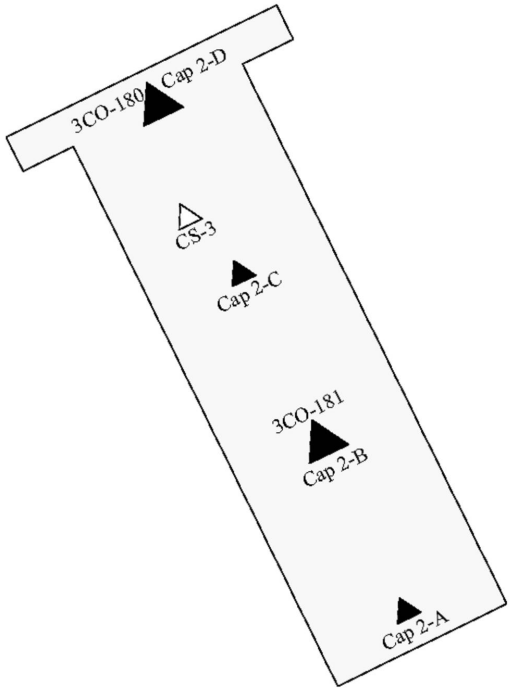
FILE NO.: Figure 4-8A Rev 4.dwg

Capacitor Pad #3



Line drawn to show that Pad #3 and Pad #2 are not adjacent.

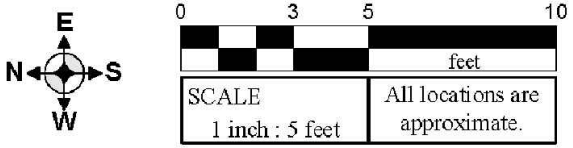
Capacitor Pad #2



LEGEND

Cap 3-A ▲	Concrete Sample Point
CS-4 △	Concrete Sample Point—GEI
Cap 3-A ▲ 3CO-180	Concrete Sample Point—Adjacent

SOURCE:
Figure A3.1c: PCB Area 3.1 - Concrete Sample Points at Capacitor Pads #2 & #3.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.



NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 3.1 - Historic Concrete Sample Locations at Capacitor Pads 2 & 3

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-8B**
DATE:	10/07/2016		

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FILE NO.: Figure 4-8B Rev 4.dwg

PCB AREA 5.3

POLE (GH-4)

*5.5

APPROXIMATE EXTENT OF EXCAVATION

P06

GH4-S3

GH4-E2

GH4-E1

GH4-E3

GH4-S2

GH4-N2

GH4-S4

GH4-S1

GH4-N1

TB-CCCCCC

GH4-S5

GH4-S6

5GP-253

LP#9

SS-QQ

SIGN

SB-092914-108

SB-092914-109

SB-092914-110

5GP-024

5GP-016

5GP-015

LP#8

TB-109

TB-AAAAAA

5TB-022

5TB-023

D3

5TB-037

5TB-164

PCB AREA 5.5

5TB-036

TB-NNNNN

5TB-032

5TB-226

5TB-501

5TB-502

5TB-503

5TB-168

5TB-171

5TB-170

5TB-208

5TB-021

MW-21

TB-110

5TB-172

TB-207

5TB-173

5TB-019

5TB-020

5CO-151

5TB-169

5CO-150

P05

5CO-148

5CO-149

5TB-033

5TB-034

5TB-035

5AS-008

5AS-009

5AS-010

5CO-111

TB-210

5TB-166

5TB-165

5TB-167

5TB-040

5TB-041

5TB-042

5TB-043

5TB-039

LP#10

SB-093014-112

SB-093014-111

AOC-7

TB-21

MW-17S

MW-17D

5TB-044

TB-DDDDDD

*5.6

TB-219

P08

5HA-237

5TB-174

TB-00000

5TB-221

5TB-017

TB-209

TB-111

5TB-018

5TB-025

5HA-236

5HA-235

5TB-029

TB-BBBBBB

5TB-222

5TB-223

5TB-224

5SD-009

7SD-011

7SD-012

AST-1

TB-225

7C0-194

7C0-195

OIL PUMP ROOM

7XX-007

TB-224

5TB-027

P03

5TB-028

5TB-601

TB-223

5TB-031

5TB-030

7C0-192

7C0-193

PCB AREA 5.6

5HA-238

TB-112

SS-01

SS-05

SS-06

SS-08

SS-04

TB-222

TB-221

5HA-049

SS-07

SS-RR

5HA-

5SD-002

TB-113

5CO-118

TB-220

5CO-175

5CO-174

5CO-168

5HA

SB-093014-114

SB-100114-116

SB-093014-113

SB-111814-125

SB-111814-123

SB-100114-115

SB-111814-124

FUEL OIL TANK

PCB AREA 5.7

TB-211

TB-MMMMM

5CO-169

5CO-173

5CO-117

5CO-506

5SD-003

5TB-163

5CO-116

5CO-507

5H

AOC-8

EAST

*5.4

PCB AREA 5.4

8-B

T

L

CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'

GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
2	RG	2/27/17	REVISED SAMPLE LABEL SS-01 & ADDED TPH/ETPH HIGHLIGHT	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-7
(PCB AREAS 5.3, 5.4, 5.5, & 5.6)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH
CHECKED BY:	RG
APPROVED BY:	MM
DATE:	10/07/2016
PROJ NO.:	263951-000001-000000

FIGURE 4-9

TRC
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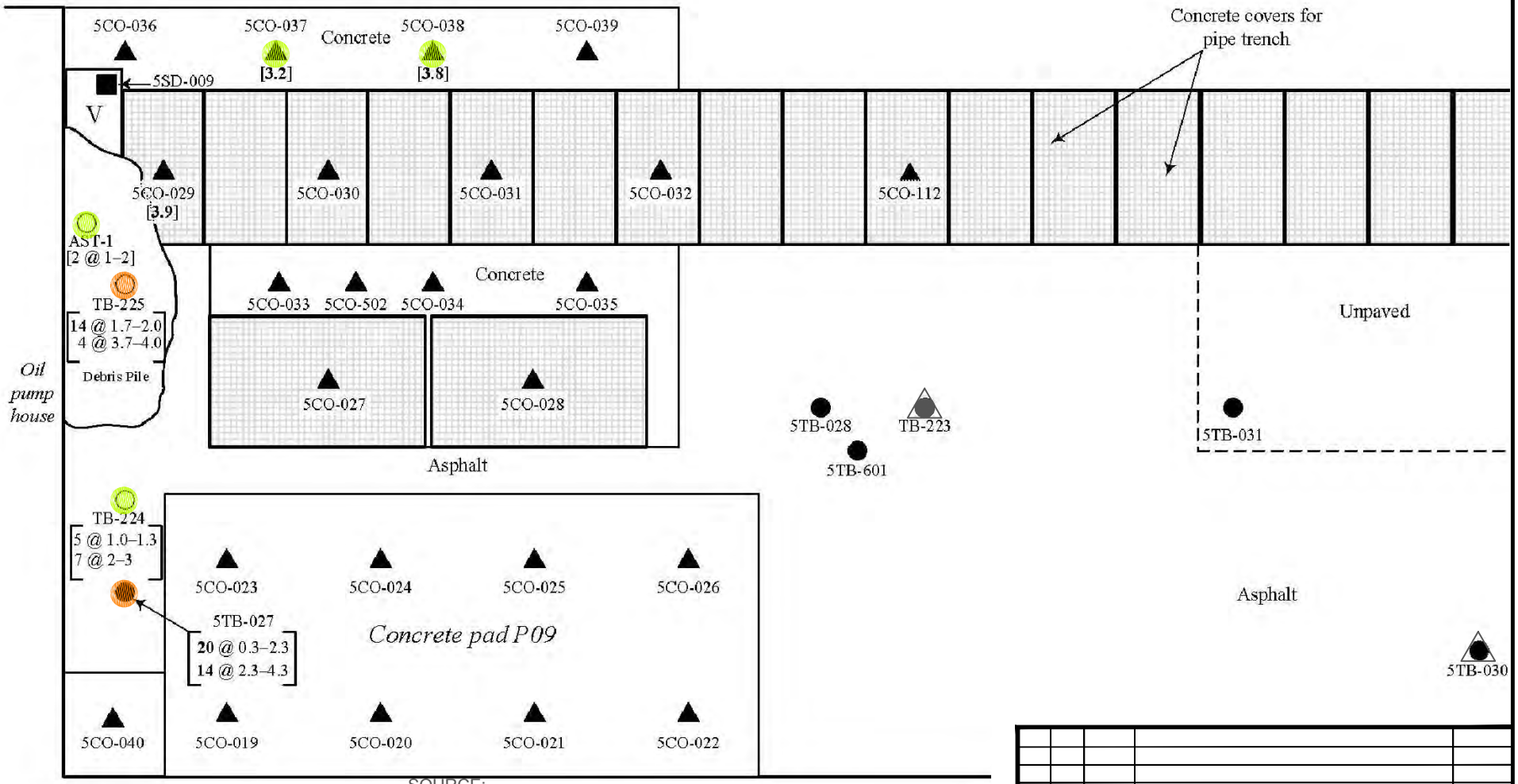
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

5CO-040	Concrete Sample Point -AEI
5SD-009	Sediment Sample Point -AEI
5TB-027	Soil Sample Point -AEI
TB-225	Soil Sample Point—GEI
[1.9]	PCB Criterion Exceedance in Milligrams Per Kilogram

SOURCE:
Figure A5.4: PCB Area 5.4: Concrete, Sediment,
and Soil Sample Points
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

E N S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 5.4: Historic Concrete, Sediment, and Soil Sample Locations

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-9A**
DATE:	10/07/2016		

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21 Griffin Road North
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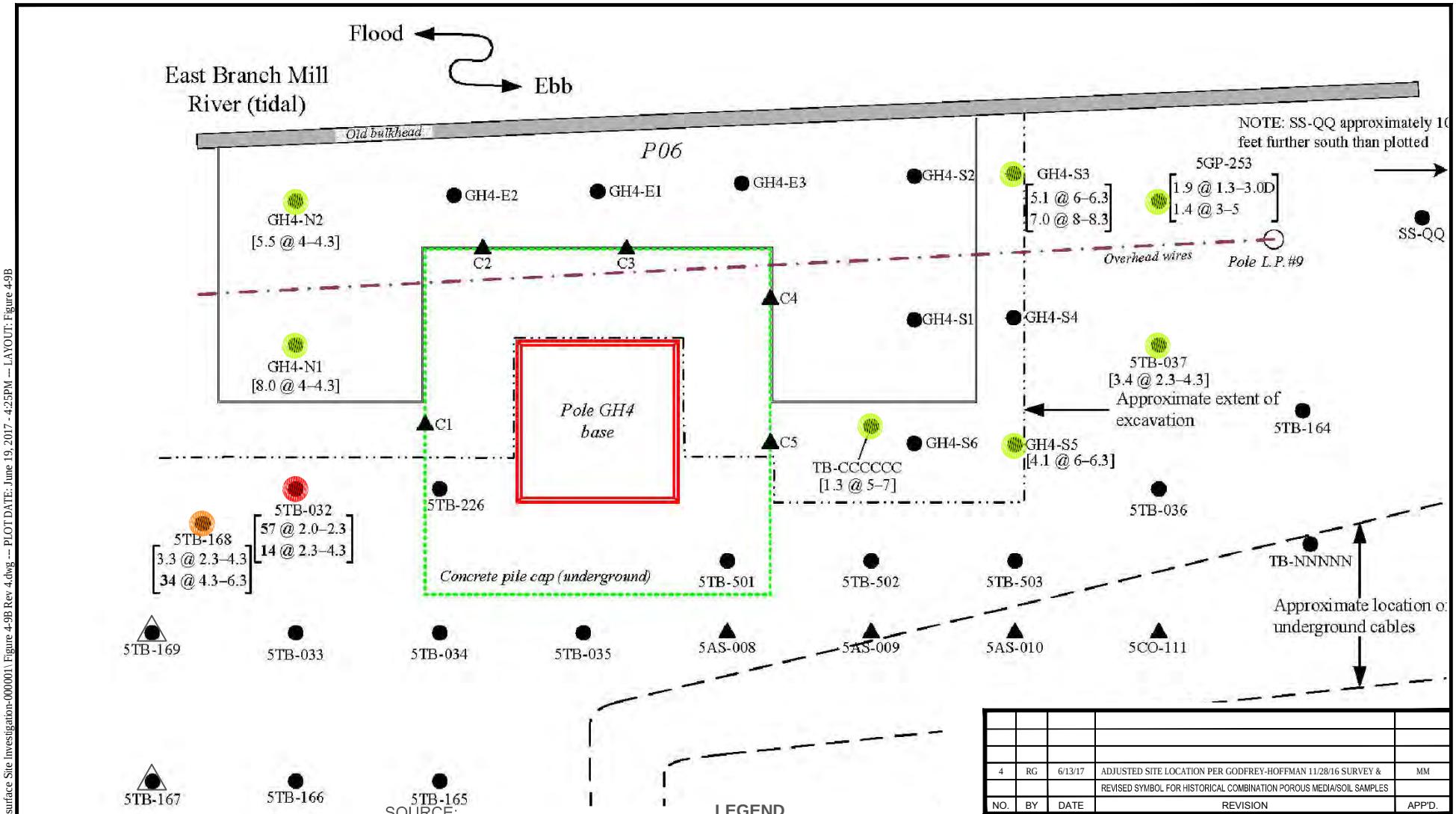
www.trcsolutions.com

FILE NO.: Figure 4-9A Rev 4.dwg



SOURCE:
Figure A5.5a: PCB Area 5.5: Current Asphalt, Concrete, and Soil Sample Points
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

LEGEND

- C1 — Asphalt or Concrete Sample Point – AEI
- 5TB-167 — Soil Sample Point – AEI
- [34 @ 5–7] — PCB Criterion Exceedance in Milligrams Per Kilogram

E N S W

0 6 10 20 feet

SCALE 1 inch : 10 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 5.5: Historic Asphalt, Concrete, and Soil Sample Locations

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-9B**
DATE:	10/07/2016		

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Phone: 860.298.9692
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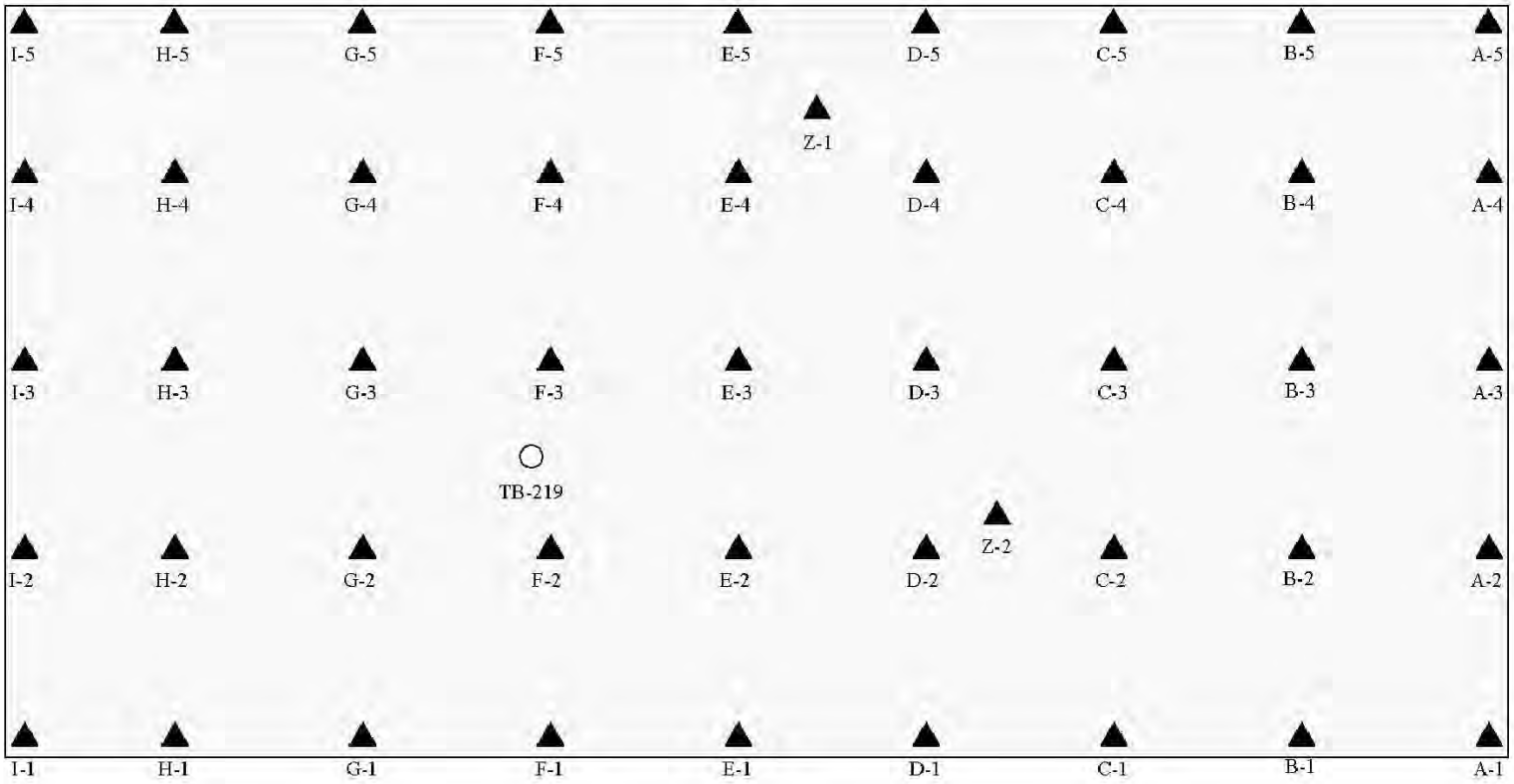
FILE NO.: Figure 4-9B Rev 4.dwg



SOURCE:
Figure A5.6: PCB Area 5.6: Concrete and Soil Sample Points at Concrete Pad P08
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

5CO-026 — Concrete Sample Point - AEI

TB-219 — Soil Sample Point—GEI

E N S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 5.6: Historic Concrete and Soil Sample Locations at Concrete Pad P08

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-9C**
DATE:	10/07/2016		

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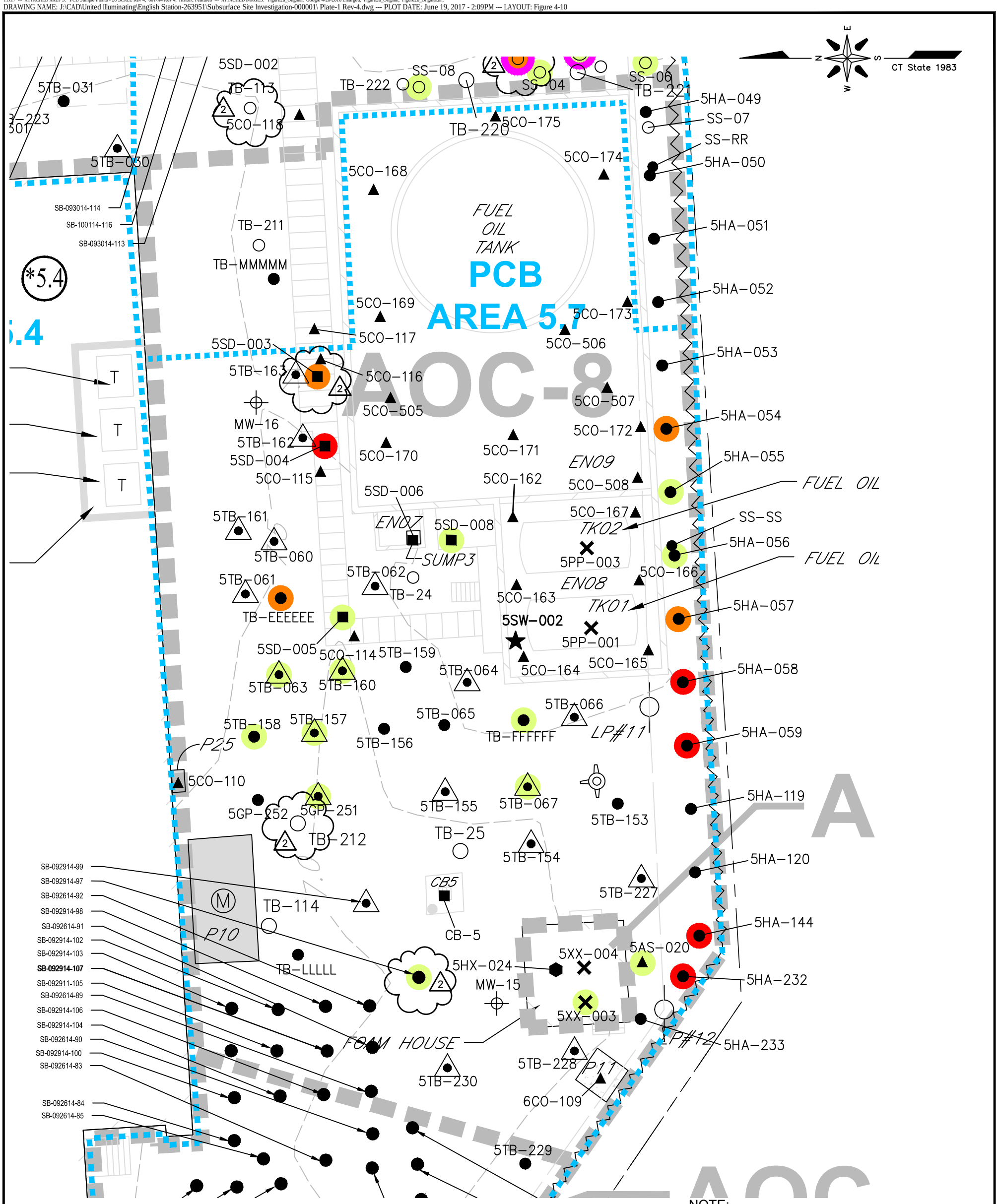
FILE NO.: Figure 4-9C Rev 4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:09PM --- LAYOUT: Figure 4-10



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
2	RG	2/27/17	ADDED PCB HIGHLIGHT & MOVED PCB HIGHLIGHT TO SSD-003 AND	MM
			ADDED SAMPLE TB-212 & RENAMED TB-213 TO TB-113	

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-8
(PCB AREA 5.7)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 4-10**
DATE:	10/07/2016		

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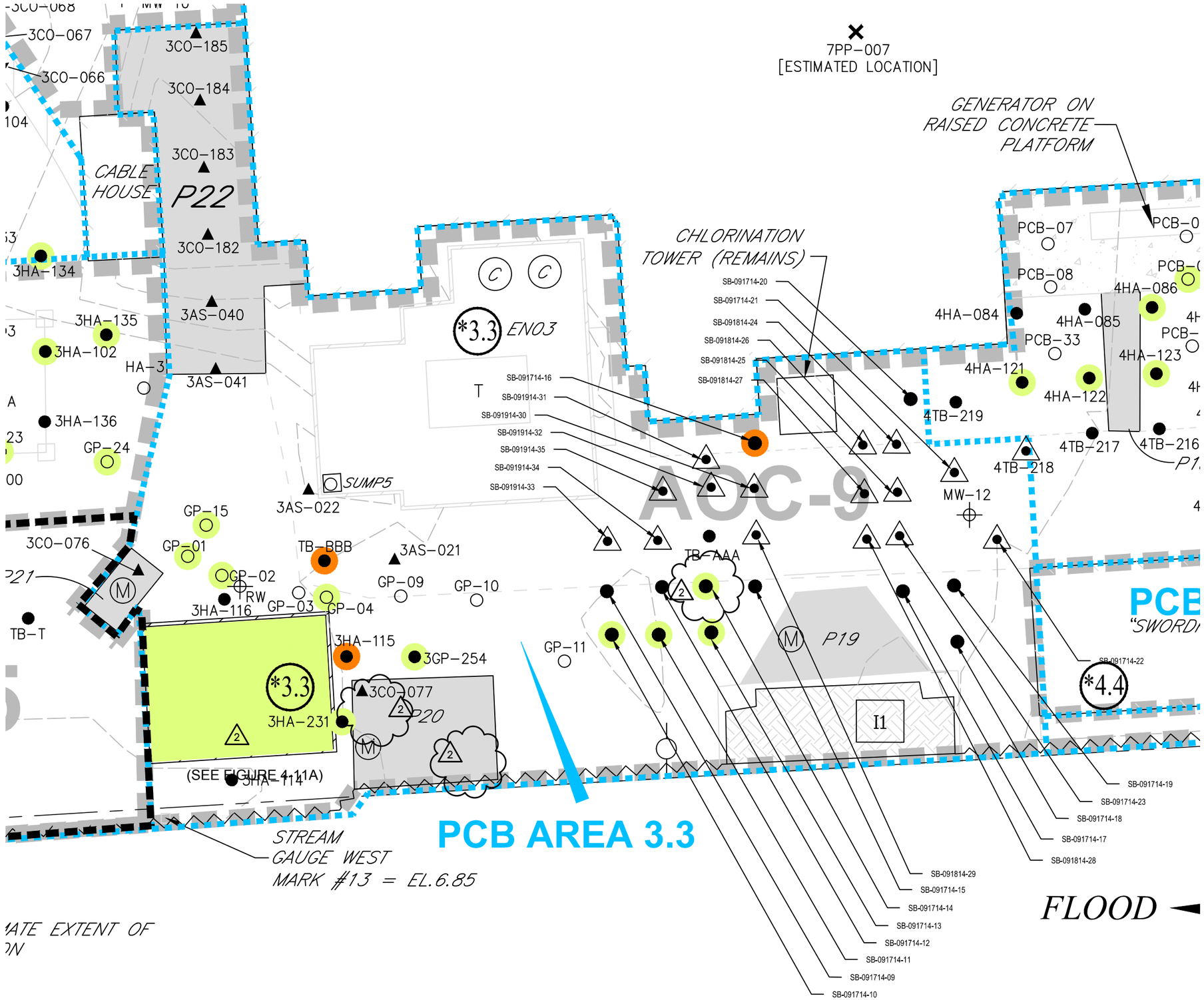
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
2	RG	2/27/17	LABELED BUILDING EN02	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-9
(PCB AREA 3.3)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 4-11**
DATE:	10/07/2016		

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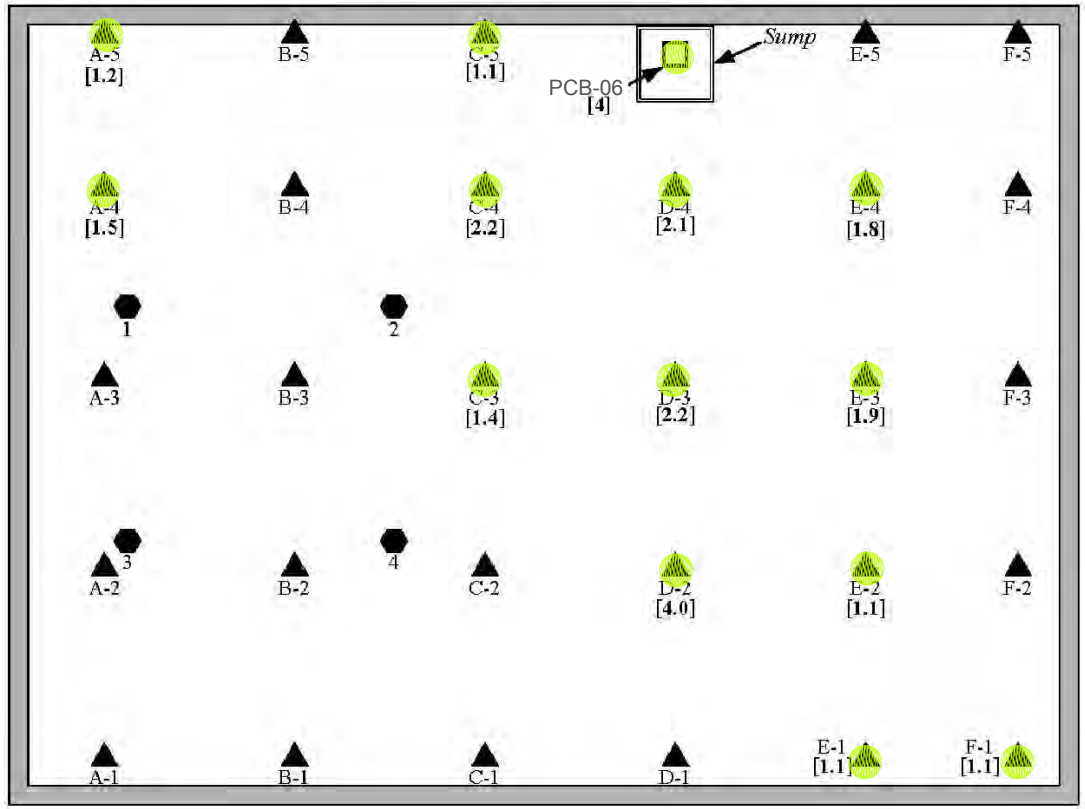
FILE NO.: Plate-1 Rev-4.dwg

Enclosure EN02



NOTES:
1. Hexane wipe samples were taken from an elevated steel deck above the enclosure concrete floor.
2. Many enclosure details are not shown.

SOURCE:
Figure A3.3a: PCB Area 3.3: Concrete, Hexane Wipe, and Sediment Sample Points at Enclosure EN02.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

LEGEND

A-1	Concrete Sample Point -AEI
3	Hexane Wipe Sample Point -AEI
PCB-6	Sediment Sample Point—GEI
[1.9]	PCB Criterion Exceedance in Milligrams per Kilogram

N E S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
2	RG	2/27/17	REV PCB-06 LABEL	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 3.3: Historic Concrete, Hexane Wipe, and Sediment Sample Locations at Enclosure EN02

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-11A**
DATE:	10/07/2016		

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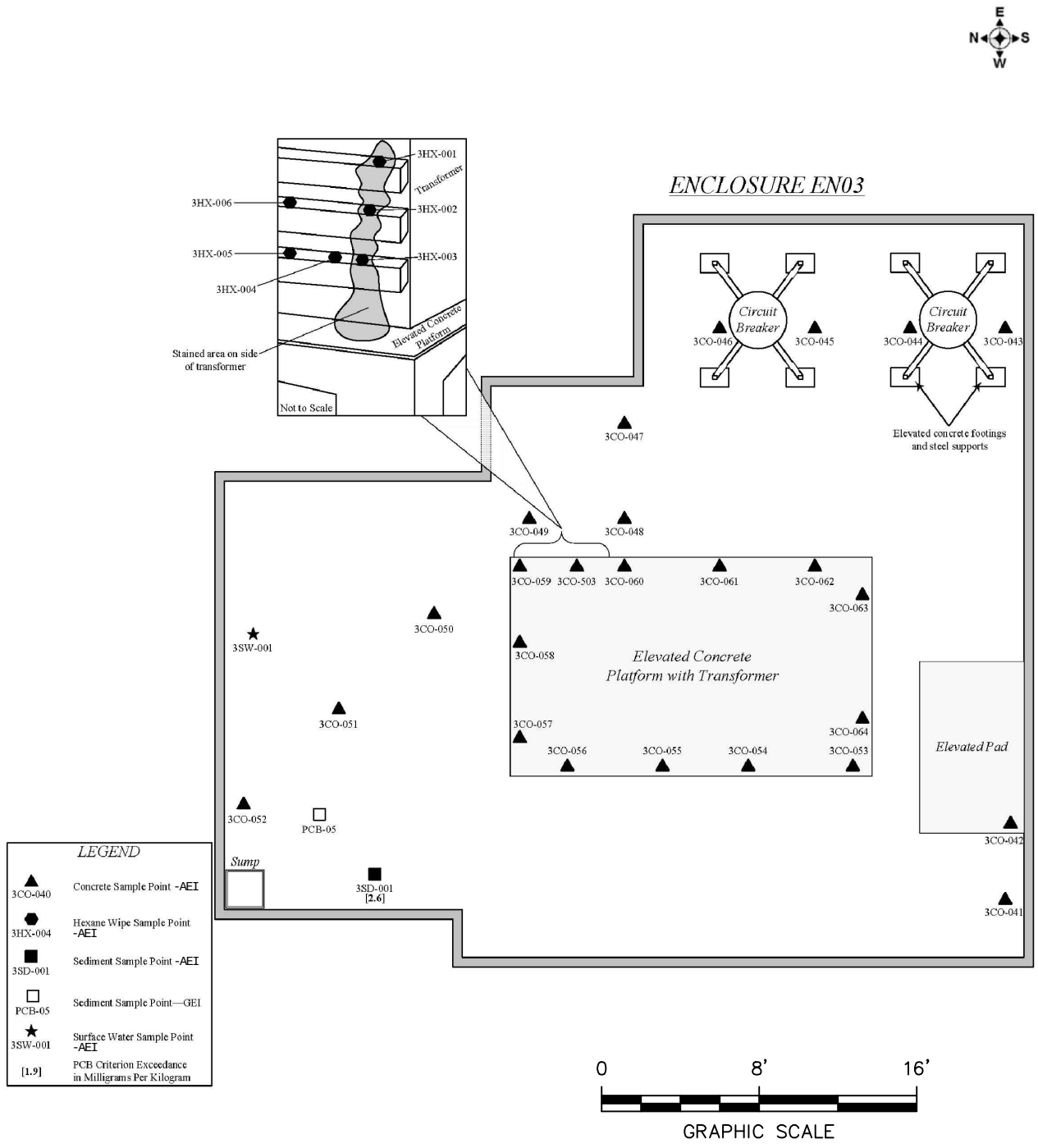
FILE NO.: Figure 4-11A Rev 4.dwg



NOTES:

1. 3HX-004 was taken from area of intermediate staining.
2. Transformer has blue sticker indicating fluid contains less than 50 ppm PCB.
3. Elevated circuit breakers have green stickers indicating fluid contains less than 1 ppm PCB.
4. Many enclosure details are not shown.
5. All Locations Are Approximate.

SOURCE:

Figure A3.3b: PCB Area 3.3: Concrete, Hexane Wipe, Sediment, and Surface Water Sample Points at Enclosure EN03.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

All Locations Are Approximate

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 3.3: Historic Concrete, Hexane Wipe, Sediment, and Surface Water Sample Locations at Enclosure EN03

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-11B**
DATE:	10/07/2016		

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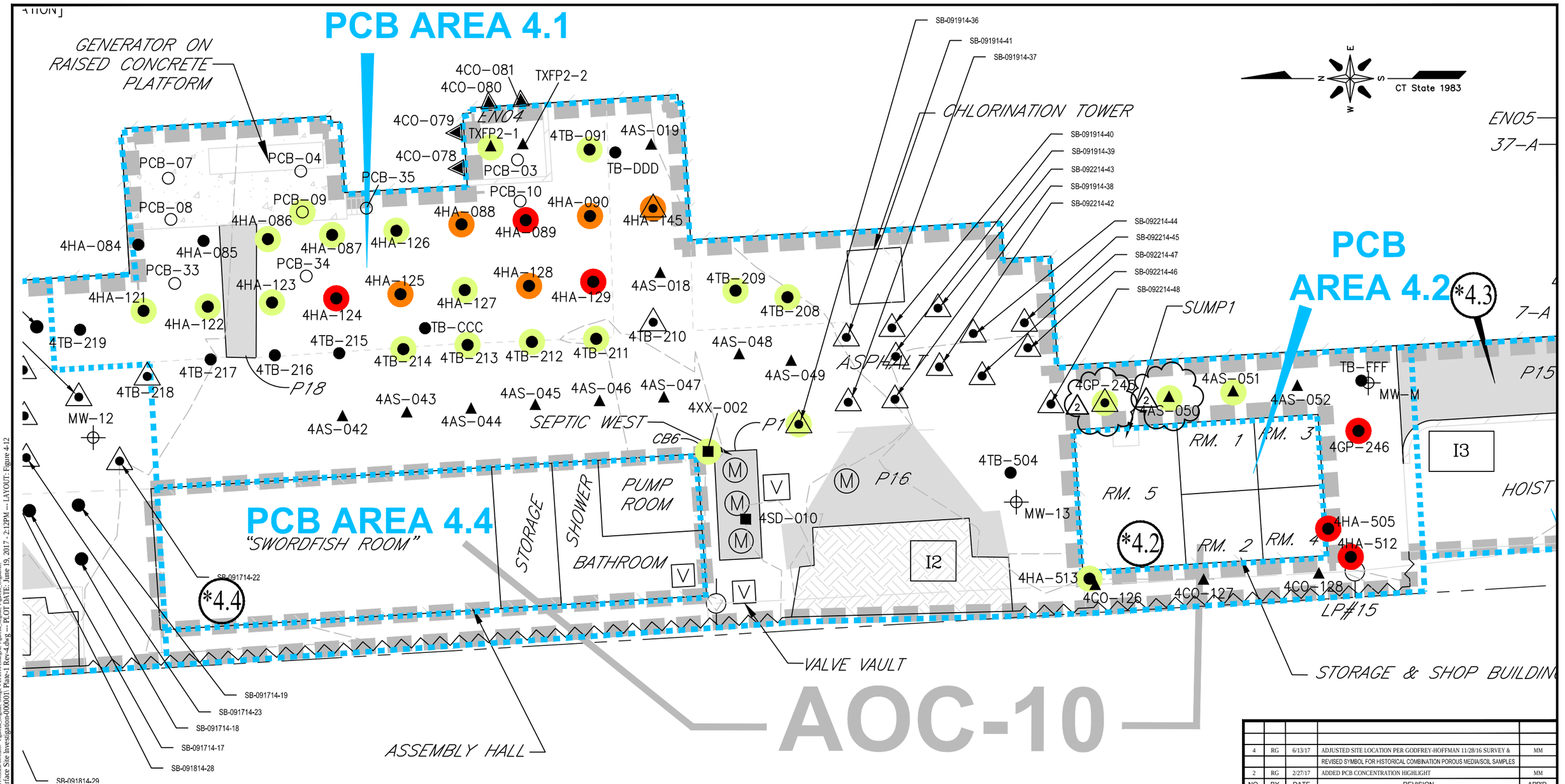
FILE NO.: Figure 4-11B Rev 4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
2	RG	2/27/17	ADDED PCB CONCENTRATION HIGHLIGHT	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-9
(PCB AREA 4.1)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 4-12**
DATE:	10/07/2016		

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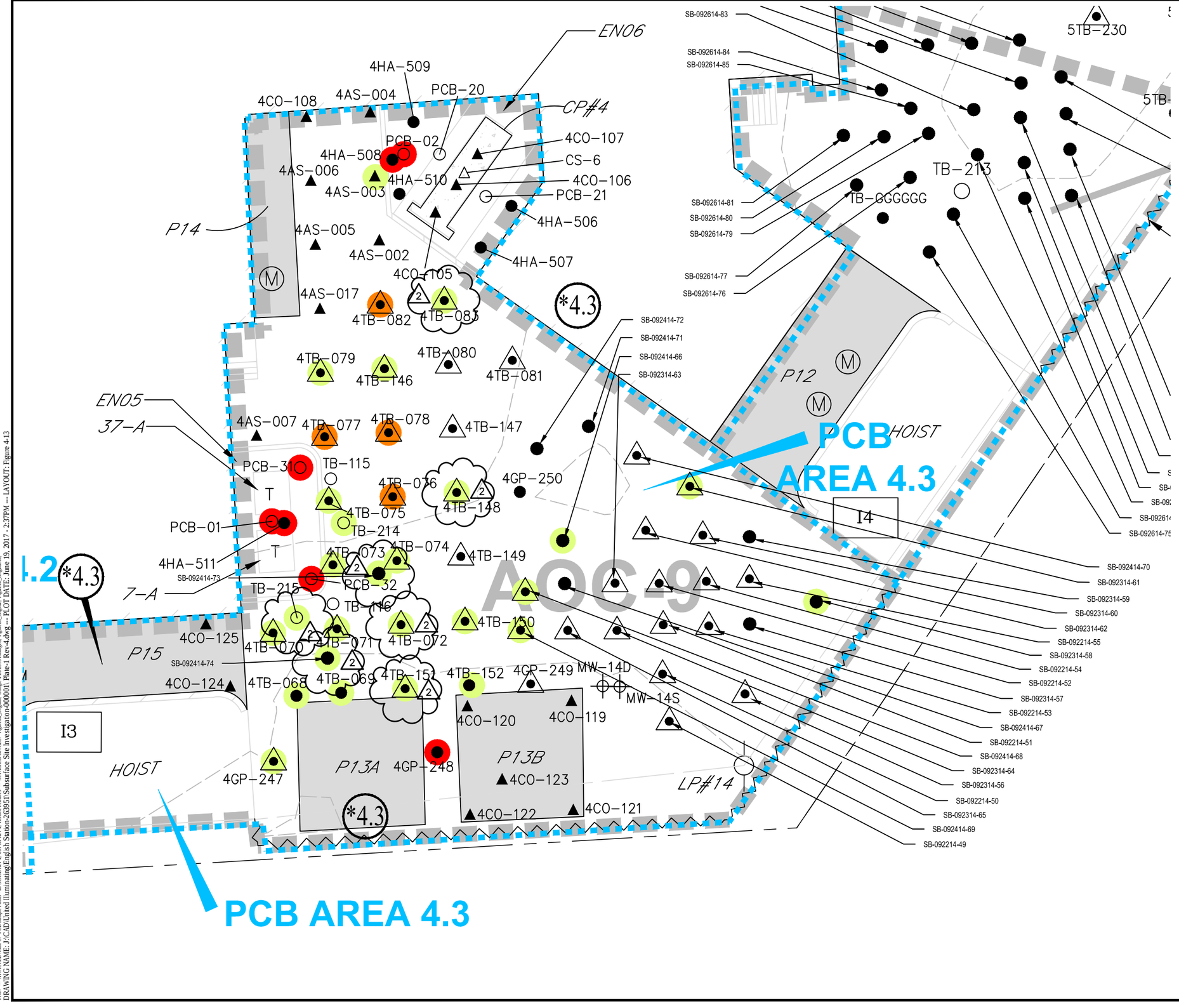
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15’ 30’

GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
2	RG	2/27/17	ADDED SAMPLE LOCATIONS & PCB HIGHLIGHTING	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-9
(PCB AREA 4.3)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 4-13**
APPROVED BY:	MM		
DATE:	10/07/2016		

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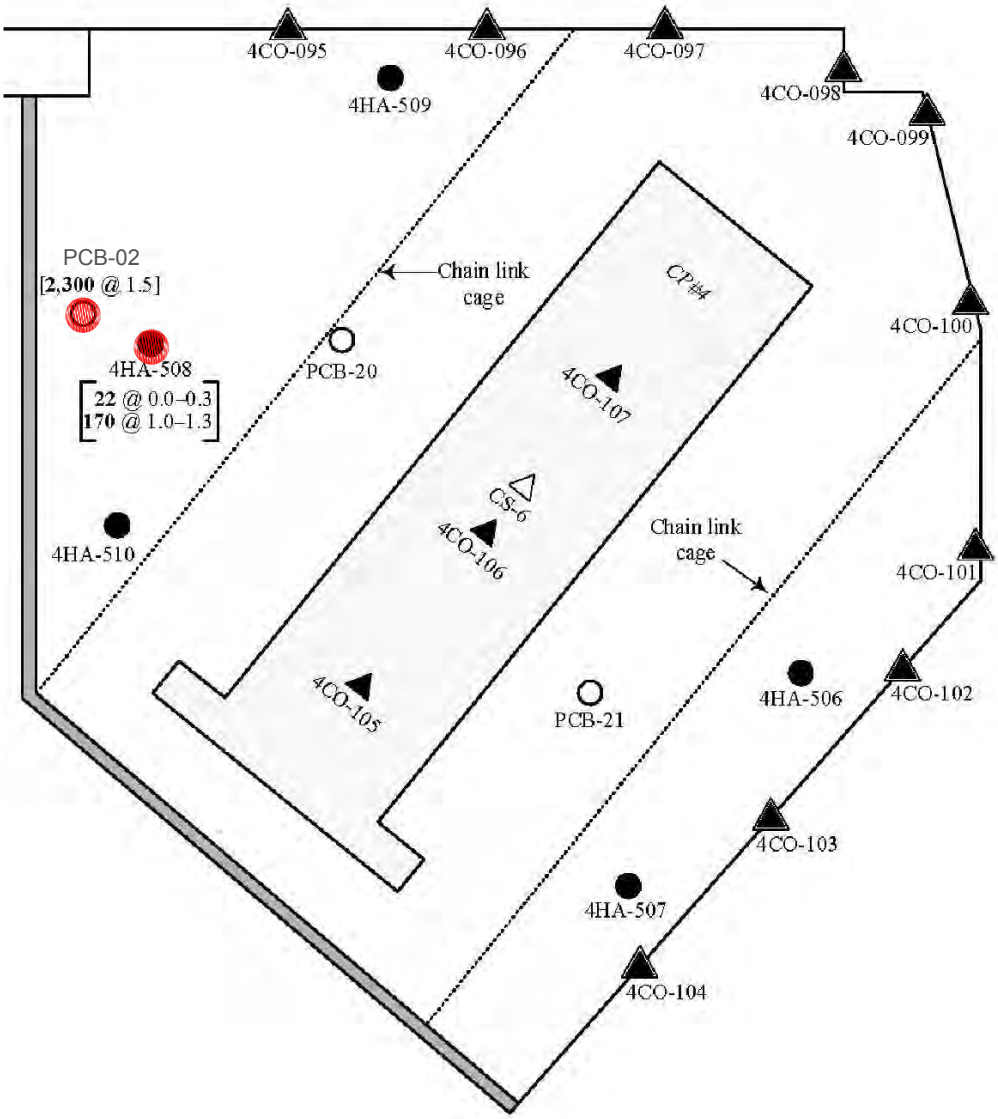
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREFS: --- ATTACHED IMAGES: Figure 4-13B Rev 2;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Figure 4-13A Rev 4.dwg --- PLOT DATE: June 14, 2017 - 3:34PM --- LAYOUT: Figure 4-13A



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

SOURCE:
Figure A4.3a: PCB Area 4.3: Concrete, Hexane, and Soil Samples at Enclosures EN05 and EN06.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

4CO-095	Concrete Sample Point -AEI
4CO-095	Concrete Sample Point on Wall -AEI
CS-6	Concrete Sample Point—GEI
3HX-004	Hexane Wipe Sample Point -AEI
4HA-507	Soil Sample Point -AEI
PCB-1	Soil Sample Point—GEI
[22]	PCB Criterion Exceedance in Milligrams Per Kilogram

E N S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
2	RG	2/27/17	REVISED PCB-02 LABEL	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 4.3: Historic Sample Locations at EN06 / Capacitor Bank 4

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-13A**
DATE:	10/07/2016		

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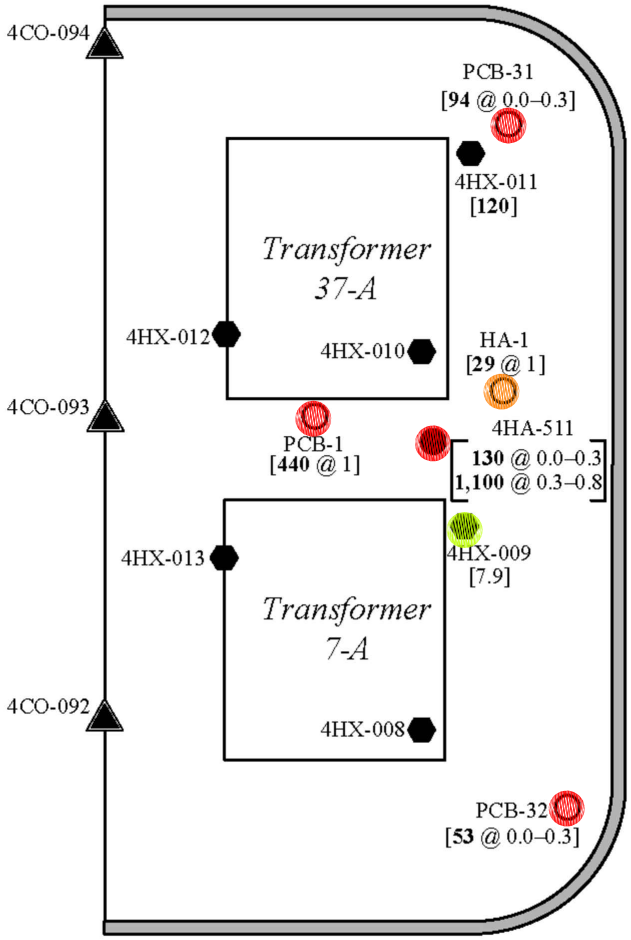
FILE NO.: Figure 4-13A Rev 4.dwg

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: Figure 4-13B.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Figure 4-13B Rev 4.dwg --- PLOT DATE: June 14, 2017 - 3:46PM --- LAYOUT: Figure 4-13B

EN05



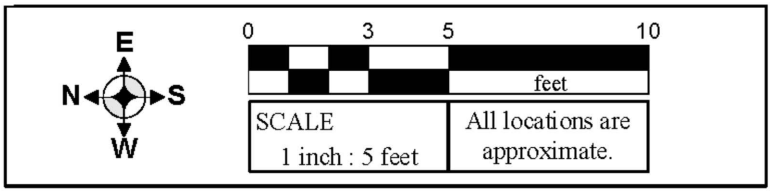
LEGEND

4CO-095	Concrete Sample Point -AEI
4CO-095	Concrete Sample Point on Wall -AEI
CS-6	Concrete Sample Point—GEI
3HX-004	Hexane Wipe Sample Point -AEI
4HA-507	Soil Sample Point -AEI
PCB-1	Soil Sample Point—GEI
[22]	PCB Criterion Exceedance in Milligrams Per Kilogram

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

SOURCE:
Figure A4.3a: PCB Area 4.3: Concrete, Hexane, and Soil Samples at Enclosures EN05 and EN06.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.



NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 4.3: Historic Concrete, Hexane Wipe, and Soil Sample Locations at Enclosure EN05

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-13B**
DATE:	10/07/2016		

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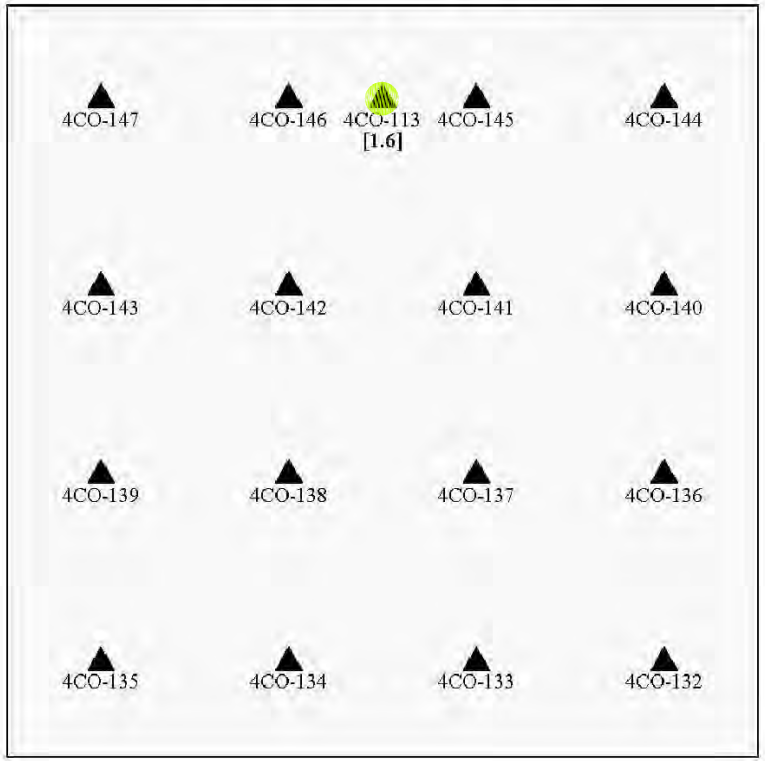
FILE NO.: Figure 4-13B Rev 4.dwg

Concrete Pad P13A



NOTE:
1. Pad P13A was buried beneath ca. 2–4" gravel, and was excavated at sample points.

SOURCE:
Figure A4.3b: PCB Area 4.3: Concrete Sample Points at Concrete Pad P13A.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

LEGEND

4CO-135 — Concrete Sample Point -AEI

[1.6] — PCB Criterion Exceedance in Milligrams Per Kilogram

E N S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 4.3: Historic Concrete Sample Locations at Concrete Pad P13A

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-13C**
DATE:	10/07/2016		

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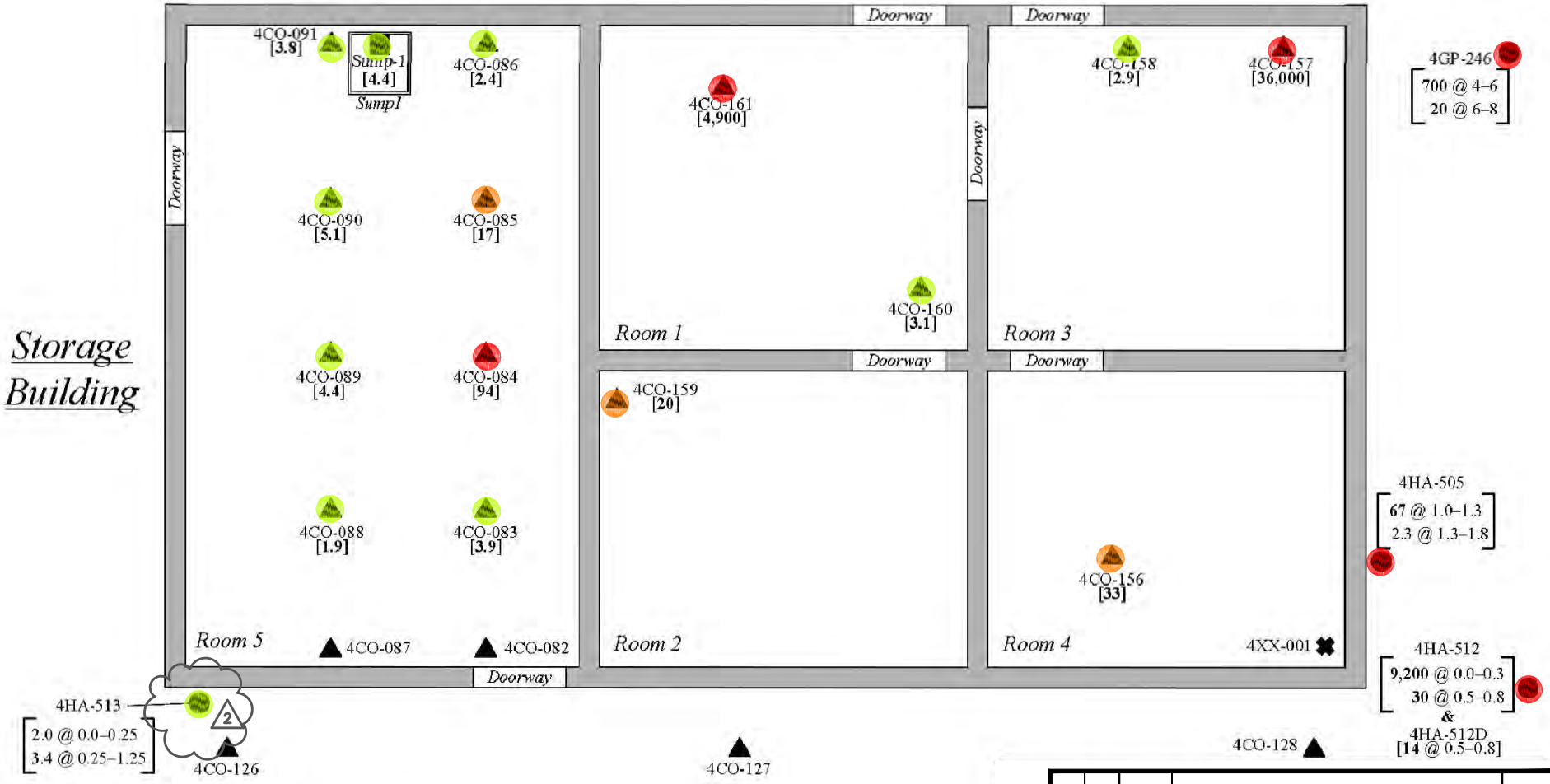
FILE NO.: Figure 4-13C Rev 4.dwg



LEGEND

4CO-087	Concrete Sample Point –AEI
4XX-001	Miscellaneous Sample Point (canister of orange powder) –AEI
Sump-1	Sediment Sample Point –AEI
4HA-513	Soil Sample Point –AEI
[1.9]	PCB Criterion Exceedance in Milligrams Per Kilogram

SOURCE:
Figure A4.2: PCB Area 4.2: Concrete, Miscellaneous, Sediment and Soil Sample Points.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

N E S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
2	RG	2/27/17	ADDED PCB HIGHLIGHT	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-10
PCB Area 4.2: Historic Concrete, Miscellaneous, Sediment and Soil Sample Locations

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-14**
DATE:	10/07/2016		

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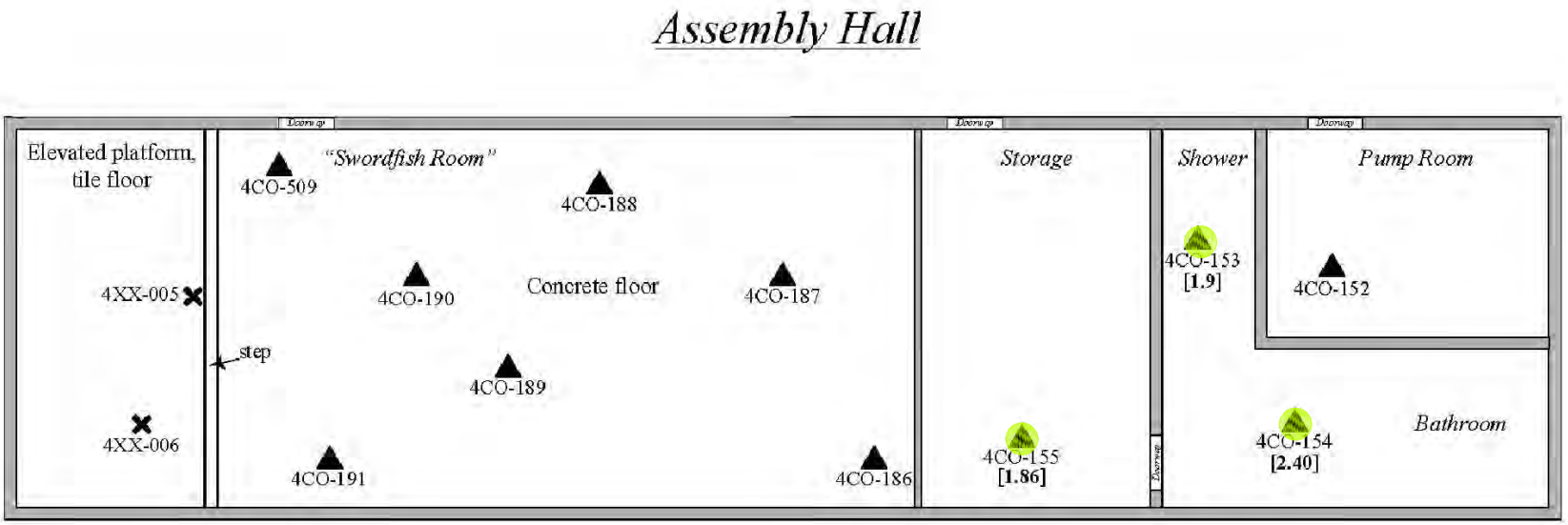
FILE NO.: Figure 4-14 & 5-12 Rev 4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

LEGEND

4CO-154	Concrete Sample Point – AEI
4XX-006	Miscellaneous Sample Point (Floor Tiles) – AEI
[1.9]	PCB Criterion Exceedance in Milligrams Per Kilogram

SOURCE:
Figure A4.4: PCB Area 4.4: Concrete and Miscellaneous Sample Points.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

E N S W

0 6 10 20 feet

SCALE 1 inch : 10 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-10
PCB Area 4.4: Historic Concrete and Miscellaneous Sample Locations

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-15**
DATE:	10/07/2016		

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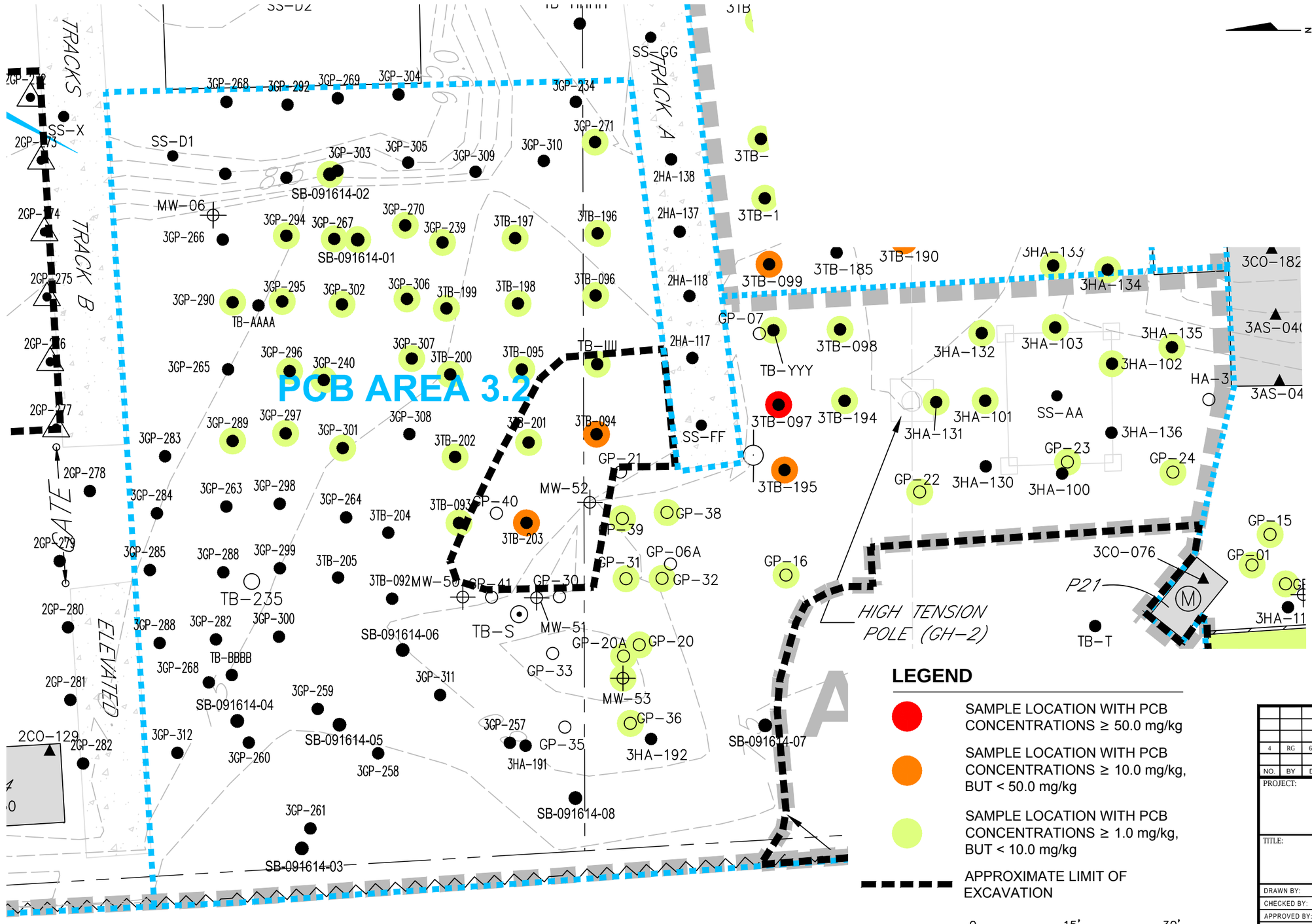
FILE NO.: Figure 4-15 & 5-13 Rev 4.dwg



NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- APPROXIMATE LIMIT OF EXCAVATION

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12
(PCB AREA 3.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 4-16**
APPROVED BY:	MM		
DATE:	10/07/2016		

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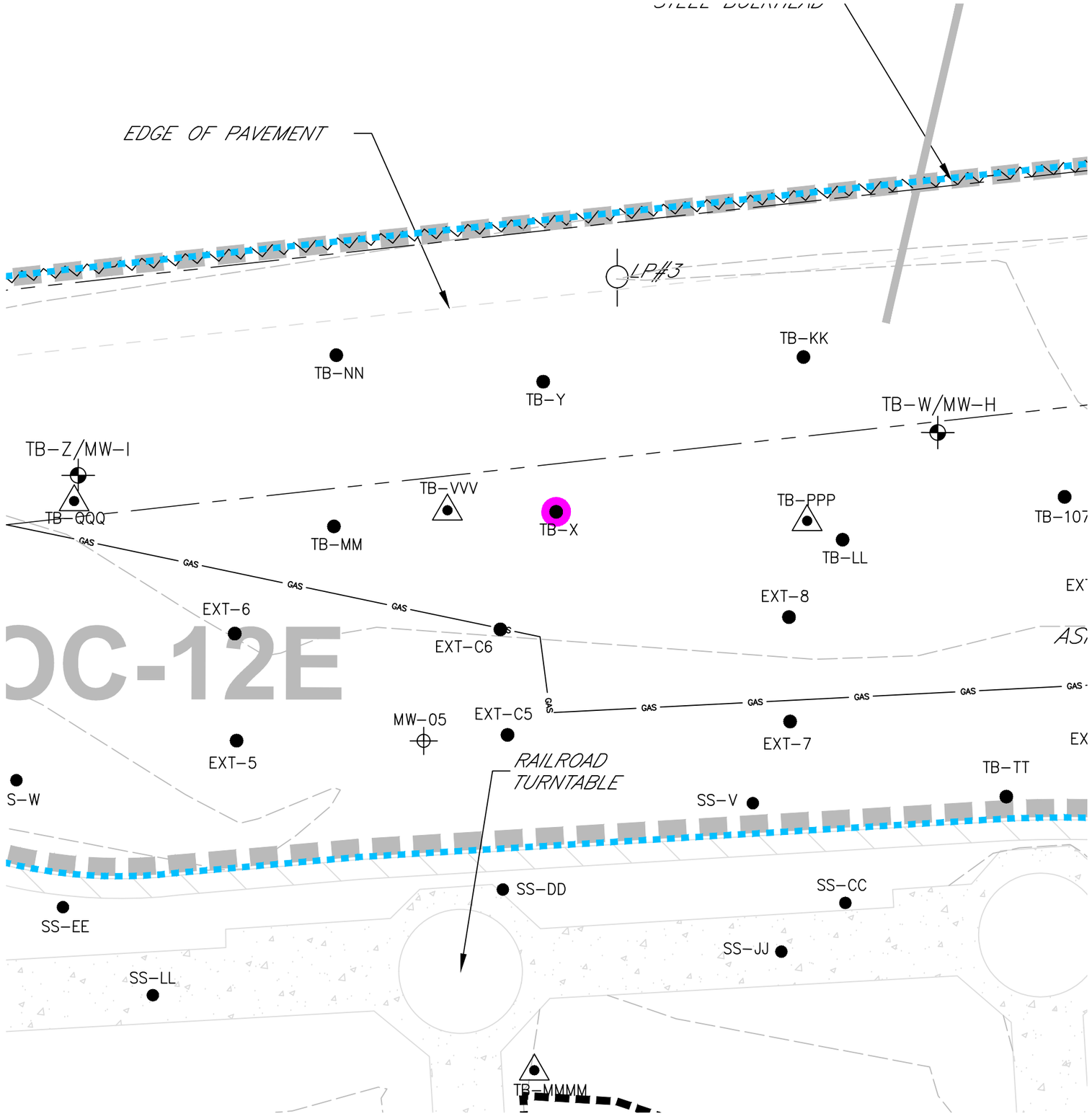
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg



AOC-12E

CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC

NOTE:
SEE FIGURES 4.2A & 4.2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

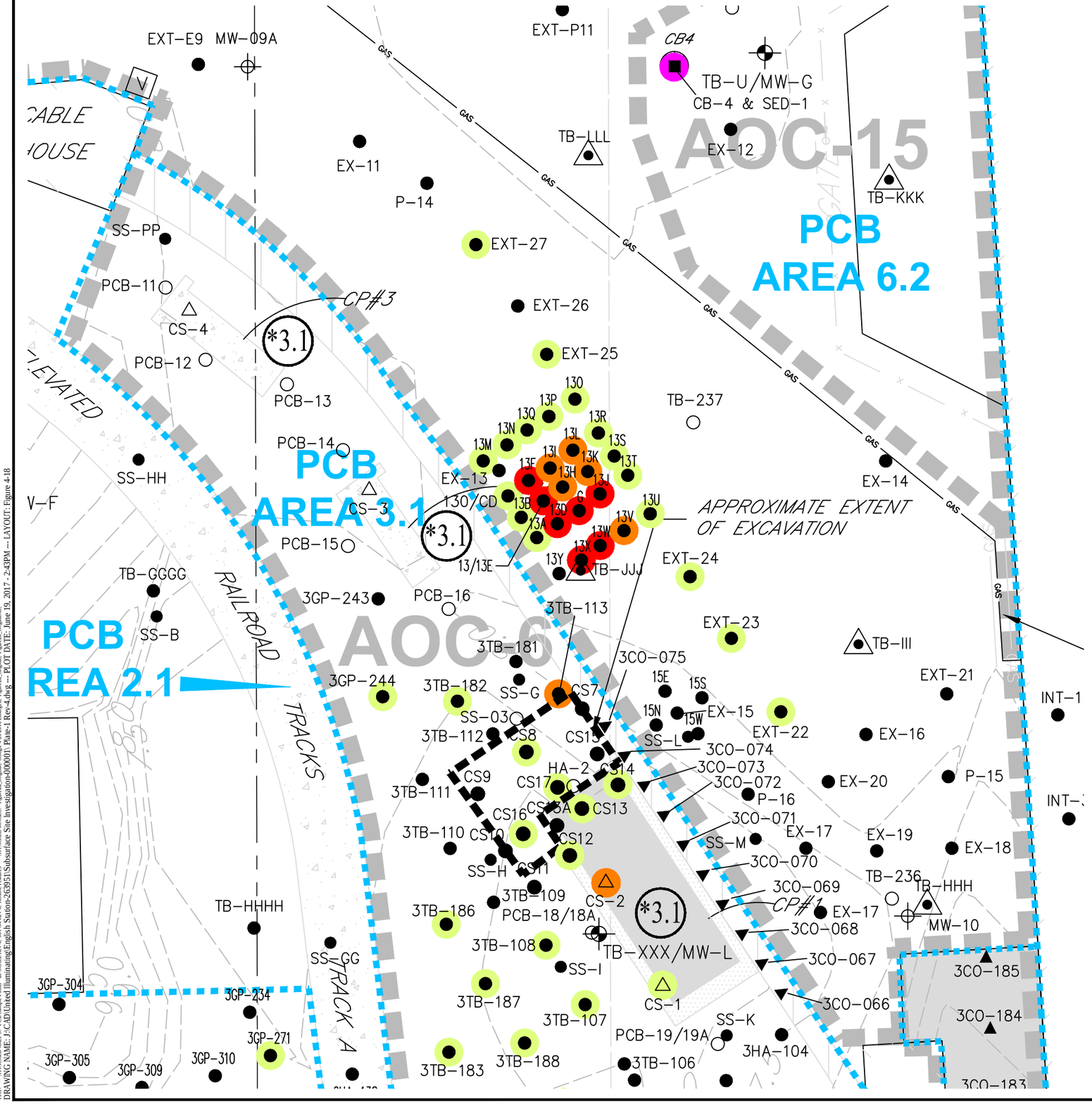
PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

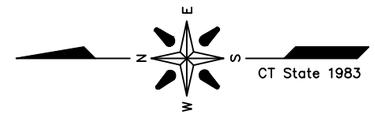
TITLE:
AOC-12E
(PCB AREA 6.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		FIGURE 4-17
APPROVED BY:	MM		
DATE:	10/07/2016		

TRC
21 Griffin Road North
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg

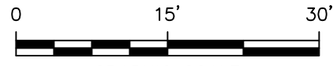




LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4.2A & 4.2B FOR NOTES, LEGEND AND LOCATION.



NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12E
(PCB AREA 6.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 4-18**
DATE:	10/07/2016		

TRC
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Phone: 860.298.9692
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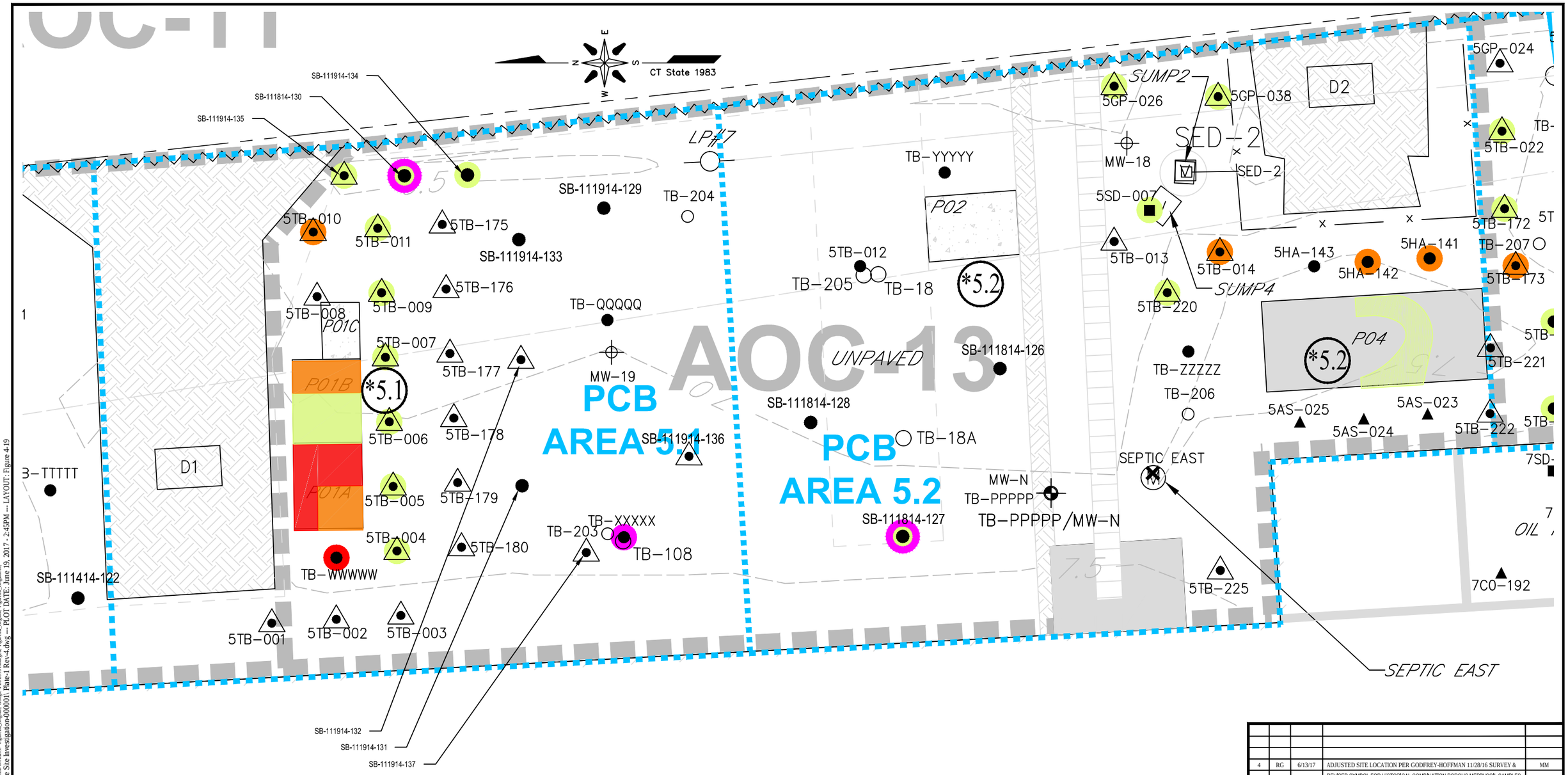
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-13
(PCB AREAS 5.1 & 5.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 4-19**
APPROVED BY:	MM		
DATE:	10/07/2016		

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Windsor, CT 06095
Phone: 860.298.9692
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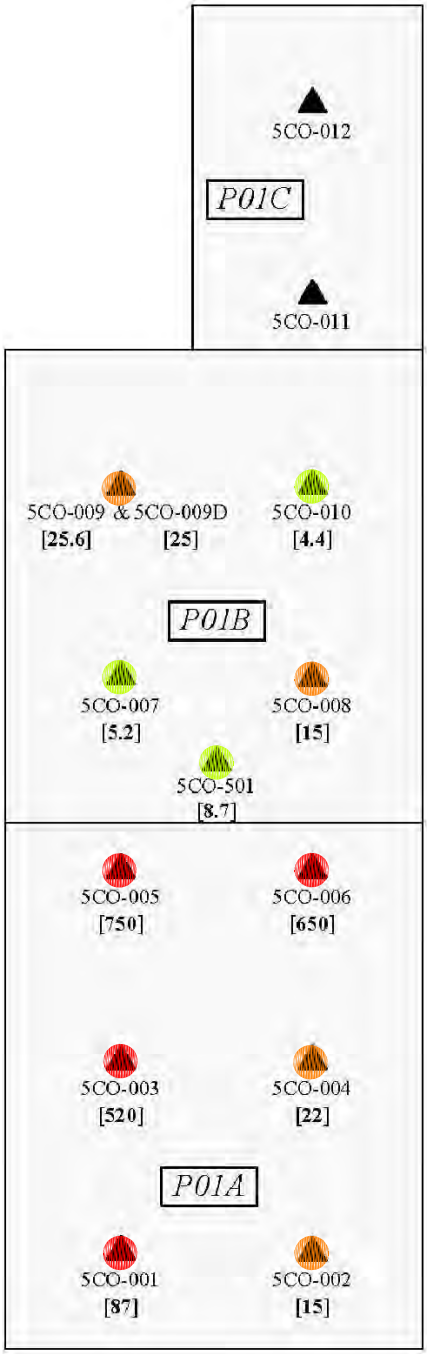
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREFS: --- ATTACHED IMAGES: Figure 4-19A.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Figure 4-19A Rev 4.dwg --- PLOT DATE: June 14, 2017 - 4:50PM --- LAYOUT: Figure 4-19A

Concrete Pad P01

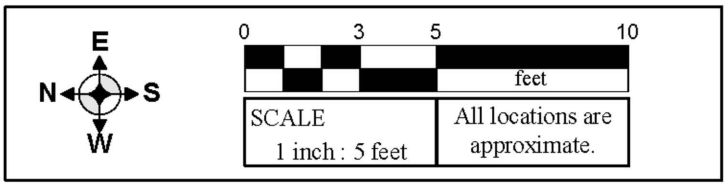


LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

NOTE:
1. Concrete pad P01C is elevated. Pads P01A and P01B are at grade..

SOURCE:
Figure A5.1: PCB Area 5.1: Concrete Sample Points
at Concrete Pad P01.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.



LEGEND

5CO-011 — Concrete Sample Point -AEI

[87] — PCB Criterion Exceedance in Milligrams Per Kilogram

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 5.1: Historic Concrete Sample Locations at Concrete Pad P01

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**Figure 4-19A**
APPROVED BY:	MM		
DATE:	10/07/2016		

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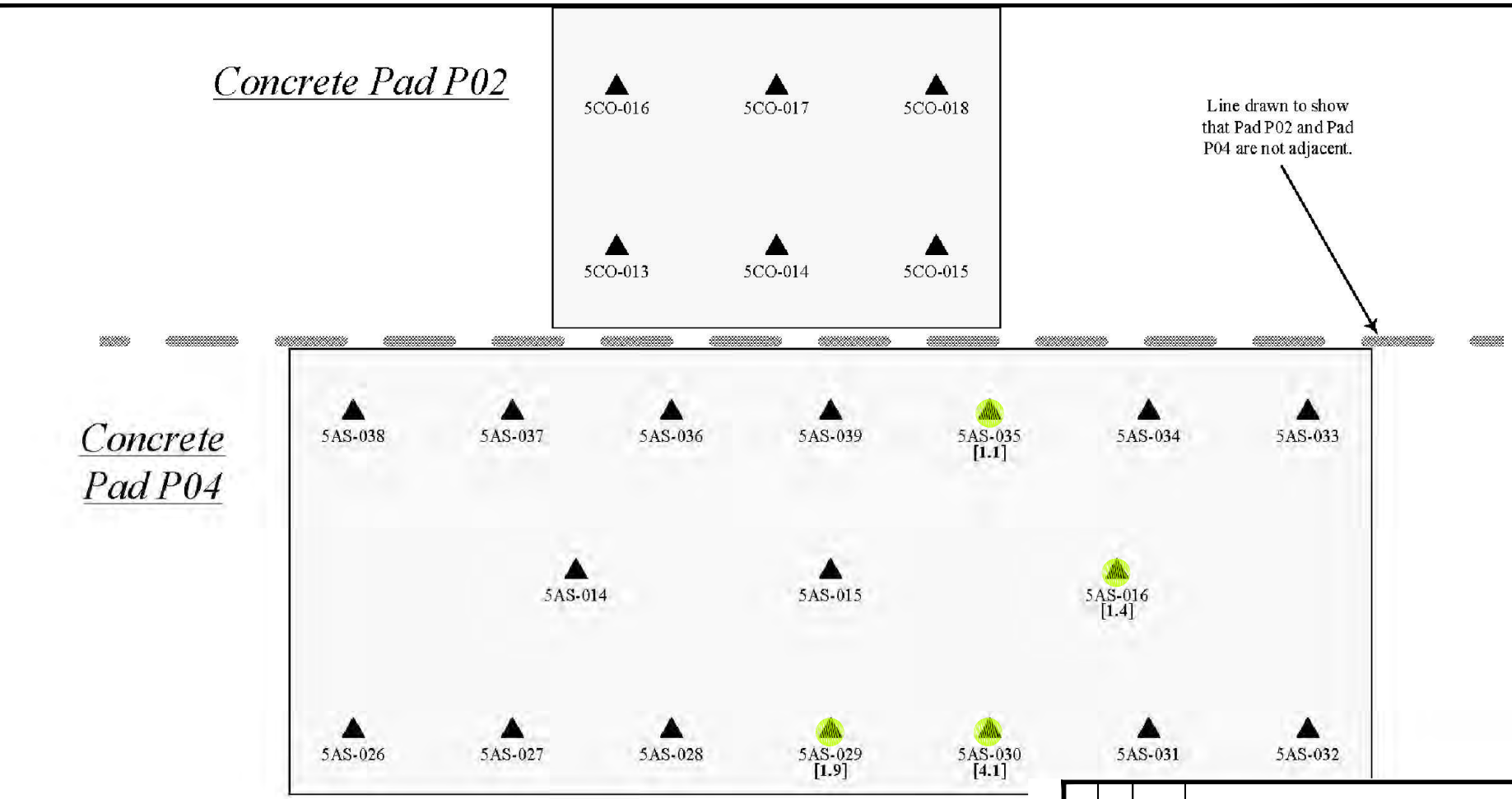
FILE NO.: Figure 4-19A Rev 4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg

NOTE:

1. Concrete pad P02 is elevated.

SOURCE:

Figure A5.2: PCB Area 5.2: Asphalt and Concrete Sample Points at Concrete Pads P02 and P04.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

LEGEND

5AS-026
[1.9]
Asphalt or Concrete Sample Point -AEI
PCB Criterion Exceedance in Milligrams Per Kilogram

E N S W

0 3 5 10 feet

SCALE 1 inch : 5 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
PCB Area 5.2: Historic Asphalt and Concrete Sample Locations at Concrete Pads P02 and P04

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 4-19B**
DATE:	10/07/2016		

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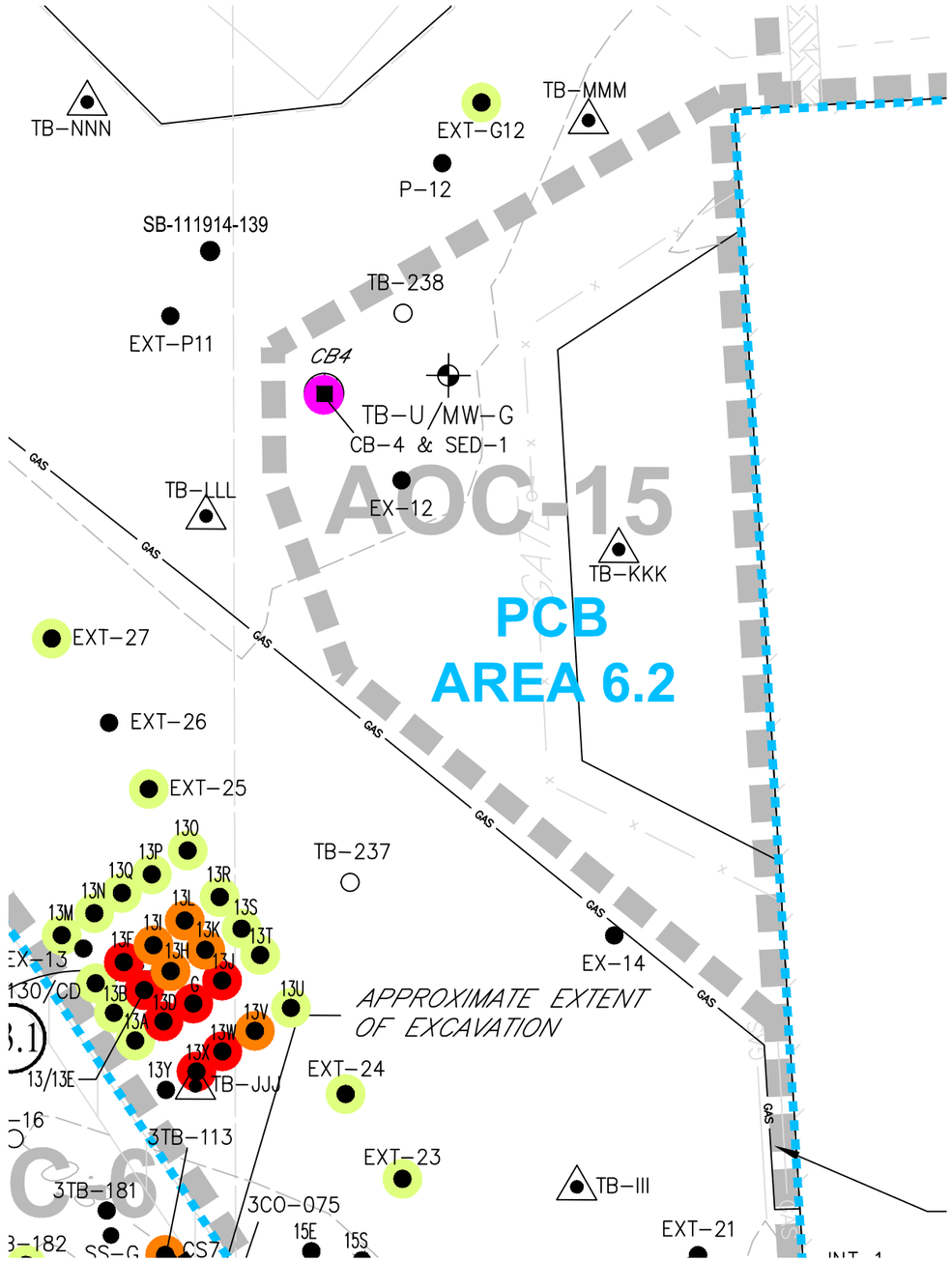
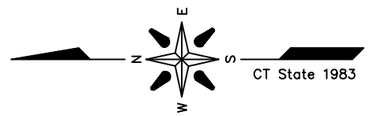
FILE NO.: Figure 4-19B Rev 4.dwg





LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-15
(PCB AREA 6.2)
HISTORIC SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 4-20**
DATE:	10/07/2016		

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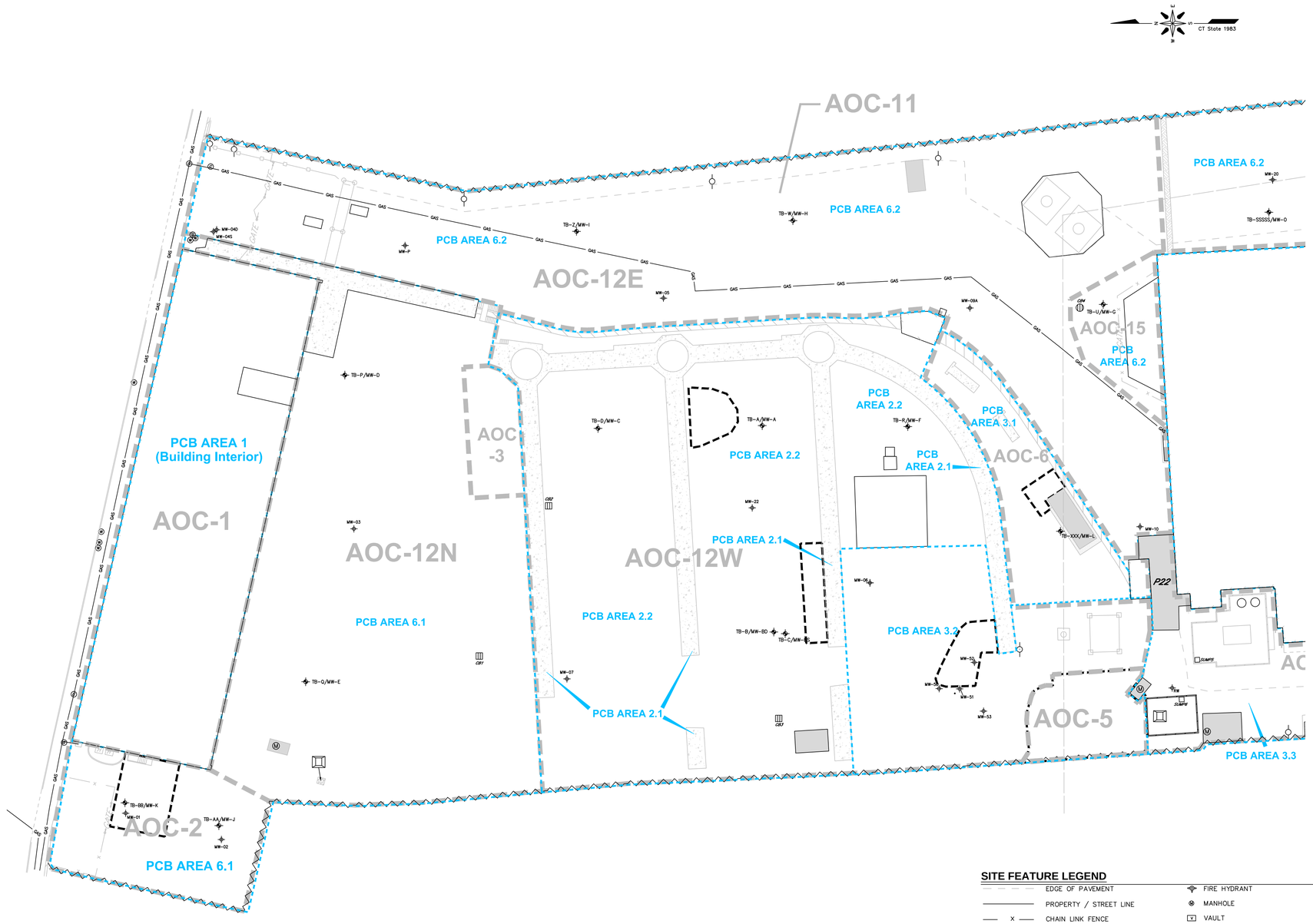
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg



0 30' 60'

GRAPHIC SCALE

SITE FEATURE LEGEND

- EDGE OF PAVEMENT
- PROPERTY / STREET LINE
- CHAIN LINK FENCE
- GUARDRAIL
- NEW BULKHEAD
- GAS LINE
- OVERHEAD WIRE
- CONCRETE WALL
- APPROXIMATE EXTENT OF PREVIOUS EXCAVATION
- PCB AREA BOUNDARY
- AOC BOUNDARY
- PIPE TRENCH
- EXISTING BUILDING
- CONCRETE PAD
- CONCRETE PAD (ELEVATED)
- ASPHALT APRON
- RECENT FILL
- WATER GATE
- GAS GATE
- ROUND CATCH BASIN
- RECTANGULAR CATCH BASIN
- UTILITY POLE
- FIRE HYDRANT
- MANHOLE
- VAULT
- HATCHWAY
- INTAKE CHANNEL
- DISCHARGE CHANNEL
- TRANSFORMER
- CIRCUIT BREAKER
- CATHODIC BULKHEAD PROTECTION DEVICE
- MW-H / TB-W — SOIL SAMPLE FROM GROUND WATER MONITORING WELL
- MW-01 — SOIL SAMPLE FROM GROUND WATER MONITORING WELL – INSTALLED BY OTHERS

General Notes for Figures 4.2A and 4.2B

[1] Several base maps were used for site features and Sample Point locations. These contain some discrepancies that have not been resolved. Locations are approximate.

[2] Not all structural details have been shown within buildings and enclosures.

[3] Most Sample Point locations were field-located and have not been surveyed. Not all Sample Points are mapped.

[4] Godfrey-Hoffman Associates, LLC supplied a General Location Survey base map: Project 01-182; January 4, 2002 with revisions to June 21, 2002; scale 1 inch = 40 feet.

[5] These Figures are not intended for construction purposes.

PCB Investigation Areas

PCB Area 1: Station B Interior
- Area 1.1 Mezzanine and First Floor, except Annex III
- Area 1.2 Former Annex III
- Area 1.3 Basement

PCB Area 2: Former Coal Yard
- Area 2.1 Elevated Railroad Tracks and Foundations
- Area 2.2 Remainder of Former Coal Yard

PCB Area 3: Electrical Infrastructure and Excavation
- Area 3.1 Former Capacitor Area
- Area 3.2 United Illuminating Remediation Area
- Area 3.3 Transformer and Capacitor Area

PCB Area 4: Southwest Corner
- Area 4.1 Former Transformer Area
- Area 4.2 Storage and Shop Building Interior
- Area 4.3 Transformer and Former Capacitor Area
- Area 4.4 Assembly Hall Interior

PCB Area 5: Southeast Corner
- Area 5.1 Former Dumpster Area
- Area 5.2 Former Wastewater Treatment Area
- Area 5.3 Oil Pump House Area
- Area 5.4 Former Waste Oil Tank Area
- Area 5.5 Tower GH-4 Area
- Area 5.6 Former Storage Building Area
- Area 5.7 Fuel Oil Tank Area

PCB Area 6: Balance of Site, Except English Station
- Area 6.1 Former Station B Area
- Area 6.2 Mill River East Branch Area

PCB Area 7: English Station Interior

SOURCE:
MAP TITLED "FIGURE 3N, MASS ANALYSIS PCB SAMPLE POINT LOCATIONS-NORTH, PREPARED FOR QUINNIPIAC ENERGY, LLC., ENGLISH STATION, 510 GRAND AVENUE, NEW HAVEN, CT." DATED: 3/1/10, SCALE: 1"=20', BY ADVANCED ENVIRONMENTAL INTERFACE, INC.

NO.	BY	DATE	REVISION	APP'D
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
1	RG	1/9/17	FIGURE ADDED TO SCOPE OF STUDY	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
HISTORIC MONITORING WELL LOCATIONS - PARCEL A

DRAWN BY:	KDH	PROJ. NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	ST		**FIGURE 4-21A**
DATE:	10/07/2016		

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21 Griffin Road North
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FILE NO.: Plate-1 Rev-4.dwg

General Notes for Figures 4.21A and 4.21B

[1] Several base maps were used for site features and Sample Point locations. These contain some discrepancies that have not been resolved. Locations are approximate.

[2] Not all structural details have been shown within buildings and enclosures.

[3] Most Sample Point locations were field-located and have not been surveyed. Not all Sample Points are mapped.

[4] Godfrey-Hoffman Associates, LLC supplied a General Location Survey base map: Project 01-182; January 4, 2002 with revisions to June 21, 2002; scale 1 inch = 40 feet.

[5] These Figures are not intended for construction purposes.

PCB Investigation Areas

PCB Area 1: Station B Interior
- Area 1.1 Mezzanine and First Floor, except Annex III
- Area 1.2 Former Annex III
- Area 1.3 Basement

PCB Area 2: Former Coal Yard
- Area 2.1 Elevated Railroad Tracks and Foundations
- Area 2.2 Remainder of Former Coal Yard

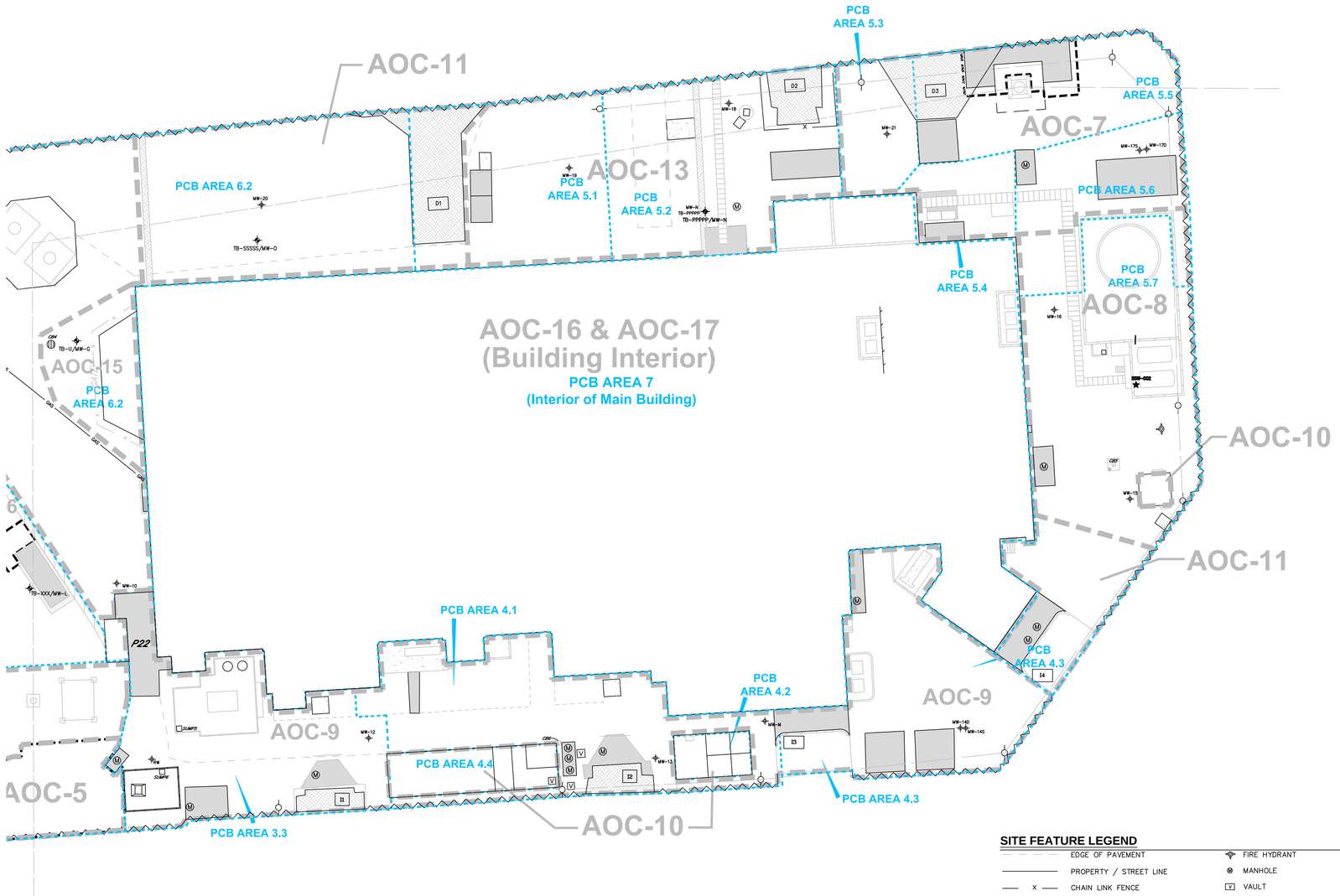
PCB Area 3: Electrical Infrastructure and Excavation
- Area 3.1 Former Capacitor Area
- Area 3.2 United Illuminating Remediation Area
- Area 3.3 Transformer and Capacitor Area

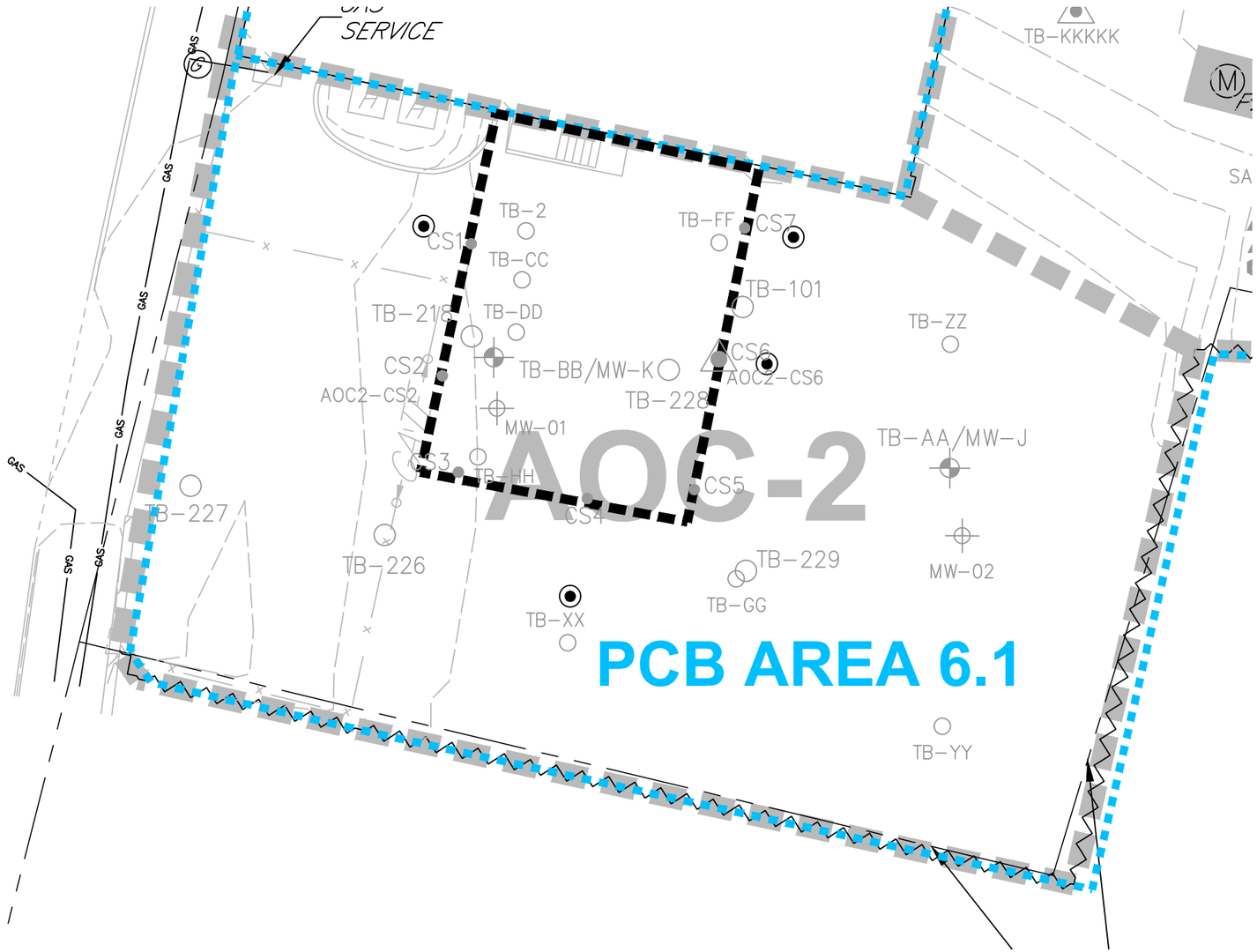
PCB Area 4: Southwest Corner
- Area 4.1 Former Transformer Area
- Area 4.2 Storage and Shop Building Interior
- Area 4.3 Transformer and Former Capacitor Area
- Area 4.4 Assembly Hall Interior

PCB Area 5: Southeast Corner
- Area 5.1 Former Dumpster Area
- Area 5.2 Former Wastewater Treatment Area
- Area 5.3 Oil Pump House Area
- Area 5.4 Former Waste Oil Tank Area
- Area 5.5 Tower GH-4 Area
- Area 5.6 Former Storage Building Area
- Area 5.7 Fuel Oil Tank Area

PCB Area 6: Balance of Site, Except English Station
- Area 6.1 Former Station B Area
- Area 6.2 Mill River East Branch Area

PCB Area 7: English Station Interior





N E S W

CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-2
(PCB AREA 6.1)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 5-1**
APPROVED BY:	MM		
DATE:	01/04/2017		

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Windsor, CT 06095
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FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:51PM --- LAYOUT: Figure 5-2

N E S W

CT State 1983

'P ANNEX III PCB STORAGE AREA

SS-N SS-O SS-P SS-Q SS-R SS-S SS-W SS-Z SS-00 SS-MM

TB-AAAAA TB-BBBBB TB-CCCCC TB-DDDDD TB-EEEEE TB-FFFFF TB-GGGGG TB-HHHHH TB-IIIII TB-JJJJJ TB-KKKKK TB-UUUU TB-VVVV TB-WWWW TB-XXXX TB-YYYY TB-ZZ TB-0 TB-103 TB-104 TB-105 TB-217 TB-230 TB-231 TB-232 TB-233 TB-5 TB-6 TB-7 TB-7A TB-8A TB-8B TB-J TB-K TB-L TB-M TB-N

CS-5 TB-P/MW-D MW-03 TB-Q/MW-E

AREA 1
g Interior)

AOC-12N

AOC -3

AOC-14

PCB AREA 6.1

ELEVATED TRACK D

CB2 2CO-177 CB-2

CB1 6CO-176 CB-1

8.0 1.0 1.5 6.9

F26

SAMPLE POINTS AT ENO1:
▲ 6AS-001
▲ 6CO-065
⬢ 6HX-007
ENO1

0 20' 40'
GRAPHIC SCALE

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- ▲ PROPOSED CONCRETE /ASPHALT SAMPLE LOCATION
- ■ PROPOSED SEDIMENT SAMPLE LOCATION
- ◉ PROPOSED BORING/SOIL SAMPLE LOCATION

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12N
(PCB AREA 6.1)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-2**
DATE:	10/07/2016		

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Windsor, CT 06095
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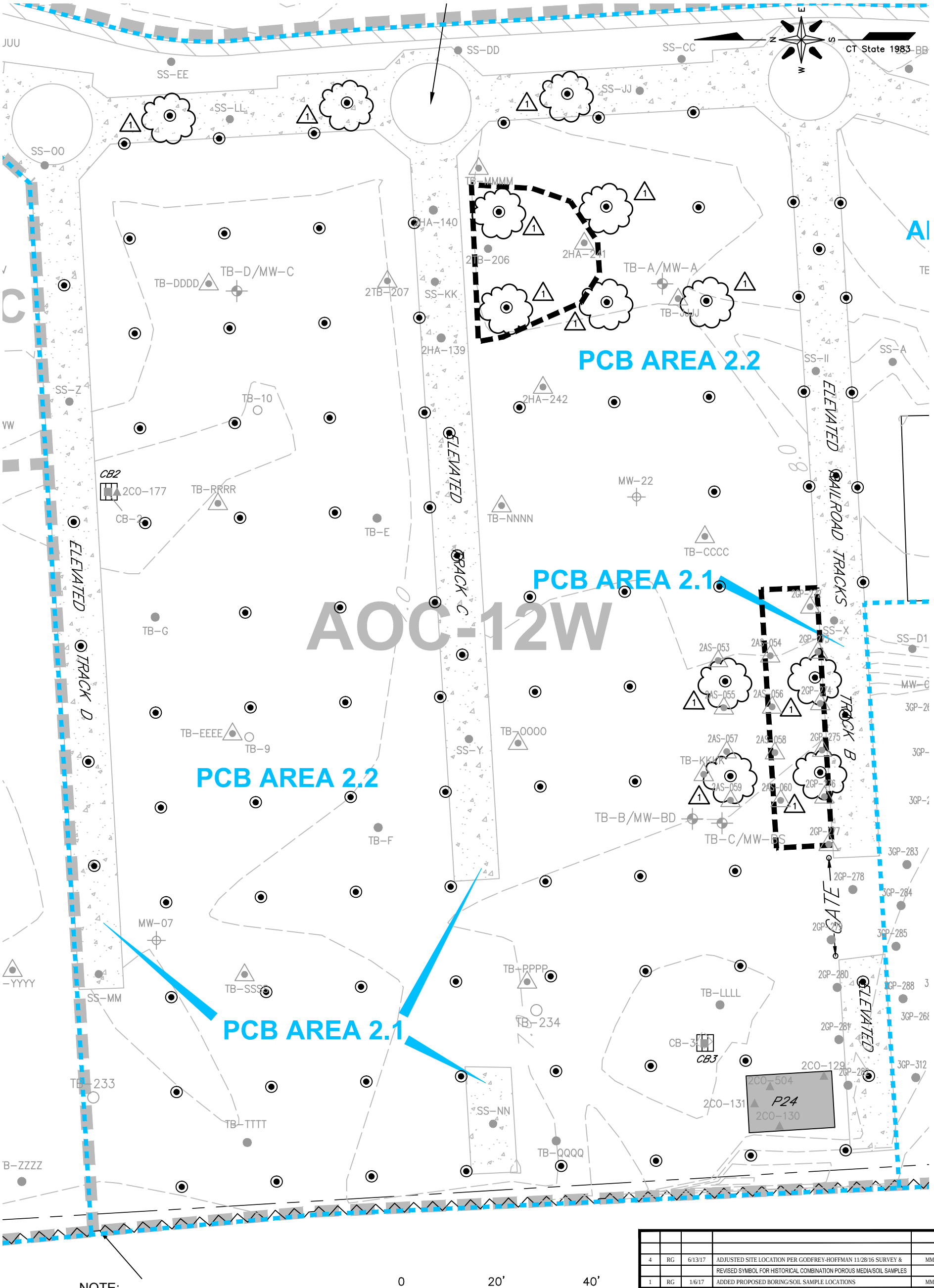
FILE NO.: Plate-1 Rev-4.dwg



NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 20' 40'
GRAPHIC SCALE

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- APPROXIMATE LIMIT OF EXCAVATION
- PROPOSED CONCRETE /ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
1	RG	1/6/17	ADDED PROPOSED BORING/SOIL SAMPLE LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12W
(PCB AREAS 2.1 & 2.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-3**
DATE:	10/07/2016		

TRC
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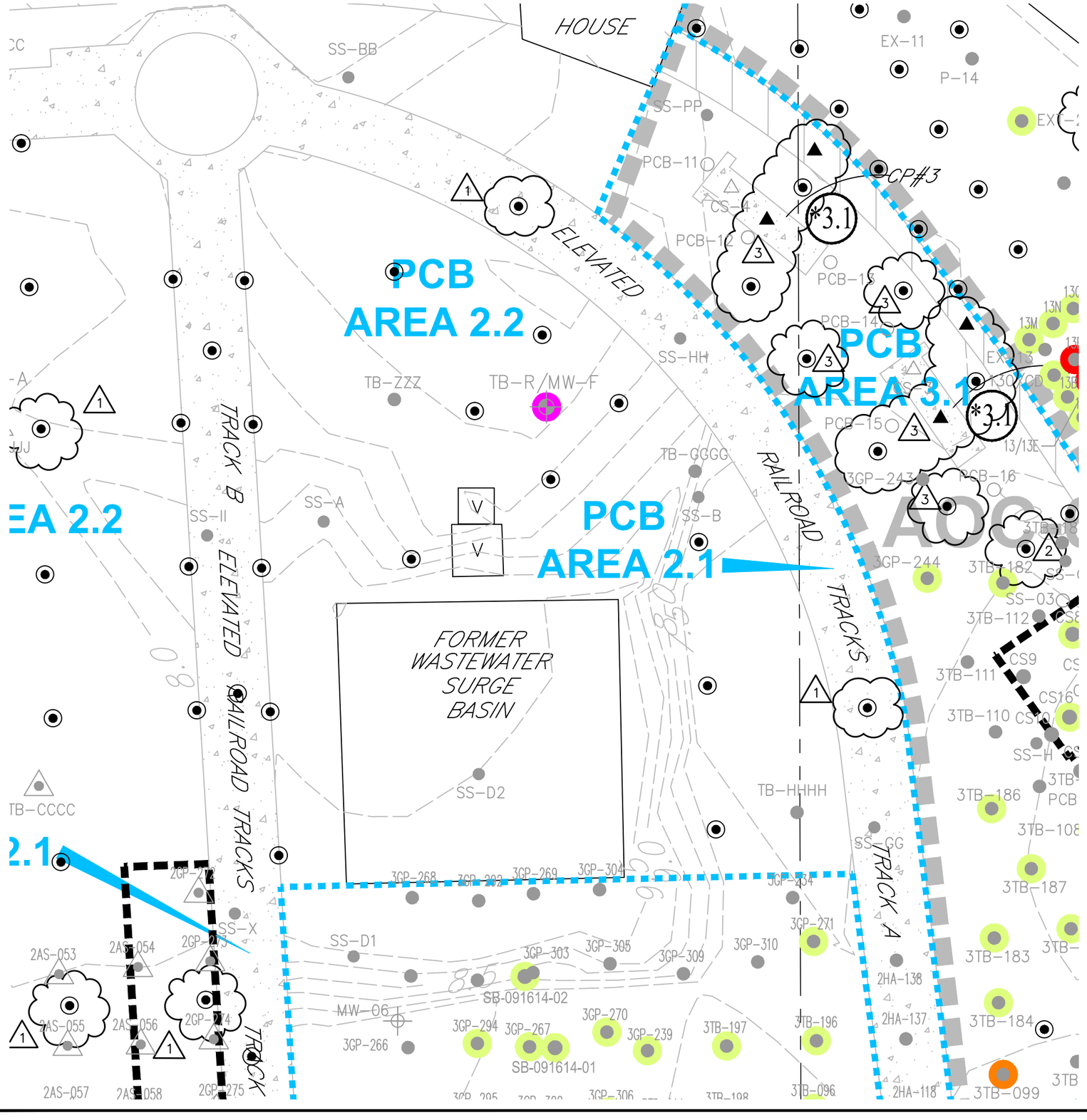
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROPOSED BORING & CONC/ASPHALT SAMPLE LOCATIONS	MM
1	RG	1/6/17	ADDED PROPOSED BORING/SOIL SAMPLE LOCATIONS	MM

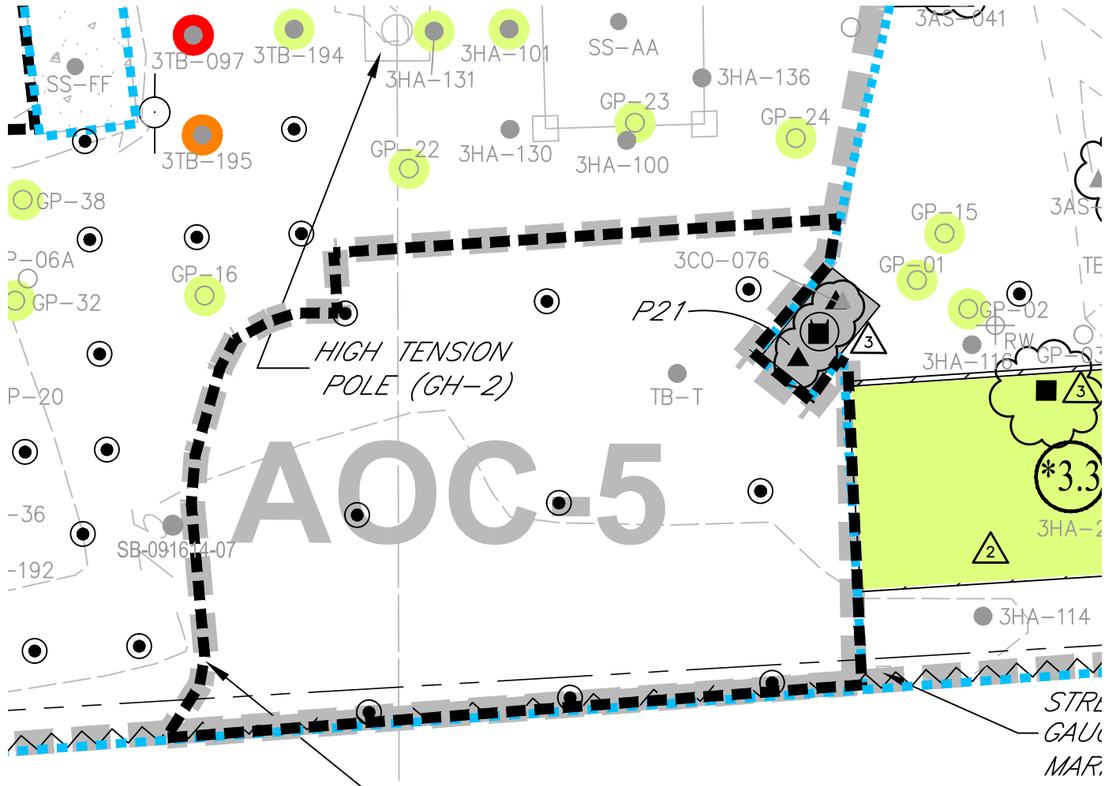
PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12W
(PCB AREAS 2.1 & 2.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-4**
DATE:	10/07/2016		

TRC
21 Griffin Road North
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg



APPROXIMATE EXTENT OF EXCAVATION

(NOTE THAT NUMEROUS SOIL SAMPLES WERE COLLECTED PRIOR TO AND DURING THE EXCAVATION IN AOC 5. ② THE SAMPLE LOCATIONS ARE NOT SHOWN HEREIN AS THE SOILS WERE EXCAVATED.)

0 15' 30'

GRAPHIC SCALE

CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
3	RG	5/22/17	ADDED PROPOSED BORING & CONC/ASPHALT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED BUILDING I.D. AND NOTE	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-5
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-5**
DATE:	10/07/2016		

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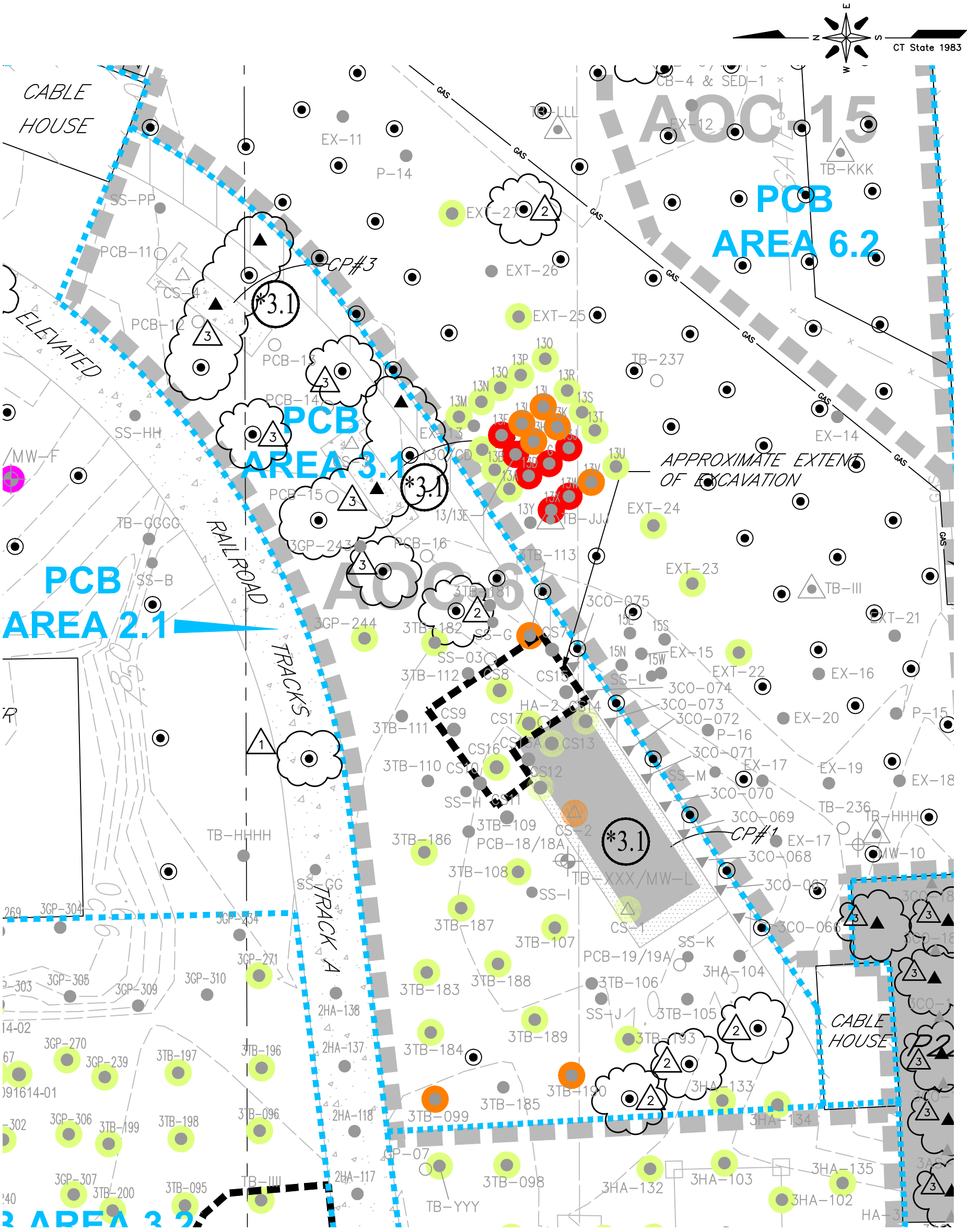
Windsor, CT 06095
Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: June 19, 2017 - 2:57PM --- LAYOUT: Figure 5-6



NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- APPROXIMATE LIMIT OF EXCAVATION
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	ADDED PROPOSED BORING & CONC/ASPHALT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PROPOSED BORING LOCATIONS	MM
1	RG	1/6/17	ADDED PROPOSED BORING LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-6
(PCB AREA 3.1)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-6**
DATE:	10/07/2016		

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Phone: 860.298.9692
www.trcsolutions.com

FILE NO.: Plate-1 Rev-4.dwg

PCB AREA 5.3

POLE (GH-4)

*5.5

APPROXIMATE EXTENT OF EXCAVATION

P06

GH4-N2 GH4-E2 GH4-E1 GH4-E3 GH4-S2 GH4-S3 GH4-S4 GH4-S1 GH4-N1 GH4-S5 GH4-S6

LP#9 SIGN SS-QQ 5GP-253 5TB-037 TB-CCCCCC 5TB-164 5TB-036 TB-NNNNN 5TB-503 5TB-502 5TB-501 5TB-226 5TB-032 5TB-168

LP#8 5GP-024 5GP-016 5GP-015 TB-109 TB-AAAAAA 5TB-022 5TB-023 D3

PCB AREA 5.5

SB-092914-109 SB-092914-110 SB-093014-112 SB-093014-111

5TB-171 5TB-170 5TB-172 5TB-021 TB-208 MW-21 TB-110 TB-207 5TB-173 5TB-019 5TB-020 5CO-151 5TB-169 5CO-150 5TB-033 5TB-034 TB-210 5TB-035 5AS-010 5CO-111 5AS-008 5AS-009 5TB-040 5TB-042 5TB-041 5TB-039 5TB-043 LP#10 MW-17S MW-17D TB-21

AOC-7

P05 5CO-148 5CO-149 5TB-167 5TB-166 5TB-165

P07

5TB-174 TB-00000 5TB-221 5TB-017 TB-209 TB-111 5TB-013 5TB-025 5HA-236 5HA-235 5TB-029 TB-BBBBBB 5TB-222 5TB-223 5TB-224 5SD-009 7SD-011 7SD-012 ST-1 7C0-194 TB-225 5TB-028 5TB-031 7C0-195 OIL PUMP ROOM 7XX-007 TB-223 5TB-601 5TB-030 5SD-027 7C0-192 7C0-193

P04

*5.6 P08 TB-DDDDDD 5TB-044 TB-219 5HA-237 5HA-238 5HA-049 SS-07 SS-RR 5HA-

PCB AREA 5.6

5SD-002 TB-113 5CO-113 TB-222 SS-08 SS-05 SS-06 SS-04 TB-220 5CO-175 5CO-174 5CO-168

FUEL OIL TANK

PCB AREA 5.7

TB-211 TB-MMMMM 5CO-169 5CO-173 5CO-117 5CO-506 5SD-003 5TB-163 5CO-116 5CO-507

AOC-8

SB-093014-114 SB-100114-116 SB-093014-113 SB-111814-125 SB-111814-123 SB-100114-115 SB-111814-124

EAST

PCB AREA 5.4

*5.4

8-B T

CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- ▲ PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- ■ PROPOSED SEDIMENT SAMPLE LOCATION
- ⊙ PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROPOSED SEDIMENT SAMPLE	MM
2	RG	2/27/17	ADDED PROP. BORINGS, CONC. SAMPLES AND TPH/ETPH HIGHLIGHTING	MM

PROJECT: UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE: AOC-7
(PCB AREAS 5.3, 5.4, 5.5, & 5.6)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		
DATE:	10/07/2016		

FIGURE 5-7

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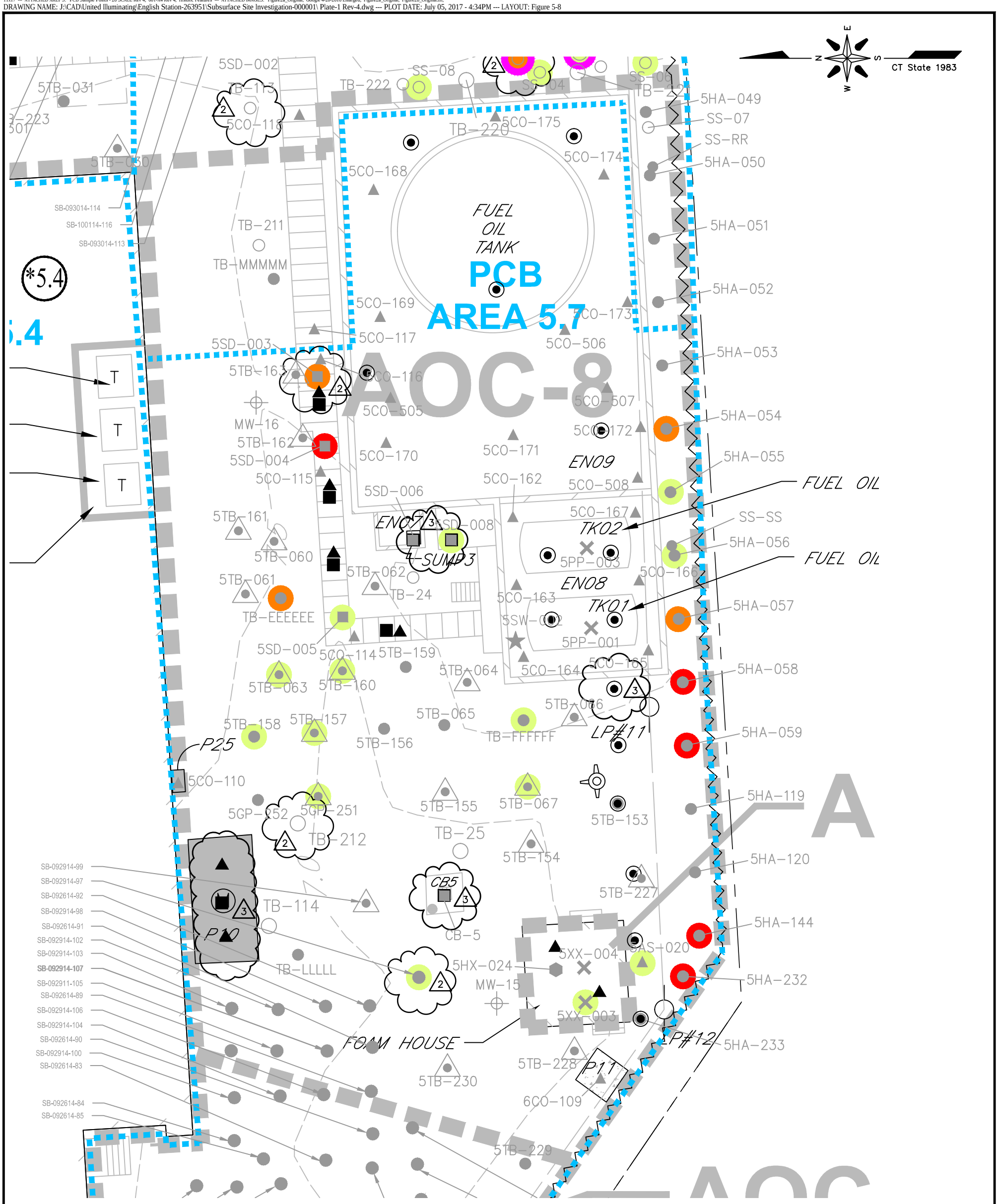
FILE NO.: Plate-1 Rev-4.dwg

11x17 --- ATTACHED XREF'S: PCB Sample Points - 20 SCALE Rev 4; 00T-X4 Rev 4; Historic Features --- ATTACHED IMAGES: Figure2a_Original; Google 4-20-2016 Enlarged; Figure2a_Original; Figure2b_Original.tiff;
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001\ Plate-1 Rev-4.dwg --- PLOT DATE: July 05, 2017 - 4:34PM --- LAYOUT: Figure 5-8



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	ADDED PROP. CONC/ASPHALT, BORING & SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PCB HIGHLIGHT & MOVED PCB HIGHLIGHT TO SSD-003 AND	MM
			ADDED SAMPLE TB-212 & RENAMED SAMPLE TB-213 TO TB-113	

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-8
(PCB AREA 5.7)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-8**
DATE:	10/07/2016		

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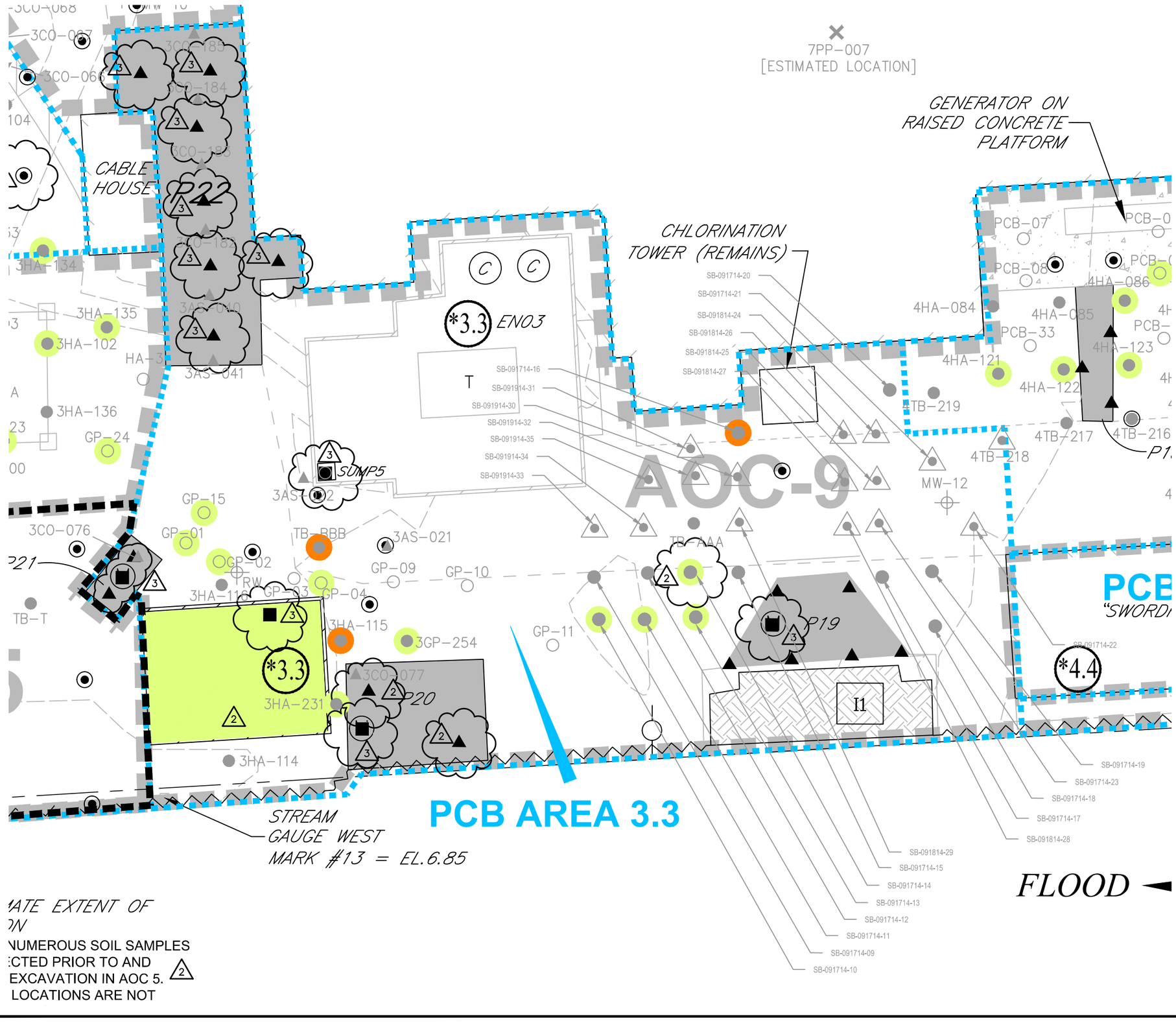
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

VATE EXTENT OF
ON
NUMEROUS SOIL SAMPLES
:CTED PRIOR TO AND
EXCAVATION IN AOC 5. ②
LOCATIONS ARE NOT

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	ADDED PROPOSED CONC/ASPHALT & SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PROP. CONC. SAMPLES, BORINGS & PCB HIGHLIGHT	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-9
(PCB AREA 3.3)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-9**
DATE:	10/07/2016		

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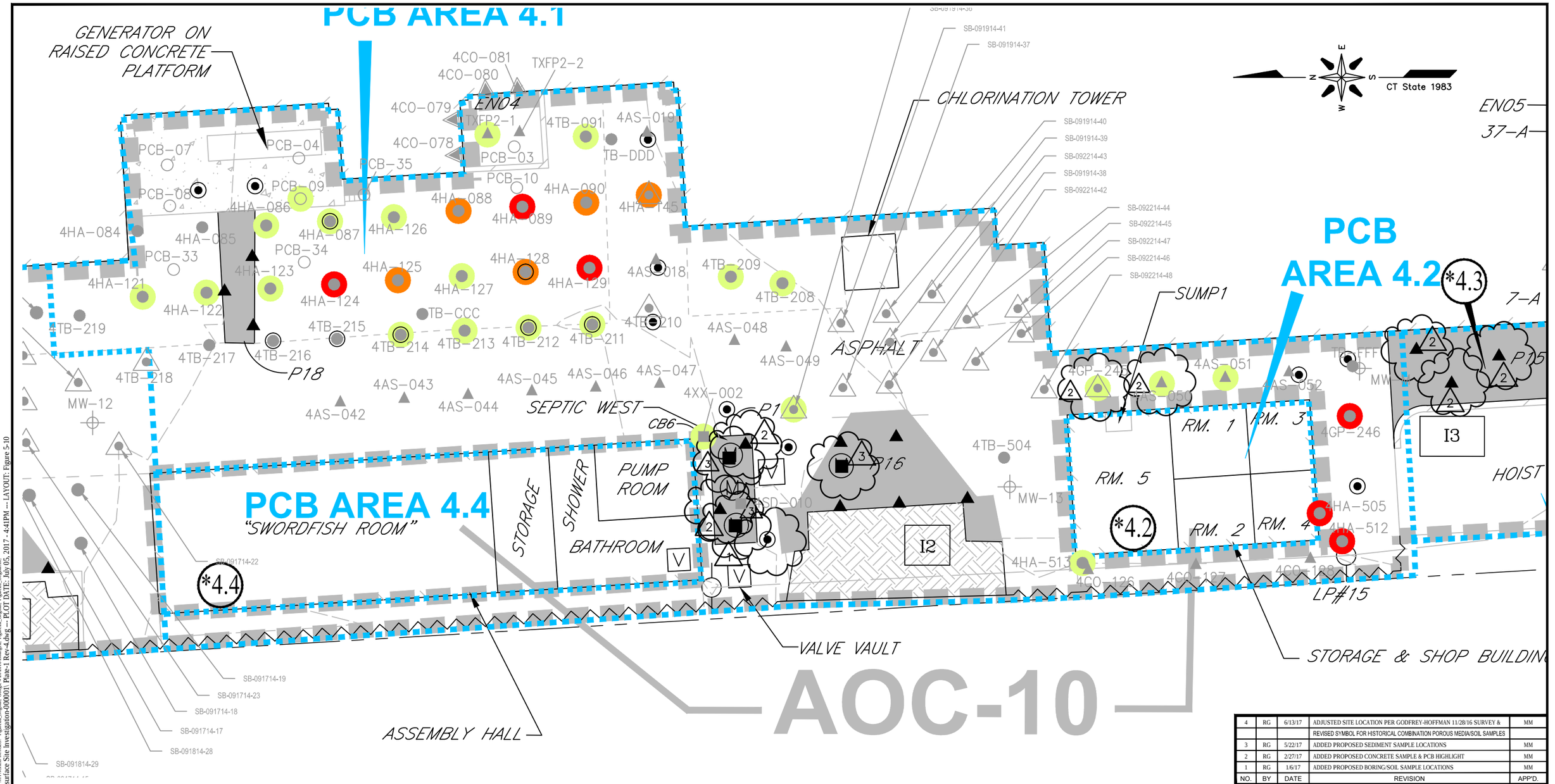
FILE NO.: Plate-1 Rev-4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	ADDED PROPOSED SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PROPOSED CONCRETE SAMPLE & PCB HIGHLIGHT	MM
1	RG	1/6/17	ADDED PROPOSED BORING/SOIL SAMPLE LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-9
(PCB AREA 4.1)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 5-10**
APPROVED BY:	MM		
DATE:	10/07/2016		

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FILE NO.: Plate-1 Rev-4.dwg

N E S W

CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'

GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	ADDED PROP. BORING, CONC/ASPHALT & SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PCB HIGHLIGHT & PROP. CONCRETE SAMPLE & BORING LOCATION	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-9
(PCB AREA 4.3)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**FIGURE 5-11**
DATE:	10/07/2016		

TRC
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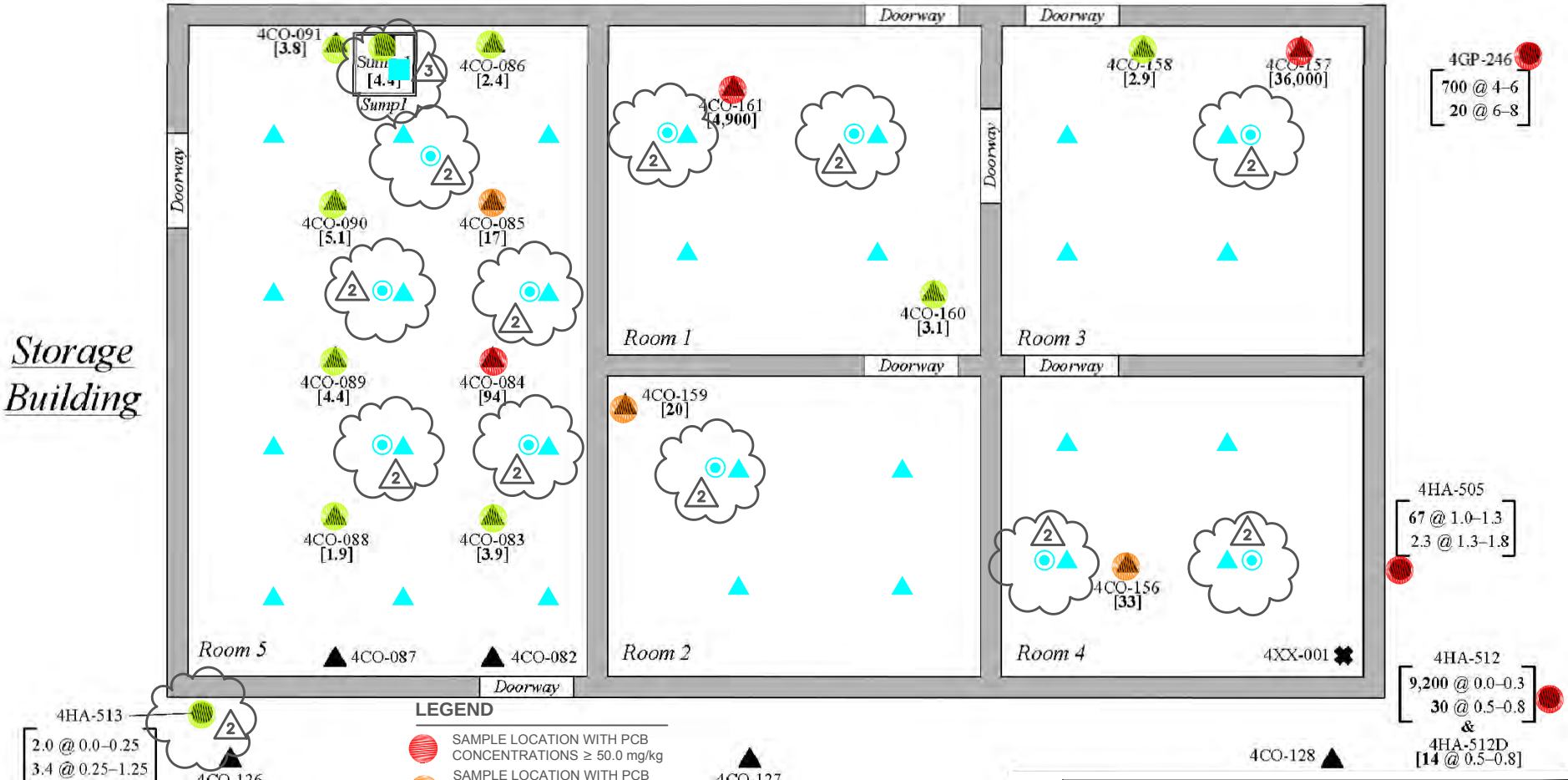
FILE NO.: Plate-1 Rev-4.dwg



SOURCE:
Figure A4.2: PCB Area 4.2: Concrete, Miscellaneous, Sediment and Soil Sample Points.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
3	RG	5/22/17	ADDED PROPOSED SEDIMENT SAMPLE LOCATION	MM
2	RG	2/27/17	ADDED PCB HIGHLIGHT & PROPOSED BORING LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-10
PCB Area 4.2: Proposed Sample Locations

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 5-12**
DATE:	10/07/2016		

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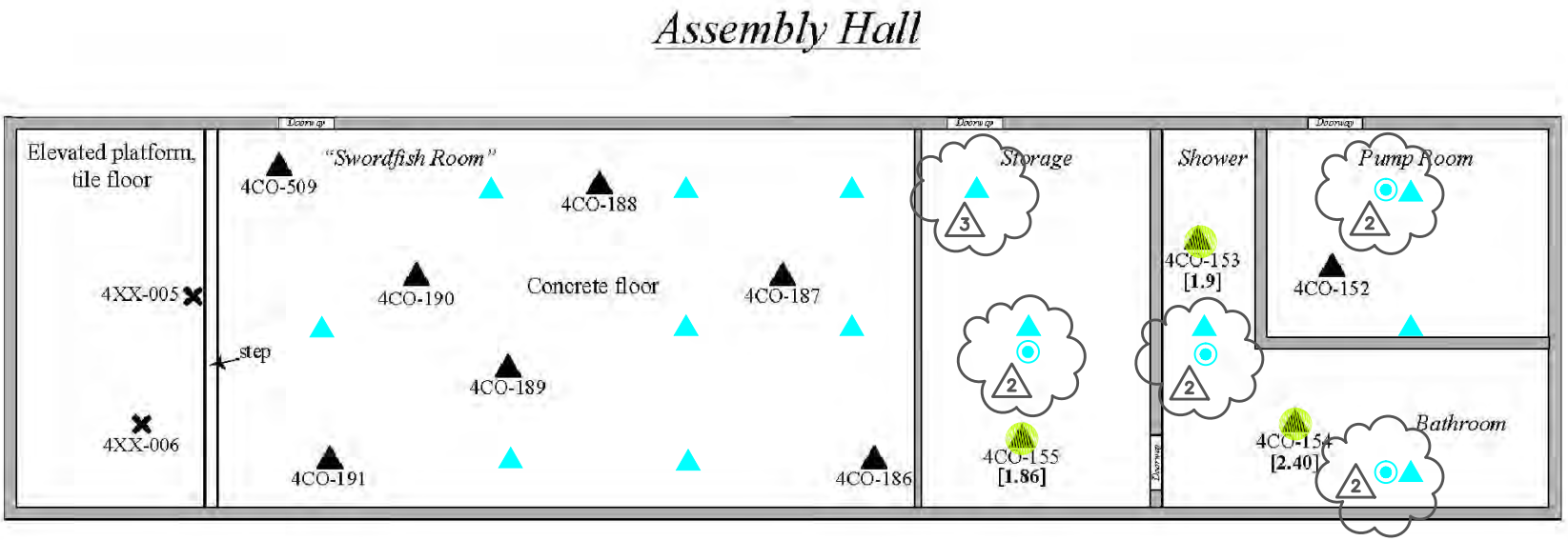
FILE NO.: Figure 4-14 & 5-12 Rev 4.dwg



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

LEGEND

4CO-154	Concrete Sample Point – AEI
4XX-006	Miscellaneous Sample Point (Floor Tiles) – AEI
[1.9]	PCB Criterion Exceedance in Milligrams Per Kilogram

SOURCE:
Figure A4.4: PCB Area 4.4: Concrete and Miscellaneous Sample Points.
Project: AEI-00T-030e
Location: English Station
Grand Avenue, New Haven, Connecticut
Date: February 2005
By Advanced Environmental Interface, Inc.

N E S W

0 6 10 20 feet

SCALE 1 inch : 10 feet

All locations are approximate.

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY	MM
3	RG	5/22/17	ADDED PROPOSED CONC/ASPHALT SAMPLE LOCATION	MM
2	RG	2/27/17	ADDED PROPOSED BORING LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-10
PCB Area 4.4: Proposed Sample Locations

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		**Figure 5-13**
DATE:	10/07/2016		

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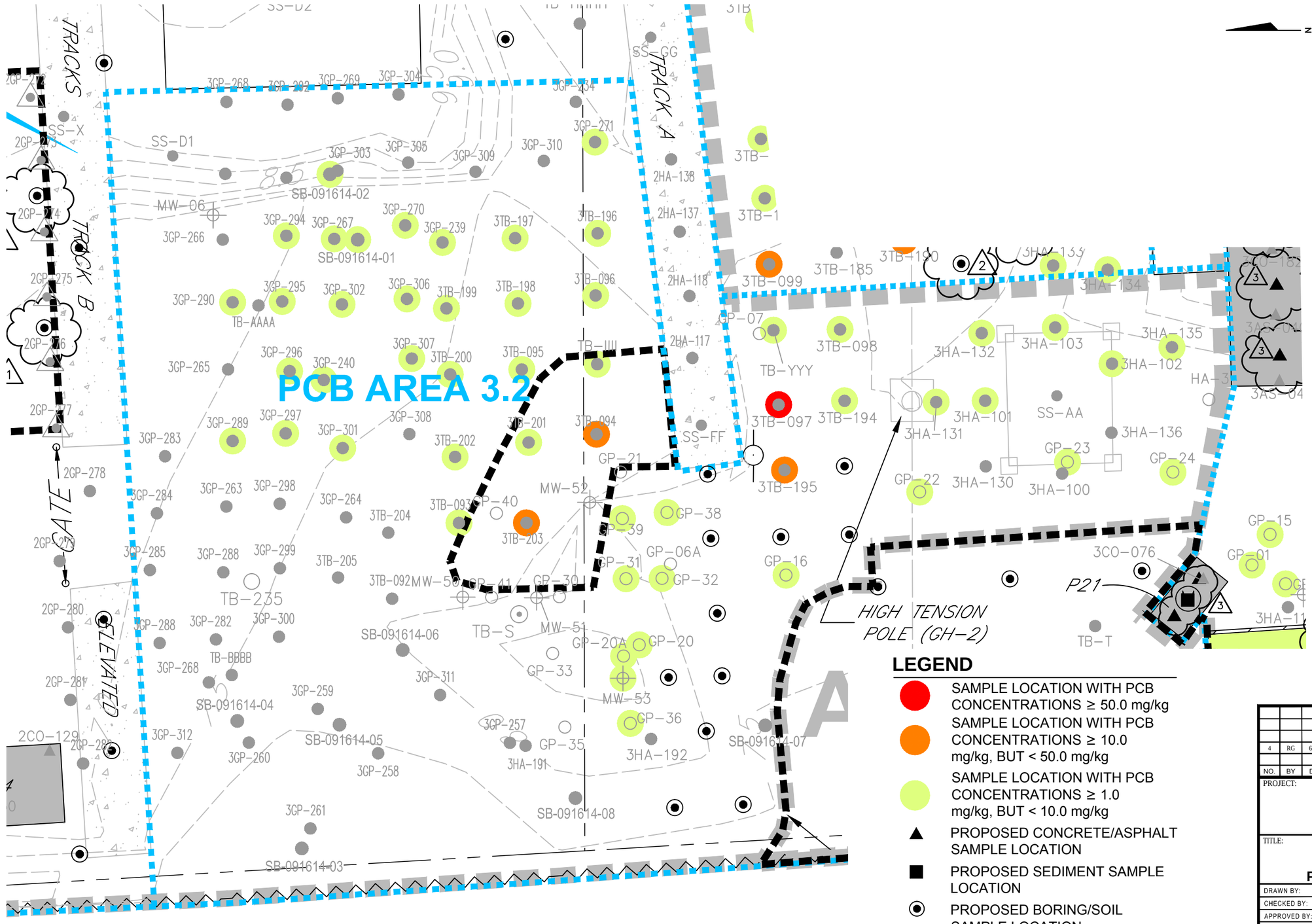
FILE NO.: Figure 4-15 & 5-13 Rev 4.dwg



NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12
(PCB AREA 3.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		
APPROVED BY:	MM		
DATE:	10/07/2016		

FIGURE 5-14

TRC
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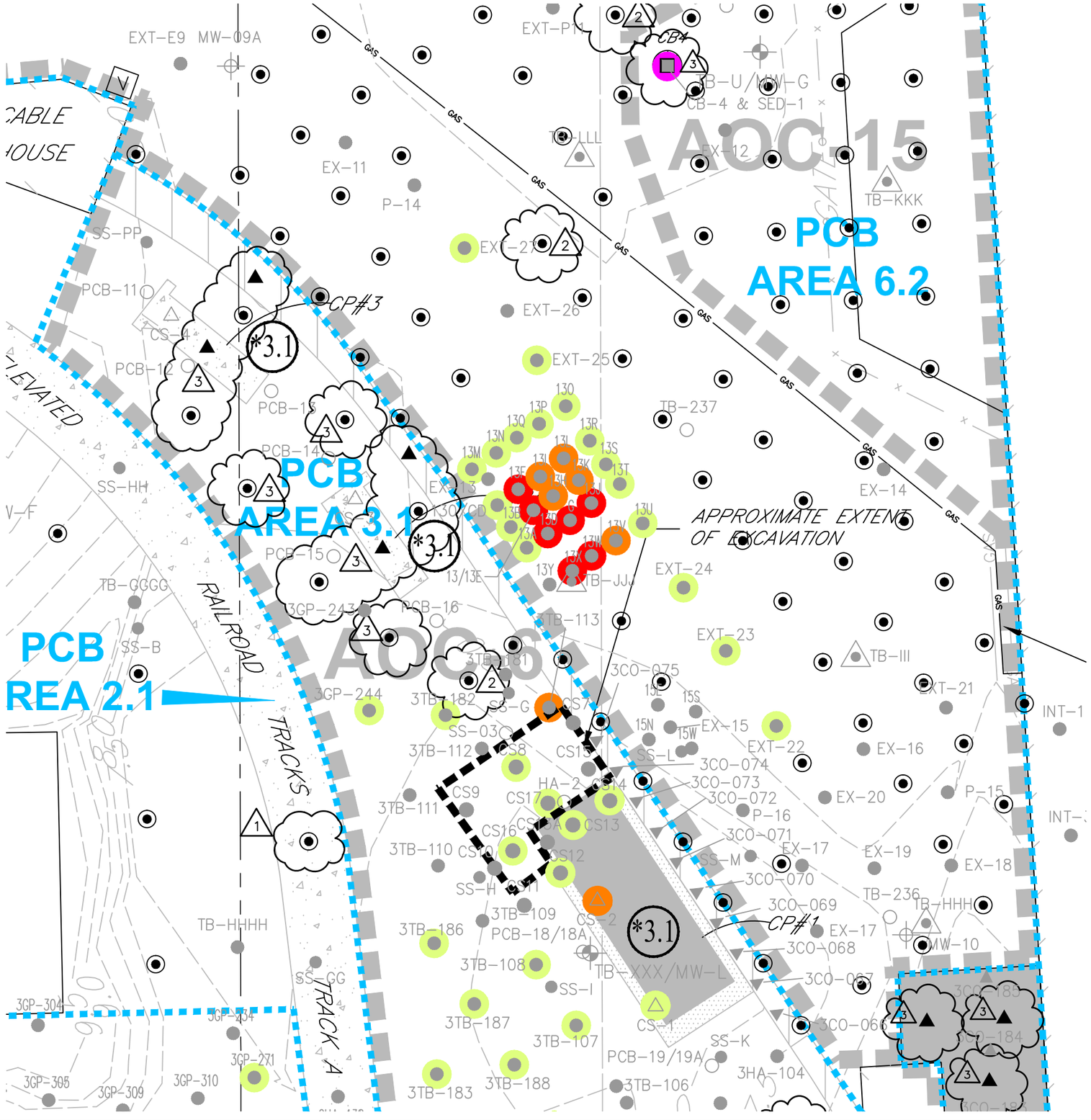
FILE NO.: Plate-1 Rev-4.dwg



CT State 1983

LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF EXCAVATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15’ 30’

GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	ADDED PROP. BORING, CONC/ASPHALT & SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PROPOSED BORING LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12E
(PCB AREA 6.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 5-15**
APPROVED BY:	MM		
DATE:	10/07/2016		

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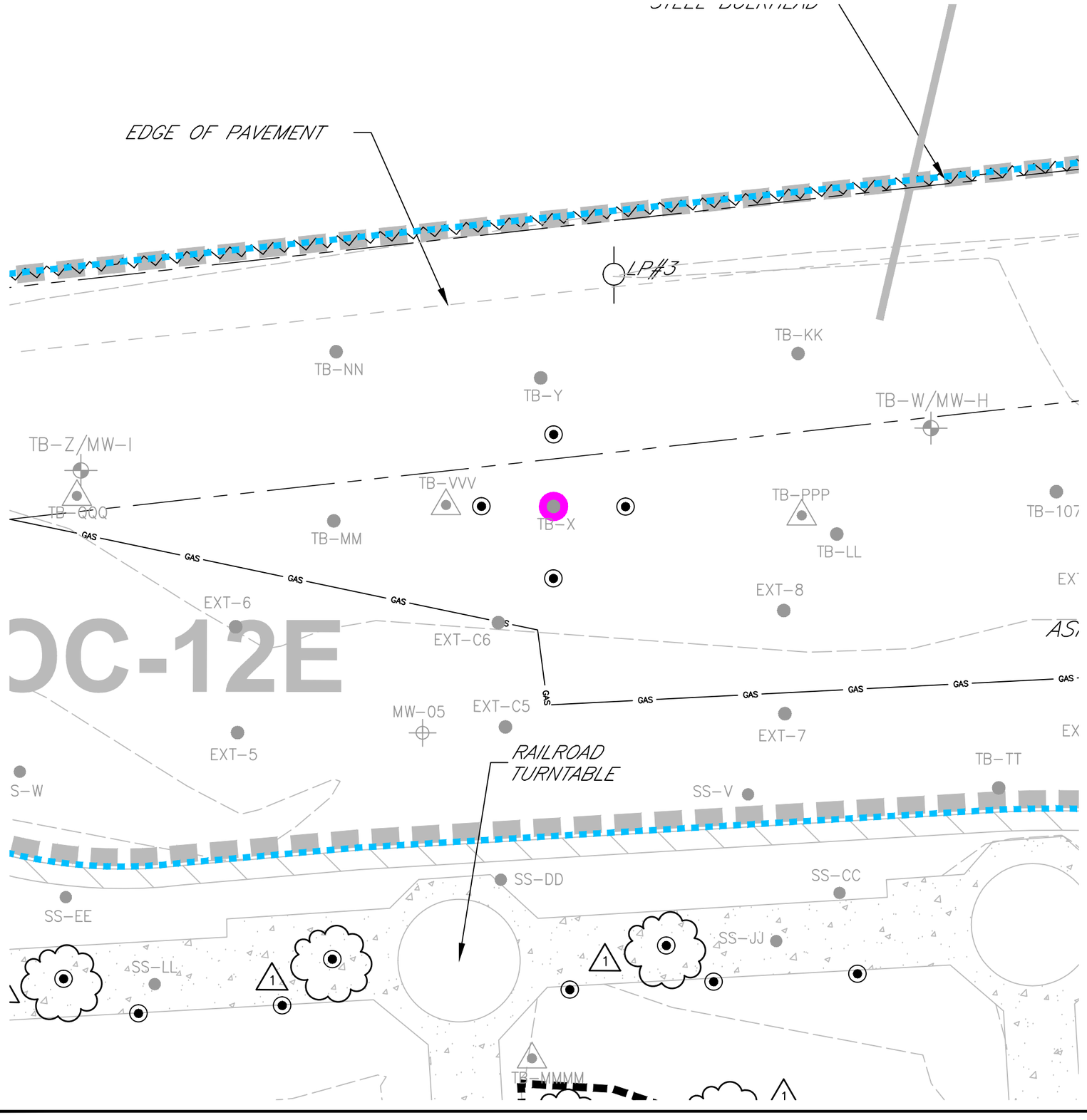
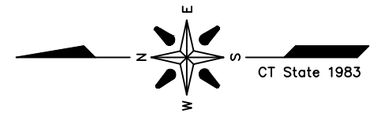
FILE NO.: Plate-1 Rev-4.dwg

DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation\000001 Plate-1 Rev-4.dwg — PLOT DATE: June 19, 2017 - 3:47PM — LAYOUT: Figure 5-15
XREFS: ATTACHED XREFS: PCB\Simple Prints - 2ft SCALE Rev-4 -EFX-1 Rev-4 -Historic Pictures — ATTACHED IMAGES: Figure2a_Option1_Cover-4-262016 Retained; Figure2a_Option1_Figure2b_Option1.dgn





LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION
- PROPOSED BORING/SOIL SAMPLE LOCATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-12E
(PCB AREA 6.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 5-16**
APPROVED BY:	MM		
DATE:	10/07/2016		

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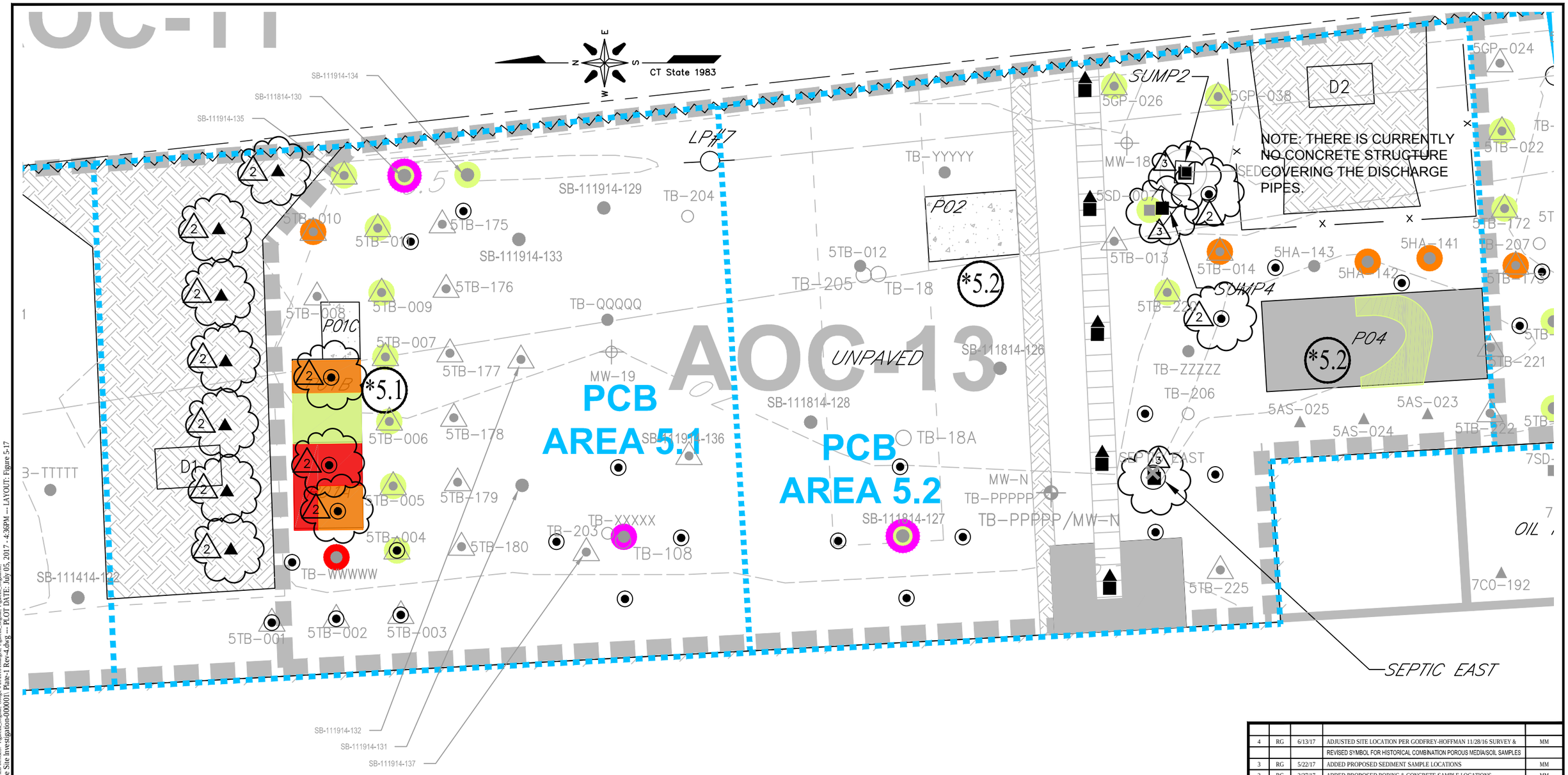
FILE NO.: Plate-1 Rev-4.dwg

11/7 - ATTACHED TIFFS: PCB Sample Points - 20 SCALE Rev-4 -HFEA Rev-4 -Hyper Expose - ATTACHED IMAGES: Figure2a-Zoom.jpg, Google 4282016 Hangel, Figure2a -Zoom, Figure2b -Zoom.tif
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\Subsurface Site Investigation-000001 Plate-1 Rev-4.dwg -- PLOT DATE: June 19, 2017 - 3:49PM -- LAYOUT: Figure 5-16



LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- ▲ PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- ■ PROPOSED SEDIMENT SAMPLE LOCATION
- ◉ PROPOSED BORING/SOIL SAMPLE LOCATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15' 30'
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY & REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	MM
3	RG	5/22/17	ADDED PROPOSED SEDIMENT SAMPLE LOCATIONS	MM
2	RG	2/27/17	ADDED PROPOSED BORING & CONCRETE SAMPLE LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-13
(PCB AREAS 5.1 & 5.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 5-17**
APPROVED BY:	MM		
DATE:	10/07/2016		

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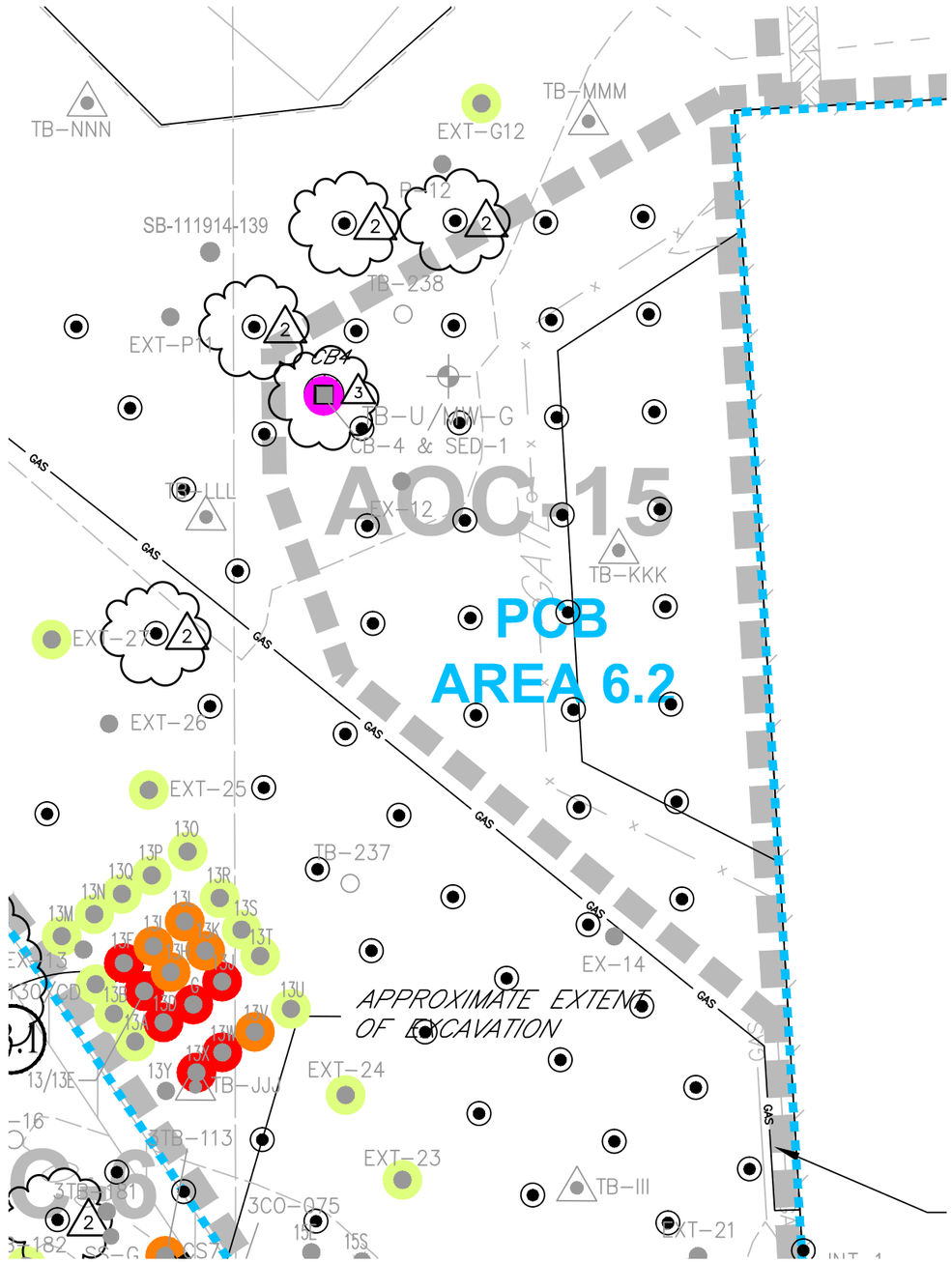
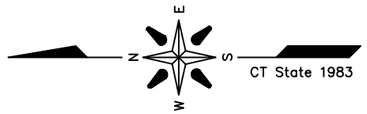
1:417 — I:\TYCHO\PRJ'S_PCB Sample Plans - 28 SOUTH\Plate-1 Rev-4 -SEPT-16 Rev-4 -Hosie Frames — I:\TYCHO\IMAGES_Figure5-x_Original_Copy4-12-2016\Original_Figure5-x_Original.dgn
DRAWING NAME: J:\CAD\United Illuminating\English Station-263951\1 Subsurface Site Investigation\000001_Plate-1 Rev-4.dwg — PLOT DATE: July 05, 2017 - 4:36PM — LAYOUT: Figure 5-17





LEGEND

- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 10.0 mg/kg, BUT < 50.0 mg/kg
- SAMPLE LOCATION WITH PCB CONCENTRATIONS ≥ 1.0 mg/kg, BUT < 10.0 mg/kg
- SAMPLE LOCATION WITH TPH/ETPH > I/C DEC
- ▲ PROPOSED CONCRETE/ASPHALT SAMPLE LOCATION
- ■ PROPOSED SEDIMENT SAMPLE LOCATION
- ◉ PROPOSED BORING/SOIL SAMPLE LOCATION

NOTE:
SEE FIGURES 4-2A & 4-2B FOR NOTES, LEGEND AND LOCATION.

0 15’ 30’
GRAPHIC SCALE

NO.	BY	DATE	REVISION	APP'D.
4	RG	6/13/17	ADJUSTED SITE LOCATION PER GODFREY-HOFFMAN 11/28/16 SURVEY &	MM
			REVISED SYMBOL FOR HISTORICAL COMBINATION POROUS MEDIA/SOIL SAMPLES	
3	RG	5/22/17	ADDED PROPOSED SEDIMENT SAMPLE LOCATION	MM
2	RG	2/27/17	ADD PROPOSED BORING LOCATIONS	MM

PROJECT:
UNITED ILLUMINATING
ENGLISH STATION POWER PLANT
510 Grand Avenue
New Haven, Connecticut

TITLE:
AOC-15
(PCB AREA 6.2)
PROPOSED SAMPLE LOCATIONS

DRAWN BY:	KDH	PROJ NO.:	263951-000001-000000
CHECKED BY:	RG		**FIGURE 5-18**
APPROVED BY:	MM		
DATE:	10/07/2016		

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FILE NO.: Plate-1 Rev-4.dwg

TABLES

TABLE 4-1
PRESENTATION OF THE CONCEPTUAL SITE MODEL
English Station
510 Grand Avenue
New Haven, Connecticut

Area of Concern (AOC)	Description / Operations	COCs (Known or Potential)	PCB Release Area?	Release to Soil, On-Site Sediment, or GW Confirmed?	Release Mechanisms (Known or Potential)	Media Affected or Potentially Affected	Fate and Transport	Notes / Data Gaps
Parcel A AOCs								
AOC-1: Station B Interior	Station B was the original power plant located on Ball Island. It was a coal-fired plant constructed circa 1890 and operations at this plant ceased in the 1920s. Following the cessation of operations, the building was primarily used for storage. By 1939, the southern portion of the Station B building (the boiler house) had been razed.							
AOC-1: Station B Interior (PCB Area 1.1)	**Mezzanine and First Floor (Except Annex III).** The area of PCB impact to the first floor was previously characterized and partially remediated. Note that as the mezzanine floor did not show any indications of staining, nor was there equipment located on the mezzanine, this has been removed from PCB Area 1.1.	PCBs, ETPH	Yes	No	**Primary:** Spill(s) directly to the concrete of the first floor thought to be the result of minor leaks over time from the overhead crane; potential existed for tracking but there is no evidence to indicate that it occurred or that it was a primary mechanism.	Concrete	Limited to absorption into the concrete as there is no exposure to rainwater or groundwater to affect its migration	There are three areas of the floor that were previously scarified that continue to exhibit PCB concentrations greater than 1 mg/kg (including one sample with a PCB concentration of 16,600 mg/kg).
AOC-1: Station B Interior (PCB Area 1.2)	**Former Annex III.** In the late 1970s (following the promulgation of the initial PCB regulations) an Annex III storage area was created in Station B. This area served as storage for PCB-containing equipment that was destined for disposal.	PCBs, ETPH	Yes	No	**Primary:** Spill(s) directly to the concrete of the Annex III area and the result of minor leaks over time from the overhead crane; potential existed for tracking but there is no evidence to indicate that it occurred or that it was a primary mechanism.	Concrete	Limited to absorption into the concrete as there is no exposure to rainwater or groundwater to affect its migration	The area of PCB impact to the floor of Annex III was previously characterized and fully remediated (via scarification) to a concentration of less than 1 mg/kg.
AOC-1: Station B Interior (PCB Area 1.3)	**Basement.** The basement area of Station B was originally constructed with an earthen floor. Fill materials that underlie the Site are also present beneath the Station B building. There are no known or recorded releases to the basement floor of Station B and previous soil sampling and analysis has indicated that the constituents present are inherent to the fill material that comprises the site. A CTDEEP-approved widespread polluted fill variance both acknowledges the condition of the fill materials and provides for a GB PMC exemption. As part of a remediation effort in 2001 (following the collection of samples to confirm the absence of PCBs), AEI poured a concrete floor atop the dirt floor of the basement to render the underlying soils inaccessible. In 2014, HRP cored through the concrete floor of the basement and collected soil samples for analysis of PCBs and confirmed that they are not present above reporting limits.	ETPH, PAHs, Metals, PCBs	No	No	**Primary:** The potential release mechanism for this area (where a dirt floor previously existed) would have been a direct release to the earthen floor and the migration of liquids through cracks or breaches in the first floor.	Soil	Limited to adsorption onto the soil particles as there is no exposure to rainwater or groundwater to further enhance its migration.	There are no data gaps identified in this area.
AOC-2: Station B Former UST Area (overlaps a portion of PCB Area 6.1 - see AOC 12N)	Four gasoline USTs were previously located adjacent to the western side of Station B. Based on information presented in GEI's 1998 Phase I investigation report, there were initially two steel, 2,000-gallon USTs located in this area that were removed in June 1991. Upon removal of these tanks, two fiberglass-reinforced plastic, 1,000-gallon gasoline USTs were installed in the same location. The second set of tanks was subsequently removed in October of 1996.	VOCs, PAHs, ETPH, PCBs	No	Yes	**Primary:** Spills directly to the ground surface during filling operations / a release from the buried tank, associated piping, pumps or fittings directly to the subsurface.	Soil and groundwater	Petroleum resulting from a spill to the surface would have infiltrated through the asphalt into the underlying soils. Releases directly to the subsurface would be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	Following the 1996 removal of the tanks from this area, two samples were collected and analyzed for VOCs only. During subsequent investigations, additional soil samples were collected from the vicinity of the former USTs and confirmed the presence of impacts to the soil. Soil was excavated from the area in 2002 and confirmatory soil samples were collected that indicated the presence of ETPH and PAHs. While there are PAHs inherent to the fill material, the presence and magnitude of the PAHs may be linked to this known historic release.

TABLE 4-1
PRESENTATION OF THE CONCEPTUAL SITE MODEL
English Station
510 Grand Avenue
New Haven, Connecticut

Area of Concern (AOC)	Description / Operations	COCs (Known or Potential)	PCB Release Area?	Release to Soil, On-Site Sediment, or GW Confirmed?	Release Mechanisms (Known or Potential)	Media Affected or Potentially Affected	Fate and Transport	Notes / Data Gaps
AOC-3: Former Septic Systems	Information provided in GEI's 1998 Phase I investigation report indicates that a P-5 report generated by the CTDEEP in 1967 references the Site having been served by six septic systems. The septic system associated with Parcel A was historically located along the southeastern side of the former boiler house for Station B (demolished sometime prior to 1938). At least two other septic-type systems are present on Parcel B and are discussed later in this table, under the Parcel B heading.	VOCs, SVOCs, ETPH, PCBs, Metals	No	Potentially	**Primary:** A release from a buried septic tank, associated piping, or fittings directly to the subsurface.	Soil and groundwater	Releases directly to the subsurface would be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	Historic reports referenced the presence of up to six septic systems at the English Station site, however, the locations of all six systems/tanks have not been identified. Historic mapping shows the locations of a septic tank (not a modern-day system constructed with leaching fields). This tank was located behind Station B has been investigated through past efforts and as such, no additional work is proposed.
AOC-12N: Former Station B Boiler House and Coal Storage Area (PCB Area 6.1)	This portion of the Site is located to the south of the Station B building and includes the footprint of the former Boiler House for Station B that was demolished sometime prior to 1939. After demolition of the Boiler House, the area was used for the storage of coal.	PCBs, ETPH, PAHs and Arsenic	No	Yes	**Primary:** Direct release to ground surface from coal storage, dust suppression (spraying of oils); **Secondary:** Seepage into the surrounding or underlying soils from the surface; **Tracking:** Tracking of surficial contamination is a potential concern in this area.	Asphalt, soil and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	Samples collected as part of the previous investigations revealed the presence of the constituents that relate to the widespread fill, as well as an area of elevated ETPH concentrations in soil adjacent to the cooling water discharge tunnel. PCBs were not determined to be an issue in the soils in this area, however, additional work will be proposed to evaluate tracking as well as to define the identified ETPH impact to soil.
AOC-12W: Elevated Railroad Tracks and Foundations (PCB Area 2.1)	Coal storage began at the Site as early as the late 1880s and Station B operated as a coal-fired power plant from the 1890s until 1903. English Station burned coal from the early 1900s to the mid-1950s to early 1960s.	PCBs, ETPH, PAHs and Arsenic	Yes	Yes	**Primary:** Over-spraying for dust suppression; **Tracking:** Tracking/spreading of contamination is a potential along the elevated rails due to the movement of coal bins.	Soil and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	This area was investigated previously by others and there have been minimal impacts identified. Despite the previous findings, however, additional work is proposed in order to evaluate any impact that tracking may have had on the area.
AOC-12W: Former Coal Storage Area (PCB Area 2.2)	Coal storage began at the Site as early as the late 1880s and Station B operated as a coal-fired power plant from the 1890s until 1903. English Station burned coal from the early 1900s to the mid-1950s to early 1960s.	PCBs, ETPH, PAHs and Arsenic	Yes	Yes	**Primary:** Direct release to ground surface from coal storage, dust suppression (spraying of oils); **Secondary:** Seepage into the surrounding or underlying soils from the surface; **Tracking:** Tracking of surficial contamination is a potential issue in this area.	Asphalt, soil and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	This area has been investigated by others during previous investigations and further, there have been soil remediation efforts undertaken to address the identified impacts. Despite the investigation and cleanup work conducted to date, additional sampling is proposed for this area to evaluate the area in general, as well as tracking issues.
AOC-14: Former Cooling Water Discharge Tunnel	Historical drawings obtained from UI indicate that a former cooling water discharge tunnel associated with Station B runs from the south side of Station B through the former coal yard and to an unidentified discharge point at a location along the eastern side of the Site. The tunnel is approximately 3 feet tall and 4 feet wide, and is buried approximately 1 foot below grade (AEI, 2002). The tunnel is reportedly sealed off at both ends and no longer discharges to the Mill River. Previous investigations by AEI noted that at least two catch basins, identified as CB-1 and CB-2, located within the former coal yard, tie into this tunnel.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Likely the result of impacted storm water run-off from the two catch basins located in the former coal storage area that are tied into the discharge tunnel.	Concrete and sediment	Impacts resulting from potential infiltration through the concrete of the discharge tunnel or to cracks, seams or joints in the tunnel to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	Sediment from the accessible length of the tunnel requires additional sampling in order to fill the primary data gap in this area. Concrete samples also need to be investigated to determine if contact with potentially impacted sediments has resulted in impacts to the concrete.

TABLE 4-1
PRESENTATION OF THE CONCEPTUAL SITE MODEL
English Station
510 Grand Avenue
New Haven, Connecticut

Area of Concern (AOC)	Description / Operations	COCs (Known or Potential)	PCB Release Area?	Release to Soil, On-Site Sediment, or GW Confirmed?	Release Mechanisms (Known or Potential)	Media Affected or Potentially Affected	Fate and Transport	Notes / Data Gaps
Parcel B AOCs (Including those that cover both Parcels - AOCs 4, 11 and 18)								
AOC-3: Former Septic Systems	Information provided in GEI's 1998 Phase I investigation report indicates that a P-5 report generated by the CTDEEP in 1967 references the Site having been served by six septic systems, however, the locations of all six systems/tanks have not been identified. Historic mapping shows the locations of two septic structures (not modern-day systems constructed with leaching fields); one located on the western side of the Site which has not been specifically targeted historically for investigation and one manhole along the eastern side of the Site labelled as "Septic East". The vicinity of the tank located on the far western side of the site, "Septic West", has been partially investigated in that a sludge sample from the tank was previously collected and analyzed for PCBs.	VOCs, SVOCs, ETPH, PCBs, Metals	No	Potentially	**Primary:** Direct dumping of material to septic structures or manholes; Carrying of surficial contaminant by stormwaters into manholes or structures; **Secondary:** A release from a buried septic structure, associated piping, or fittings directly to the subsurface.	Soil, groundwater, sediment (within structures), and concrete/asphalt	Releases directly to the subsurface would be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and fluctuating water table.	Additional investigation of the "Septic West" structures and surrounding area will be completed to more thoroughly evaluate potential impacts. As the sturctures that make up "Septic East" and the surrounding area has not previously been investigated, additional investigation is planned here as well.
AOC-4: Past Spills	There have been numerous spills reported for the Site from 1975 through present. Many of the spill reports referenced releases to the Mill River, while the remainder of the spill report generally do not reference the specific locations on the Site where releases occurred. Of note is that this Site was developed in the late 1800s and progressively through the 1950s and it was operational into the early 1990s. Much of its operating history occurred before there were environmental regulations and the means to report releases.	VOCs, SVOCs, ETPH, PCBs, Metals	Yes	Yes	**Primary:** Spills or releases directly to the ground surface (e.g., soil, asphalt, concrete); **Secondary:** Infiltration through the ground surface (including cracks, seams and other breaches in media other than soil) and into the soil below.	Asphalt, concrete, soil, sediment and groundwater	Releases directly to the subsurface would be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	A review of the CTDEEP spill files associated with the 510 Grand Avenue property was conducted on September 22, 2016 to ensure that this CSM is up-to-date. Areas that have been impacted by documented historic spills (with the exception of the new AOC 15; Catch Basin Release and Oil Stain Area located just to the north of the English Station building) have been and will continue to be addressed through the investigation of the other AOCs/PCB Investigation Areas across the site.
AOC-5: Bulkhead PCB Remediation Area (PCB Area 3.2)	This former soil remediation area is located along the western side of the Site (just to the north of English Station). The remediation effort was conducted in 1998 in response to a 1997 report of oil-impacted soil from the site that was falling into the Mill River through a collapsed portion of the metal bulkhead that surrounds the island.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** The exact release mechanism is unknown, however, it is most likely two-fold. First, there was dust suppression conducted in areas where coal was handled; therefore, direct application of oils to the ground surface likely occurred. Also, based on the reported presence of NAPL, a leakage from a subsurface source may have occurred; **Secondary:** The potential for tracking exists due to activities conducted at the site between completion of the remediation and the present; **Tracking:** Tracking of surficial contamination across this area is a concern as surface contamination has been identified in the vicinity.	Soil and groundwater	Releases directly or indirectly to the subsurface were entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would have been subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	Additional investigation to the north and east of the original remediation area has confirmed the presence of PCBs in soils beyond the limits (PCB Area 3.2) of the initial UI remediation area. The potential for impacts to the surface due to tracking is a data gap that has been identified in this AOC.
AOC-6: Capacitor Release / Outdoor Capacitor Banks 1-3 (PCB Area 3.1)	Capacitor Banks 1 through 3 were formerly located in the central portion of the Site. A 1984 spill report summarized in GEI's 1998 Phase I investigation report indicated that a capacitor "blew up" at the Site (location not specified). Based on anecdotal information, it appears that Capacitor Bank 1 suffered damage that resulted in a release to the environment. Impacted soils in this area were subsequently remediated. Capacitor Bank 1 is located flush with the ground and the remaining pad is surrounded by asphalt while Capacitor Banks 2 and 3 sat on elevated concrete pedestals. Subsequent evaluation of the asphalt and soils surrounding Capacitor 1 indicated the need for additional PCB remediation which was subsequently completed in 2002. PCB results depicted on a February 2005 figure prepared by AEI indicate there are elevated concentrations remaining in the concrete pad and surrounding asphalt.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Leakage from the oil-filled equipment onto its concrete base/foundation; **Secondary:** Seepage into the surrounding soil and asphalt from the surface of the concrete pad on which the capacitors sat or seepage through cracks or breaches in the concrete structure to the soil below; **Tracking:** Tracking of surficial contamination is a concern in this area due to the movement of equipment and materials associated with nearby demolition activities.	Concrete, asphalt, soil, groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	Additional investigation of the area around Capacitor 1 (including the soils underlying the asphalt that exhibits elevated PCB concentrations) is warranted; including samples to evaluate potential tracking issues. Historically, samples of concrete collected from the raised pedestals of Capacitors 2 and 3 did not exhibit concentrations of PCBs in excess of 1 mg/kg. As the concrete would have been the first media to be impacted had a spill occurred from the capacitors and there was no evidence of impacts, it stood to reason that there were no PCB impacts identified in surrounding soils. As such, there are no data gaps identified associated with the portion of AOC 6 / PCB Area 3.1 that includes Capacitors 2 and 3. However, based on the demolition activities which ocurred after the cessation of investigation, this area will be evaulated further due to tracking concerns.
AOC-7: Former Waste Oil AST/Oil Pump Room Area (PCB Area 5.3)	**Exterior Area Adjacent to Oil Pump Room.** The Oil Pump Room served high-pressure boiler units 7 and 8 during their operation.	PAHs, ETPH, PCBs and VOCs/Metals (due to the proximity to the waste oil AST)	Yes	Yes	**Primary:** Leakage from oil-filled equipment being brought out of the building through the nearby overhead door onto the ground surface (asphalt/gravel or soil); **Secondary:** Seepage into the surrounding soil from infiltration through the asphalt (including through cracks or other breaches); **Tracking**: Tracking is a concern in this area given the shallow nature of the impacts defined to date and the demolition activities which have taken place.	Asphalt, concrete, soil, groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any smear zone that exists may be exacerbated by the fluctuation of the tide which has been shown to have more influence in the areas of the site closest to the bulkhead. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuations of the water table.	PCB impacts have been identified from the ground surface to a depth of approximately 6 feet below grade in this area. This area of impacts, as previously defined, appears to extend to the north into the adjacent AOC 13. The available data suggests that vertical delineation of impacts in this area are not complete and, given the potential for tracking, additional investigatory work as proposed for this area.

TABLE 4-1
PRESENTATION OF THE CONCEPTUAL SITE MODEL
English Station
510 Grand Avenue
New Haven, Connecticut

Area of Concern (AOC)	Description / Operations	COCs (Known or Potential)	PCB Release Area?	Release to Soil, On-Site Sediment, or GW Confirmed?	Release Mechanisms (Known or Potential)	Media Affected or Potentially Affected	Fate and Transport	Notes / Data Gaps
AOC-7 (PCB Area 5.4)	**Former Waste Oil AST Area.** Historically, there was a waste oil AST located adjacent to the southeastern corner of English Station. This waste oil AST was located just to the south of and adjacent to the southern wall of the Oil Pump Room.	VOCs, PAHs, ETPH, PCBs, Metals	Yes	Yes	**Primary:** Leakage from the tank and/or associated piping and fittings to the ground surface; **Secondary:** Seepage into the surrounding soil from infiltration through the asphalt (including through cracks or other breaches), seepage into concrete pads or structures through seams, cracks, other breaches; **Tracking:** Due to the widespread occurrance of surficial contamination and demolition activities that have taken place, tracking is a concern in this area.	Asphalt, concrete, soil, on-site sediment (located in pipe trench; a portion of which runs through this area), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuating water table.	The results of previous soil sampling in this area identified impacts to shallow soil underlying the asphalt surface (PCBs > 50 mg/kg) at one boring location and this has not been fully delineated. The concrete pads in this area were sampled previously and did not show signs of impacts, however, concrete will be evaluated as part of the delineation of potential tracking issues in this area. In addition, the sediment (if present) located within the pipe trench in this area will be sampled. If possible, the concrete bottom of the trench will be sampled for PCBs as well.
AOC-7 (PCB Area 5.5)	**Tower GH-4 Area.**	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Unknown, but likely the result of a release to the surface; **Secondary:** Seepage into the surrounding soil from infiltration through the asphalt (including through cracks or other breaches).	Asphalt, concrete, soil, groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any smear zone that exists may be exacerbated by the fluctuation of the tide which has been shown to have more influence in the areas of the site closest to the bulkhead. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuations of the water table.	Samples collected from 4 feet below grade exhibited elevated PCB concentrations (greater than 10 mg/kg) and additional sampling has not been conducted to define the vertical extents of the impacts. Additional investigatory work is proposed for this area.
AOC-7 (PCB Area 5.6)	**Former Storage Building Area.**	VOC, SVOCs, ETPH, PCBs, Metals	Yes	Yes	**Primary:** Unknown, but likely the result of a release to the surface; **Secondary:** Seepage into the surrounding soil from infiltration through the asphalt (including through cracks or other breaches), seepage into the concrete pipe trench through seams, cracks, other breaches; **Tracking:** Due to the presence of surficial contamination of the surrounding area and the demolition activities that have taken place, tracking is a concern in this area.	Asphalt, concrete, soil, on-site sediment (located in pipe trench; a portion of which runs through this area), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any smear zone that exists may be exacerbated by the fluctuation of the tide which has been shown to have more influence in the areas of the site closest to the bulkhead. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuations of the water table.	Previous sampling has indicated the presence of PCBs in soil at one location in excess of 10 mg/kg. This isolated hotspot requires definition and additional work is proposed for the soils in this area. Additional samples of the sediment (if present) in the pipe trench will also be sampled. The concrete that comprises the trench will be sampled for PCBs as well. Several concrete pads/structures will be sampled and/or re-sampled due to tracking concerns.
AOC-8: Former Fuel Oil ASTs (PCB Area 5.7)	One 50,000-gallon No. 6 fuel oil vertical tank was previously located within a concrete containment berm located in the far southern end of the Site. Following the cessation of the use of coal in the 1950s, No. 6 fuel oil was used as the fuel source for the Plant. To the west of the former No. 6 fuel oil tank, there were two 5,000-gallon No. 2 fuel oil ASTs that were formerly located in concrete cradles. During a recent site visit, it was noted that these tanks, although still present at the Site, are no longer located within their cradle structures. Rather, they have been emptied and are currently located to the west of their respective cradles (between the cradle structures and the Foam House building). The No. 2 fuel oil formerly housed in these tanks fueled the boilers installed to heat the building to a base temperature (boiler units 7 and 8) during the winter months after the Plant had been moth-balled in the early 1990s.	VOCs, PAHs, ETPH, PCBs	Yes	Yes	**Primary:** Incidental spills from filling operations (or, the case of the ASTs that have been moved) leaks from valves, piping, fittings to the ground surface or subsurface (relative to the appurtenances); **Secondary:** Seepage into soils underlying concrete or asphalt through infiltration through cracks, seams or other breaches; **Tracking:** Tracking is a concern in this area, particularly due to the fact that the identified impacts include PCBs at concentrations greater than 50 mg/kg in shallow soils along the bulkhead where it is not paved.	Asphalt, concrete, soil, on-site sediment (located in pipe trench; a portion of which runs through this area), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any smear zone that exists may be exacerbated by the fluctuation of the tide which has been shown to have more influence in the areas of the site closest to the bulkhead. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuations of the water table.	Although the concrete that comprises the containment dike for the former No. 6 fuel oil tank did not exhibit any impacts during previous PCB sampling efforts and there are no known or reported spills within, there will be samples of the underlying soils proposed for other petroleum-related constituents (particularly if there are breaches observed of the floor of the containment). In addition, as the ASTs that were previously settled in their cradle structures have been removed and placed nearby on the ground surface, sampling is proposed to evaluate the potential of spillage during the pump-out or moving of the tanks. There are sediments present in the portion of the piping trench located within this AOC. Previous sampling has indicated the presence of PCBs in these sediments at a concentration of greater than 50 mg/kg. Additional sampling will be proposed to define the extent of the impacted sediments in the trench and the concrete within which the impacted sediments are in contact will also be sampled. There are five small areas of PCB-impacted soils within AOC 8 (four of which are located right along the southern bulkhead and the remaining one is located between the southern end of English Station and the pipe trench) which require additional delineation. In addition, given the shallow impacts in these areas (which are exposed soil), additional work is proposed to evaluate potential tracking issues.

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AOC-9: Transformer Areas (PCB Area 3.3)	**Northwest Transformer / Capacitor Area:** There is one large, pad-mounted transformer (identified as Transformer G) located adjacent to the northwestern corner of English Station. It is located on a concrete pedestal that is, in turn, located in a concrete containment dike. Just behind (to the east of) Transformer G are two circuit breakers that are also located within the footprint of the containment dike that served Transformer G. It was noted in previous reports that a sticker indicating PCBs less than 50 ppm was affixed to Transformer G. Labels indicating PCB concentrations less than 1 ppm were affixed to both the circuit breakers and a small tank associated with Transformer G.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Surface releases from oil-filled electrical equipment (e.g., transformers and capacitors) to concrete pads and dikes, absorption into concrete surfaces; **Secondary:** Seepage/migration through concrete via cracks, breaches or sumps into the underlying soil, migration with precipitation into adjacent paved (asphalt) and unpaved surfaces, seepage into underlying soils; **Tracking:** Given the location of this area, tracking of surface contamination is a concern.	Concrete, asphalt, soil, sediment (in sumps, manholes and containment structures), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	A soil sample collected in the north-central portion of this area exhibited PCB concentrations >10 mg/kg at a depth of 7 ftbgs., however, the area is well defined. A nearby soil sample (just to the south of Enclosure 2) also exhibited PCB concentrations in excess of 10 mg/kg, however, this location requires additional delineation (particularly vertically). A third soil sample located to the northwest of the remains of the chlorination tower also exhibited PCB concentrations in excess of 10 mg/kg, however, this location is delineated. There are six concrete structures included in this area, five of which have been sampled. The concrete that overlies the intake was not sampled, but will be as part of this effort. The remaining concrete samples that were collected either did not exhibit detectable levels of PCBs or, in the case of Enclosure 2, exhibited PCBs at concentrations greater than 1 mg/kg and less than 10 mg/kg. Of particular note is the concrete containment dike/pedestal on top of which Transformer G sits. The sampling of this structure indicated that it is not PCB-impacted. There was one sediment sample collected from the bottom of the containment and it exhibited very low PCB concentrations. At least one additional sample of sediment will be collected from the base of the containment in order to confirm that result. Due to the high potential for tracking of shallow contamination in this area, additional samples of asphalt, concrete and soils will be collected.
AOC-9: Transformer Areas (PCB Area 4.1)	**Former Transformer Area on the West Side of English Station:** Three pad-mounted transformers (Identified as Service Transformers 1-3) were previously located adjacent to the western exterior wall of English Station (in the approximate center of the building length). These transformers were all reportedly affixed with labels that indicated PCB concentrations less than 50 ppm.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Surface releases from oil filled electrical equipment (e.g. transformers and capacitors) to concrete pads, absorption into concrete surfaces; **Secondary:** Seepage/migration through concrete via cracks, breaches or sumps into the underlying soil, migration with precipitation into adjacent paved (asphalt) and unpaved surfaces, seepage into underlying soils; **Tracking:** Given the location of this area, tracking of surface contamination is a concern.	Concrete, asphalt, soil, sediment (in sumps, manholes and containment structures), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	There are two areas of PCB impacts (PCBs greater than 50 mg/kg) located to the west of the locations of three former transformers (previously located immediately adjacent to the building). There are also soil impacts identified (PCBs greater than 10 mg/kg) in between the two highest concentration locations and to the west of the southern-most location with high concentrations. The impacted area requires additional vertical delineation. There are several concrete structures included in this area, and a minimal number of samples have been collected. Due to the high potential for tracking of shallow contamination in this area, additional samples of asphalt, concrete and soils will be collected.
AOC-9: Transformer Areas (PCB Area 4.3)	**Southwest Transformer and Former Capacitor Area:** The area in which the transformers and former Capacitor Bank No. 4 are located is in the southwestern portion of the Site; specifically in the area that is considered the exterior courtyard portion of English Station. Two transformers (identified as 7A and 37A) were previously located within a containment "tub" located along the southern exterior wall of the screen house. As of the date of a recent visit, these transformers had been removed from the tub (filled with squelching stone) and placed along the southwestern wall of the portion of the English Station building that creates the courtyard. In addition to the transformers, Capacitor Bank No. 4 was previously located within fenced enclosure (also filled with squelching stone) located in the courtyard.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Surface releases from oil filled electrical equipment (e.g. transformers and capacitors) to concrete pads and containment tubs, absorption into concrete surfaces; **Secondary:** Seepage/migration through concrete via cracks, breaches or sumps into the underlying soil, migration with precipitation into adjacent paved (asphalt) and unpaved surfaces, seepage into underlying soils. Tracking: Given the location of this area, tracking of surface contamination is a concern.	Concrete, asphalt, soil, sediment (in sumps, manholes and containment structures), groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	There are three areas of PCB impacts (PCBs greater than 50 mg/kg), two of which are located adjacent to former Transformers 7-A and 37-A and Capacitor Bank #4 (previously located immediately adjacent to the building). The third area is located in the far southwestern portion of AOC 9, in between concrete pads P-13A and P-13B. Note that the release mechanism associated with the third area mentioned is unknown, as there has not been anything identified historically that would indicate a source and the there was only positive detection of PCBs (just over 1 mg/kg) in the concrete of Pad 13A. There are also soil impacts identified (PCBs greater than 10 mg/kg) in the central portion of this sub-area of AOC 9 (located between the two primary hot-spot areas likely associated with the former transformers and capacitor). Further delineation of the impact to soil in between the concrete pads will be conducted. In addition, as the two additional hot-spot areas over 50 mg/kg in this area are within tubs/containment structures that are filled with squelching stone and it not known whether the structures have concrete bottoms, vertical delineation is proposed in these areas, but it is not known if it will be possible to ascertain until these areas are remediated. There are three concrete pads in this portion of AOC, only two of which (P-13A and P-13B) have been sampled. Only one of the concrete samples collected from these two pads exhibited a PCB concentration of greater than 1 mg/kg (but less than 10 mg/kg). The pad identified as P-14 was not sampled. Due to the high potential for tracking of shallow contamination in this area, additional samples of asphalt, concrete and soils will be collected.

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AOC-10: Former Interior Chemical Storage Areas Excluding English Station (Foam House)	The Foam House is a small, stand-alone structure located at the southern tip of the Site (to the west of the former AST location). There is little known (and further, nothing readily ascertained from available documentation) about its potential chemical storage history. GEI, in their 1998 Phase I assessment report, indicated that there were several pumps and pump stands observed in this building at the time of their site inspection.	VOCs, SVOCs, ETPH, PCBs, Metals	No	Unknown	**Primary:** Direct releases to the floor of the building; **Secondary:** Assuming that the floor of the building is comprised of concrete, a secondary mechanism would be potential seepage through crack, seams or other breaches in the floor to the underlying soils; **Tracking:** Tracking into or out of the building is not likely (Note that tracking will be generally evaluated in the areas outside of this building.)	Concrete, soil and groundwater	Spills to the surface may have infiltrated through the concrete floor of the building into the underlying soils. Secondary releases resulting from potential infiltration through the floor to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	There is little information about the use of this building. Given the general lack of sampling in this building, additional evaluation for potential COCs is proposed.
AOC-10: Former Interior Chemical Storage Areas Excluding English Station (PCB Area 4.2)	**Storage and Shop Building Interior.** This building is located along the western side of the Site between English Station and the bulkhead. According to a historic map of the Site and anecdotal information provided by UI personnel (as documented in the GEI 1998 Phase I), this one-story building was previously used, at least in part, for storage/a shop and as a contractor office.	PCBs, ETPH, VOCs, SVOCs, Metals	Yes	Yes (immediately adjacent to the building, but unknown beneath the building)	**Primary:** Direct releases to the floor of the building; **Secondary:** Absorption into the concrete, seepage through cracks, seams or other breaches in the floor to the underlying soil; **Tracking:** Tracking is likely both into and out of this building.	Concrete, sediment (contained in a sump located in the building), soil (likely), groundwater	Spills to the surface may have infiltrated through the concrete floor of the building into the underlying soils. Secondary releases resulting from potential infiltration through the floor to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	Concrete samples collected from the floor of the building exhibited PCB concentrations in excess of 1 mg/kg in the northern and north-western portion; in excess of 10 mg/kg in the eastern, central and northern portions of the building and in excess of 50 mg/kg in the eastern and north-central portion of the building. In addition, as referenced earlier in this table, there was sediment collected from a sump located in the northeastern portion of the building that exhibited PCBs at concentrations of greater than 1 mg/kg. Based on the presence of PCBs and the use of this building as a shop and for storage in which there may have been a variety of chemicals used or handled, there will be additional concrete and soil samples are proposed.
AOC-10: Former Interior Chemical Storage Areas Excluding English Station (PCB Area 4.4)	**Assembly Hall Interior:** This one-story masonry building is also located along the western side of the Site (between English Station and the bulkhead) and to the north of the Storage/Shop building. This building was reportedly used as an assembly hall for workers at the Plant.	PCBs	Yes	Unknown but unlikely based on the primary release mechanism)	**Primary:** Tracking into the building from outside areas (identified as such due to the fact that the documented historic use of this building was for contractor meetings).	Concrete	Given that tracking is considered the likely primary release mechanism in this area (as opposed to spills or leaks) and the interior of the building is not fully exposed to the elements, it is likely that any impacts would remain on the surface of the floor and would not be subject to migration.	There has been some sampling of the concrete floor within this building and PCBs have been identified at concentrations greater than 1 mg/kg in the southern portion. In order to fill the data gap in this sub-area (i.e., in order to confirm tracking as the source of the identified impacts to the concrete), additional sampling of the concrete will be conducted.
AOC-11: On-Site Fill Material	Ball Island is a land mass that was created within the Mill River. As documented in historic reports for the Site, the island was created from spoils generated from dredging operations in the late 1800s and well into the 1900s in the Mill River to maintain navigable waters. As the Mill River was the receiving water body for many discharges emanating from industrial operations over the years, the spoils that comprise the island are inherently impacted with petroleum hydrocarbons, PAHs and metals.	PAHs, ETPH, Metals	No	No	The COCs identified are inherent in the materials that comprise the island on which English Station and Station B are located. As such, although considered a site-wide AOC, the fill itself does not constitute a release to the environment.	N/A	N/A	The fill that comprises the site has been adequately characterized by others during previous investigatory efforts. As such, there are no data gaps identified.
AOC-12W: Former Coal Storage Area (PCB Area 3.2)	**Area Adjacent to PCB Bulkhead Remediation.** This portion of the Site is located to the south of the Station B. Coal storage began at the Site as early as the late 1880s and Station B operated as a coal-fired power plant from the 1890s until 1903. English Station burned coal from the early 1900s to the mid-1950s to early 1960s.	PCBs, ETPH and PAHs	Yes	Yes	**Primary:** Direct release to ground surface from coal storage, dust suppression (spraying of oils); **Secondary:** Seepage into the surrounding or underlying soils from the surface; **Tracking:** Due to the widespread surficial contamination of nearby areas and demolition activities that have taken place, tracking is a potential concern in this area.	Asphalt, soil and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	Previous investigation in this area has identified PCB hotspots (both greater than 10 mg/kg and greater than 50 mg/kg) that require additional delineation (particularly to the north and east of the former excavation area). Tracking may be an issue in this area and as such, additional sampling will be conducted.
AOC-12E (PCB Area 6.2)	**Mill River East Branch Area.**	PCBs, ETPH, PAHs	No	Yes	**Primary:** Potential direct release to ground surface from dust suppression (spraying of oils); **Secondary:** Seepage into the surrounding or underlying soils from the surface; **Tracking:** Tracking is a potential issue in this area as it is the main point of access to the Site.	Asphalt, soil and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	This area was investigated previously by others and there have been minimal impacts identified. Despite the previous findings, however, additional work is proposed in order to evaluate any impact that tracking may have had on the area.

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AOC-13: Former Wastewater Treatment System (PCB Area 5.1)	**Former Dumpster Area.**	VOCs, SVOCs, ETPH, PCBs, Metals	Yes	Yes	**Primary:** Leakage or spillage onto the concrete pad on which the dumpsters sat; direct discharge to the ground surface; **Secondary:** Infiltration through the asphalt or concrete or through cracks, seams or other breaches in the asphalt or concrete to the underlying soils; **Tracking:** Due to the widespread presence of surficial contamination in this area and the demolition activities that have taken place, tracking is a concern in this area.	Asphalt, concrete, soil, groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	Soil samples collected from a boring located in the west-central portion of this area exhibited PCB concentrations greater than 50 mg/kg and this hot-spot area has not been fully horizontally delineated and as such, requires additional work. There is also a soil boring located along the eastern-central portion of this area from which soil samples exhibited PCB concentrations greater than 10 mg/kg. Although this location technically requires additional delineation to the northeast, it abuts discharge D1 which will prevent further investigation via drilling. The concrete that comprises pads P01A and P01B exhibited PCB concentrations greater than 10 mg/kg across approximately half of its surface (not contiguously). There is a data gap identified herein as there were no samples collected beneath the concrete pad. As such, additional work is proposed to evaluate underlying soil conditions, as well as soils in the vicinity of the impacted pad that may have been subject to tracking.
AOC-13: Former Wastewater Treatment System (PCB Area 5.2)	**Former Wastewater Treatment System Area.** This area is located to the east of English Station and includes remnants of a former wastewater treatment system (primarily concrete pads). The operational history of this former treatment system is not well documented in historic reports associated with the site.	PCBs, ETPH, PAHs	Yes	Yes	**Primary:** Leakage or spillage onto the concrete pads on which former treatment system components were located or asphalt surfaces in the area; direct discharge to the ground surface; **Secondary:** Infiltration through the asphalt or concrete or through cracks, seams or other breaches in the asphalt or concrete to the underlying soils; **Tracking:** Due to the widespread presence of surficial contamination in this area and the demolition activities that have taken place, tracking is a concern in this area.	Asphalt, concrete, soil, sediment and groundwater	Releases directly or indirectly to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Any product that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	A wastewater piping trench is located within this area. It is constructed similarly to the fuel piping trench located in AOC 8 in that it is covered with the same sectional concrete panels. As such, there are likely sediments present in the piping trench. Samples of the concrete panels that overlie this trench are proposed, as is the collection of samples of sediment in the trench (if accessible). There is one area of PCB-impacted soils (greater than 10 mg/kg) within this portion of AOC 13 which requires additional delineation. There is also a boring that exhibited PCBs in soil at concentrations greater than 1 mg/kg and due to the lack of borings surrounding that location, additional borings are proposed in order to ensure the surrounding concentrations. Although there are no PCB hotspots greater than 50 mg/kg in this area based on previous data, the soil borings/samples proposed for this area will serve to evaluate potential tracking issues as well.
AOC-15: Oil Stained Area North of English Station / Release to Catch Basin 4	In 2011 and 2012, demolition and asbestos abatement work was being conducted within English Station. A primary route of egress from the building for the workers was through the Oil Storage Room where many drums and other containers of oil were reported to have been stored. Spillage and/or deliberate dumping and subsequent tracking through the area has resulted in a large oil stain on the pavement on the north side of the building that was documented in 2013/2014. Catch Basin 4 is located within the oil stain and due to the concern that this release was impacting the adjacent Mill River, the USCG executed response actions in 2014.	ETPH, PAHs, PCBs	Suspected	Yes	**Primary:** Documented direct spillage and tracking from the nearby interior Oil Storage Room where breached oil containers/drums and a partially-filled AST were located and migration into the nearby catch basin; **Secondary:** Infiltration directly through the asphalt or through cracks, seams or other breaches into the underlying soils and infiltration through the concrete that comprises the bottom of the catch basin and from joints along the piping that conveyed the storm water; **Tracking:** Based on the release mechanism associated with this area (direct spillage to the ground), tracking is a concern in this area.	Asphalt, concrete, soils, catch basin sediment, groundwater	Petroleum resulting from a release to the surface may have infiltrated through the asphalt into the underlying soils. Impacts that infiltrated into the subsurface would be subject to migration to the groundwater through the infiltration of rainwater and the fluctuation of the water table.	This area was minimally investigated upon its discovery in 2014. PCBs were not detected in the sediment sample collected from the bottom of Catch Basin 4. Additional investigation is needed in this area to fill data gaps and to evaluate tracking issues.
AOC-16: English Station Interior (PCB Area 7)	TRC personnel conducted a walk-through of the interior of English Station in September 2016. Observations made during this walk-through have indicated that the floors of the building are generally obstructed from view by a combination of construction and asbestos debris. As such, there is initial abatement that will need to occur prior to reentry into the building to identify the full extent of staining and therefore, the locations that will require investigation.	VOCs, SVOCs, ETPH, PCBs, Metals	Suspected	Suspected	**Primary:** Direct spillage or leakage to the floor of the building; **Secondary:** Absorption into the concrete and infiltration to the soils underlying the building; **Tracking:** Tracking into, throughout and out of the building is very likely an issue in this AOC.	Concrete, soil, sediment (in sumps), surface water (contained in sumps, trenches and pits), and groundwater	Spills to the surface may have infiltrated through the concrete floor of the building via drains, cracks or other breaches into the underlying soils. Secondary releases resulting from potential infiltration through the floor to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface may be subject to migration to the groundwater through the changes in the tide causing fluctuations in the groundwater table.	TRC personnel conducted a walk-through of the interior of English Station in September 2016. Observations made during this walk-through have indicated that the floors of the building are generally obstructed from view by a combination of construction and asbestos debris. As such, there is initial abatement that will need to occur prior to reentry into the building to identify the full extent of staining and therefore, the locations that will require investigation.

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AOC-17: Drainage Structures Associated with/beneath English Station	Although not specifically detailed as of the date of preparation of this CSM given the condition of the interior of English Station, it is evident from some limited markings on a historic drawing that there is a robust drainage system underlying the floor of the building.	VOCs, SVOCs, ETPH, PCBs, Metals	Suspected	Suspected	**Primary:** Direct spillage to floor drains, trench drains, sumps; **Secondary:** Infiltration through the bottoms of drainage structures into the underlying soils; **Tracking:** Tracking is a likely issue, as materials caught in the treads of mobile equipment may have been deposited through the grates that cover certain floor drainage features.	Concrete, soil, sediment (in sumps), surface water (contained in sumps, trenches and pits), and groundwater	Spills into the drainage structures may have infiltrated through the concrete floor of the building via drains, cracks or other breaches into the underlying soils and may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface would be subject to migration to the groundwater through fluctuations of the tide causing fluctuations in the groundwater table.	TRC personnel conducted a walk-through of the interior of English Station in September 2016. Observations made during this walk-through have indicated that the floors of the building are generally obstructed from view by a combination of construction and asbestos debris. As such, there is initial abatement that will need to occur prior to reentry into the building to identify drainage features and therefore, the locations that will require investigation.
AOC-18: Loading Docks and Overhead Doors	Although not specifically detailed as of the date of preparation of this CSM given the condition of the interior of English Station, it is evident that there are interior portions of former loading docks that will need to be assessed.	VOCs, SVOCs, ETPH, PCBs, Metals	Suspected	Suspected	**Primary:** Direct spillage or leakage to the floor of the building or to the surface immediately outside of the building; **Secondary:** Absorption into concrete and/or asphalt and infiltration to the underlying soils; **Tracking:** Tracking into, throughout and out of the building is very likely an issue in this AOC.	Concrete, asphalt, soil, sediment and groundwater	Spills to the surface may have infiltrated through the concrete floor of the building or into asphalt or concrete aprons outside of the building into the underlying soils. Secondary releases resulting from potential infiltration through the concrete or asphalt to the subsurface may be entrapped in the soil pore spaces in the vadose zone. Impacts that may have infiltrated into the subsurface would be subject to migration to the groundwater through the changes in the tide causing fluctuations in the water table.	TRC personnel conducted a walk-through of the interior of English Station in September 2016. Observations made during this walk-through have indicated that the floors of the building are generally obstructed from view by a combination of construction and asbestos debris. As such, there is initial abatement that will need to occur prior to reentry into the building to identify interior conditions associated with loading docks and overhead doors where chemicals were handled. The exterior portions of the loading docks will also be further evaluated, although they have been subject to a great deal of sampling already through the evaluation of other AOCs across the Site.

Note that "Tracking" includes not only that which happens via anthropogenic means, but also may be the result of the flooding of the Site during storm events.

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
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510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
PARCEL A (STATION B)												
1	**Station B Building Interior**											
	PCB Area 1.1: Mezzanine and First Floor	PCBs, ETPH	No additional investigative sampling is proposed. Additional remediation will be required in this area, followed by verification sampling in accordance with 40 CFR 761 Subpart O (5-ft. sampling grid).	--				--	**Concerete verification samples as needed.**	--	--	--
	PCB Area 1.2: Former Annex III	PCBs, ETPH	None; Previously remediated.	--				--	--	--	--	--
	PCB Area 1.3: Basement	Metals, PCBs, ETPH, PAHs	None; Previously investigated.	--				--	--	--	--	--
2	**Station B Former UST Area**	VOCs, PAHs, ETPH, PCBs	4 soil sample locations to confirm that past elevated detections of PAHs in this area are related to fill materials and not a release.	**4**		4	4	--	--	--	--	**Figure 5-1**
3	**Former Septic Systems**	VOCs, SVOCs, ETPH, PCBs, Metals	One former septic system location has historically been identified on Parcel A. The former septic system on Parcel A was located to the south of Station B. This location was evaluated as part of past investigations and has been adequately characterized. No further investigation in this area is planned. Two additional locations have been identified on Parcel B where other septic systems or structures may have been located. These areas have been identified previously as "Septic East" and "Septic West". Investigation is proposed at those locations and is summarized below under the proposed work for Parcel B.	--				--	--	--	--	--
12	**Former Coal Yard (Includes AOC-12N and 12W)**											
12N	PCB Area 6.1: Former Station B Area	PCBs, ETPH, PAHs, Arsenic	4 soil sample locations to confirm past detections of TPH at previous sampling location TB-6. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those boring locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**4**	--	4	4	--	**4**	--	--	**Figure 5-2**
12W	PCB Area 2.1: Elevated Railroad Tracks and Foundations	PCBs, ETPH, PAHs, Arsenic	18 soil / porous media samples (depending on the material present at the time of the investigation) from the elevated rails to further evaluate the presence of PCBs and to test for other COCs not tested for previously.	**18**	18	--	--	--	--	--	--	**Figures 5-3 and 5-4**
	PCB Area 2.2: Former Coal Storage Areas	PCBs, ETPH, PAHs, Arsenic	87 soil sample locations from the areas in between Tracks B, C, and D of the elevated rail system to evaluate areas not yet fully characterized. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those boring locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected. Sample points will be located on a 20-foot sampling grid.	**87**	87	87	87	--	87	--	--	**Figure 5-3**
14	Former Cooling Water Discharge Tunnel	PCBs, ETPH and PAHs	In order to remediate the tunnel, it will have to be exposed and the sediment removed. Sediment will require characterization prior to disposal. Once exposed and cleared of sediment, the tunnel will be sampled and handled based on the results of that sampling. Based on an approximate tunnel length of 400 ft. and a 10 ft. sample spacing, 40 concrete samples are assumed.	--				**40**	**40**	--	--	--

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
PARCEL B (ENGLISH STATION)												
3	**Former Septic Systems (Septic East and Septic West)**	VOCs, SVOCs, ETPH, PCBs, Metals	3 soil sample locations to evaluate impacts to soil in the vicinity of a structure identified as Septic East and 1 sediment sample each will be collected from the Septic East, Sump 2 and Sump 4 structures in association with Septic East (located on the east side of English Station).	**3**	3	3	3	**3**	--	--	--	**Figures 5-10 and 5-17**
			3 soil sample locations to evaluate impacts to soil in the vicinity of a structure identified as Septic West, located along the west side of English Station. 2 sediment samples will be collected from Septic West, depending on the number of chambers in the structure. 2 concrete samples will be taken from the top of Septic West to evaluate tracking of PCBs in this area.	**3**	3	3	3	**2**	**2**	--	--	**Figures 5-10 and 5-17**
4	**Past Spills**	VOCs, SVOCs, ETPH, PCBs, Metals	Past spills at the Site have been evaluated through updated research conducted during development of this Plan. No specific investigation of past spills is proposed, however, known spills or releases (such as at Capacitor Bank #1) will be evaluated through the investigation of other AOCs.	--				--	--	--	--	--
5	**Bulkhead PCB Remediation Area**	PCBs, ETPH, PAHs	9 shallow soil samples from across the former Bulkhead PCB Remedition area to evaluate tracking; deeper soil samples collected from 3 locations to confirm that past remediation met goals.	**9**	9	--	3	--	--	--	--	**Figure 5-5**
6	**Capacitor Release / Outdoor Capacitor Banks 1-3**											
	PCB-3.1: Former Capacitor Area	PCBs, ETPH, PAHs	6 soil sample locations to delineate PCB hotspots (>10 mg/kg) horizontally. 7 soil sample locations to evaluate tracking and staging of building debris. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected. The concrete pedestal/foundation on which the former Capacitor Bank #1 sat, contains PCBs at concentrations >50 mg/kg.	**13**	13	13	13	--	**13**	--	--	**Figure 5-6**
			4 concrete samples collected from the former capacitor pads and adjacent cable wall to evaluate tracking and staging of building debris.	--				--	**4**	--	--	**Figure 5-6**
7	**Former Waste Oil AST / Oil Pump Room Area**											
	PCB Area 5.3: Exterior Area Adjacent to Oil Pump Room	PAHs, ETPH, PCBs, VOCs, Metals (due to the proximity to the former Waste Oil AST)	8 soil sample locations to delineate PCB hotspots (>10 mg/kg) and to provide better vertical delineation of known contamination areas, including those locations with elevated ETPH/TPH. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**8**	8	8	8	--	**8**	--	--	**Figure 5-7**

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
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New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
	PCB Area 5.4: Former Waste Oil AST Area	VOCs, PAHs, ETPH, PCBs, Metals	4 soil borings to delineate a PCB hotspot (>50 mg/kg) and provide better vertical delineation. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**4**	4	4	4	--	**4**	--	--	**Figure 5-7**
			2 concrete samples from pipe trench covers to evaluate tracking; 2 sediment samples from within the pipe trench if accessible; 2 concrete samples from the trench itself, if accessible. 2 concrete samples from structure P09.	--				**2**	**6**	--	--	**Figure 5-7**
7	PCB Area 5.5: Tower GH-4 Area	PCBs, ETPH, PAHs	3 soil borings to delineate a PCB hotspot (>10 mg/kg) and provide better vertical delineation. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected. 3 soil borings will be advanced around SB-093014-112 to evaluate/delineate potential petroleum-related contamination observed in that boring. 2 soil borings will be advanced around SB-093014-113 to evaluate similar impacts observed at that boring location.	**8**	8	8	8	--	**8**	--	--	**Figure 5-7**
	PCB Area 5.6: Former Storage Building Area	VOCs, SVOCs, ETPH, PCBs, Metals	4 soil borings to provide additional horizontal and vertical delineation of PCB and ETPH contaminated soils. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**4**	4	4	4	--	**2**	--	--	**Figure 5-7**
			2 concrete samples from pipe trench covers to evaluate tracking; 2 sediment samples from within the pipe trench if accessible; 2 concrete samples from the trench itself, if accessible.	--				**2**	**4**	--	--	**Figure 5-7**
			2 concrete samples from structure P07 due to a lack of previous data; 7 concrete samples from structure P08 to evaluate tracking.	--				--	**9**	--	--	**Figure 5-7**
			1 sediment sample collected from the manhole in structure P07.	--				**1**	--	--	--	**Figure 5-7**
8	**Former Fuel Oil ASTs**											
	PCB Area 5.7: Fuel Oil Tank Area	VOCs, PAHs, ETPH, PCBs	9 soil samples beneath the former AST containment dikes;	**9**	9	--	--	--	--	--	--	**Figure 5-8**
			6 soil sample locations to delineate PCB hotspots (>50 mg/kg). To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**6**	6	6	6	--	**6**	--	--	**Figure 5-8**
			4 concrete samples of the pipe trench covers; 4 concrete samples of the trench bottom; 2 concrete samples from structure P10	--				--	**10**	--	--	**Figure 5-8**
			4 sediment samples from within the pipe trench; 2 sediment samples from sumps associated with the secondary containment dikes; 1 sediment sample from within P10; 1 sediment sample from within Catch Basin CB5.	--				**8**	--	--	--	**Figure 5-8**

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
9	**Transformer Areas**											
	PCB Area 3.3: Northwest Transformer Area	PCBs, ETPH, PAHs	5 soil sample locations to delineate PCB hotspots (>10 mg/kg). To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**5**	5	5	5	--	**5**	--	--	**Figure 5-9**
			1 sediment sample from within Enclosure EN03; 1 sediment sample from the manhole at structure P19; 1 sediment sample from the manhole at structure P20; 1 sediment sample from the manhole at structure P21; 1 sediment sample from the sump at Enclosure EN02.	--				**5**	--	--	--	**Figure 5-9**
			6 concrete samples collected from structure P19; 2 concrete samples collected from structure P20; 2 concrete samples collected from structure P21; 7 porous media samples collected from structure P22.	--				--	**17**	--	--	**Figure 5-9**
	PCB Area 4.1: Former Transformer Area on the West Side of English Station	PCBs, ETPH, PAHs	15 soil sample locations to delineate PCB hotspots (>10 and 50 mg/kg). To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**15**	15	15	15	--	**15**	--	--	**Figure 5-10**
			5 concrete samples collected from structure P16; 3 concrete samples collected from structure P18.					--	**8**	--	--	**Figure 5-10**
			1 sediment sample collected from the manhole at structure P16.	--				**1**	--	--	--	**Figure 5-10**
	PCB Area 4.3: Southwest Transformer and Former Capcitor Area	PCBs, ETPH, PAHs	28 soil sample locations to vertically and horizontally delineate PCB hotspots (>10 and 50 mg/kg). To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**28**	28	28	28	--	**28**	--	--	**Figure 5-11**
			4 concrete samples to characterize structure P14; 5 concrete samples to evaluate tracking across structure P15; 2 concrete samples to evaluate possible tracking of contaminated soil across pads P13A and P13B.	--				--	**11**	--	--	**Figure 5-11**
			1 sediment sample collected from the manhole in structure P14.	--				**1**	--	--	--	**Figure 5-11**
10	**Former Interior Chemical Storage Areas (Excluding English Station Interior)**											
	Foam House	VOCs, SVOCs, ETPH, PCBs, Metals	2 concrete samples of the Foam House floor.					--	**2**	--	--	**Figure 5-8**
			2 soil sample locations beneath the floor in the same locations as the concrete samples above.	**2**	2	2	2	--	--	--	--	**Figure 5-8**
			4 wipe samples of non-porous surfaces if staining or other indication of contamination is present.					--	--	**4**	--	**Figure 5-8**

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
10	PCB Area 4.2: Storage and Shop Building	PCBs, ETPH, VOCs, SVOCs, Metals	28 concrete samples of the floor of the Storage building.					--	**28**	--	--	**Figure 5-12**
			11 soil samples collected from beneath the floor of the Storage Building, below select concrete sample locations.	**11**	11	11	11	--	--	--	--	**Figure 5-12**
			8 wipe samples of non-porous surfaces if staining or other indication of contamination is present.	--				--	--	**8**	--	**Figure 5-12**
			1 sediment sample collected from the sump in the Storage Building.	--				**1**	--	--	--	**Figure 5-12**
	PCB Area 4.4: Assembly Hall Building	PCBs	14 concrete samples collected from the floor of the Assembly Hall.					--	**14**	--	--	**Figure 5-13**
			4 soil sample locations beneath floor sample locations.	**4**	4	4	4	--	--	--	--	**Figure 5-13**
11	**On-Site Fill Material (Evaluation of tracking across pads/structures not captured by other AOCs/PCB Areas)**	PAHs, ETPH, Metals	No soil sampling; the fill that comprises the Site has been adequately characterized based on previous work.	--				--	--	--	--	--
			3 concrete samples to evaluate tracking across structure P12.	--				--	**3**	--	--	**Figure 5-11**
			2 sediment samples collected from the 2 manholes present in structure P12 (unless the manholes access the same chamber).	--				**2**	--	--	--	**Figure 5-11**
12	**Former Coal Yard (Includes AOC-12N, 12E, and 12W)**											
12W	PCB Area 2.2: Former Coal Storage Areas	PCBs, ETPH, PAHs, Arsenic	14 soil sample locations in between Tracks A and B to further characterize the area with respect to PCBs and to delineate ETPH/TPH impacted soil in the vicinity of previous sample location TB-R.	**14**	14	14	14	--	--	--	--	**Figure 5-4**
	PCB Area 3.2: Area Adjacent to Bulkhead PCB Remediation	PCBs, ETPH, PAHs	11 soil sample locations to further delineate PCB hotspots (>10 mg/kg and >50 mg/kg); provide further evaluation on the northern side of the former excavation area. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**11**	11	11	11	--	**11**	--	--	**Figure 5-14**
12E	PCB Area 6.2: Mill River East Branch Area	PCBs, ETPH, PAHs	60 soil sample locations laid out on a 10-foot sampling grid to further evaluate the main access point into the southwestern portion of the Site, and to further evaluate a PCB hotspot (>50 mg/kg) and SEH area formerly indentified in front of English Station. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**60**	60	60	60	--	**60**	--	--	**Figure 5-15**
			4 soil sample locations to further delineate high concentrations of ETPH/TPH at previous sample location TB-X.	**4**	4	--	4	--	**4**	--	--	**Figure 5-16**

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
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New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
13	**Former Wastewater Treatment System**											
	PCB Area 5.1: Dumpster Area	VOCs, SVOCs, ETPH, PCBs, Metals	3 soil sample locations beneath the former dumpster pads; 5 soil sample locations to delineate PCB contamination >50 mg/kg to the immediate west of the dumpster pads; 6 soil sample locations to delineate ETPH impacts at previous sample locations.	**14**	14	14	14	--	--	--	--	**Figure 5-17**
			7 porous media (or surface soil) and shallow soil samples collected from the area north of the former dumpster pads and 5TB-010 to evaluate tracking	**7**	7	--	--	--	**7**	--	--	**Figure 5-17**
	PCB Area 5.2: Former Wastewater Treatment System Area	PCBs, ETPH and PAHs	4 soil sample locations to delineate/evaluate PCB contamination in the vicinity of previous sample locations where vertical or horizontal delineation isn't complete; 3 soil sample locations along the eastern side of PCB Area 5.2, where little investigation has been done to date. 4 soil sample locations to delineate ETPH impacts to soil at previous sample location SB-111814-127. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**11**	11	11	11	--	**11**	--	--	**Figure 5-17**
			5 concrete samples of the pipe trench covers that run through this area; 5 samples of the trench bottom (if accessible).	--				--	**10**	--	--	**Figure 5-17**
			5 sediment samples from within the pipe trench in this area	--				**5**	--	--	--	**Figure 5-17**

TABLE 5-1A
PROPOSED INVESTIGATION SUMMARY AND RATIONALE
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	PROPOSED INVESTIGATION / RATIONALE	SAMPLE LOCATION, TYPE(S) AND NUMBER								FIGURES SHOWING PROPOSED SAMPLE LOCATIONS
				Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media / Surface Soil[1]	Hexane Wipe	Other	
					Shallow	Intermediate	Deep					
15	**Oil Stained Area North of English Station / Release to Catch Basin 4**	PCBs, ETPH and PAHs	28 soil sample locations to investigate contamination related to the release of oil to the ground surface in this area. To evaluate tracking in this area, porous media (asphalt or concrete) samples will be collected at those sample locations where it is encountered at the ground surface. If no porous media is present, a surface soil sample will be collected.	**28**	28	28	28	--	**28**	--	--	**Figure 5-18**
			The catch basin discharge piping location will be determined through utility location and leaks from the discharge piping to the surrounding soils will be evaluated with a series of soil samples collected from either side of the line. Currently, the discharge piping, direction and location are not known with certainty, but may have previously discharged directly to the Mill River, along the east side of the Site. For the purposes of this table, it is assumed that the piping run is 160 ft. long. 1 sediment sample from the catch basin is also planned.	**8**	8	8	8	**1**	**8**	--	--	--
16	**English Station Interior**											
	PCB Area 7.0: English Station Interior	VOCs, SVOCs, ETPH, PCBs, Metals	Investigation of the interior of English Station will be deferred until such time as proper abatement of asbestos and the removal of debris is completed sufficient to allow such investigation.	--				--	--	--	--	--
17	**Drainage Structures Associated With / Beneath English Station**	VOCs, SVOCs, ETPH, PCBs, Metals	Investigation of the interior of English Station will be deferred until such time as proper abatement of asbestos and the removal of debris is completed sufficient to allow such investigation.	--				--	--	--	--	--
18	**Loading Docks and Overhead Doors**	VOCs, SVOCs, ETPH, PCBs, Metals	Spills, releases and tracking associated with the movement of materials through access/egress points along the exterior areas of English Station have been investigated and will continue to be evaluated during the investigation of other adjacent AOCs.	--				--	--	--	--	--
Site-Wide Groundwater		VOCs, SVOCs, ETPH, PCBs, Metals	As part of the initial investigation efforts at the Site, a well condition survey will be conducted in order to evaluate the viability of the wells that remain. A decision regarding the number of wells needed to bolster any remaining viable wells will be made following the condition survey. Final well placement may also be subject to the findings of the soil investigation. All proposed well locations will be subject to the approval of the CTDEEP.									--

Notes:

1 Where the collection of porous media samples is specified, porous media will be sampled in accordance with the USEPA Region 1 Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs), dated May 2011. If no porous media is present where specified, then a surficial soil sample will be collected from the ground surface to a maximum depth of no greater than 3 inches.

TABLE 5-1B
PROPOSED INVESTIGATION AND ESTIMATED NUMBER OF SAMPLE ANALYSES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	SAMPLE LOCATION, TYPE(S) AND NUMBER								ESTIMATED NUMBER OF SAMPLE ANALYSES												
			Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media	Hexane Wipe	Other	PCBs	SPLP PCBs	PAHs	SPLP PAHs	ETPH	SPLP ETPH	RSR 15 Metals	SPLP RSR 15 Metals	Arsenic	VOCs	SPLP VOCs	SVOCs	SPLP SVOCs
				Shallow	Intermediate	Deep																	
PARCEL A (STATION B)																							
1	**Station B Building Interior**										--	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 1.1: Mezzanine and First Floor	PCBs, ETPH	--				--	**Concerete verification samples as needed.**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 1.2: Former Annex III	PCBs, ETPH	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 1.3: Basement	Metals, PCBs, ETPH, PAHs	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	**Station B Former UST Area**	VOCs, PAHs, ETPH, PCBs	**4**	--	4	4	--	--	--	--	**8**	**4**	**8**	**2**	**8**	**4**	--	--	--	**8**	**2**	--	--
3	**Former Septic Systems**	VOCs, SVOCs, ETPH, PCBs, Metals	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12	**Former Coal Yard (Includes AOC-12N and 12W)**																						
12N	PCB Area 6.1: Former Station B Area	PCBs, ETPH, PAHs, Arsenic	**4**	--	4	4	--	**4**	--	--	**12**	**4**	**1**	--	**8**	--	--	--	**1**	--	--	--	--
12W	PCB Area 2.1: Elevated Railroad Tracks and Foundations	PCBs, ETPH, PAHs, Arsenic	**18**	18	--	--	--	--	--	--	**18**	--	**5**	--	**5**	--	--	--	**5**	--	--	--	--
	PCB Area 2.2: Former Coal Storage Areas	PCBs, ETPH, PAHs, Arsenic	**87**	87	87	87	--	**87**	--	--	**348**	**87**	**23**	--	**23**	**11**	--	--	**23**	--	--	--	--
14	Former Cooling Water Discharge Tunnel	PCBs, ETPH and PAHs	--				**40**	**40**	--	--	**80**	--	**10**	--	**10**	--	--	--	--	--	--	--	--

TABLE 5-1B
PROPOSED INVESTIGATION AND ESTIMATED NUMBER OF SAMPLE ANALYSES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	SAMPLE LOCATION, TYPE(S) AND NUMBER								ESTIMATED NUMBER OF SAMPLE ANALYSES												
			Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media	Hexane Wipe	Other	PCBs	SPLP PCBs	PAHs	SPLP PAHs	ETPH	SPLP ETPH	RSR 15 Metals	SPLP RSR 15 Metals	Arsenic	VOCs	SPLP VOCs	SVOCs	SPLP SVOCs
				Shallow	Intermediate	Deep																	
PARCEL B (ENGLISH STATION)																							
3	**Former Septic Systems (Septic East and Septic West)**	VOCs, SVOCs, ETPH, PCBs, Metals	**3**	3	3	3	**3**	--	--	--	**12**	**4**	--	--	**9**	--	**9**	--	--	**9**	**5**	**9**	**5**
			3	3	3	3	**2**	**2**	--	--	**13**	**5**			**8**		**8**			**8**	**4**	**8**	**4**
4	**Past Spills**	VOCs, SVOCs, ETPH, PCBs, Metals	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	**Bulkhead PCB Remediation Area**	PCBs, ETPH, PAHs	**9**	9	--	3	--	--	--	--	**12**	--	**3**	--	**3**	--	--	--	--	--	--	--	--
6	**Capacitor Release / Outdoor Capacitor Banks 1-3**																						
	PCB-3.1: Former Capacitor Area	PCBs, ETPH, PAHs	**13**	13	13	13	--	**13**	--	--	**52**	**15**	**2**	--	**13**	**13**	--	--	--	--	--	--	--
			--				--	**4**	--	--	**4**	--	--	--	--	--	--	--	--	--	--	--	--
7	**Former Waste Oil AST / Oil Pump Room Area**																						
	PCB Area 5.3: Exterior Area Adjacent to Oil Pump Room	PAHs, ETPH, PCBs, VOCs, Metals (due to the proximity to the former Waste Oil AST)	**8**	8	8	8	--	**8**	--	--	**32**	**8**	**2**	--	**8**	**8**	**2**	--	--	**2**	--	--	--
	PCB Area 5.4: Former Waste Oil AST Area	VOCs, PAHs, ETPH, PCBs, Metals	**4**	4	4	4	--	**4**	--	--	**16**	**4**	**1**	--	**4**	**4**	**1**	--	--	**1**	--	--	--
			--				**2**	**6**	--	--	**8**	--	**2**	--	**2**	--	**2**	--	--	**2**	--	--	--
	PCB Area 5.5: Tower GH-4 Area	PCBs, ETPH, PAHs	**8**	8	8	8	--	**8**	--	--	**32**	**8**	**1**	--	**18**	**9**	--	--	--	--	--	--	--
	PCB Area 5.6: Former Storage Building Area	VOCs, SVOCs, ETPH, PCBs, Metals	**4**	4	4	4	--	**2**	--	--	**14**	**4**	--	--	**8**	**4**	**1**	--	--	**1**	--	**1**	--
			--				**2**	**4**	--	--	**6**	--	--	--	**1**	--	--	**1**	--	**1**	--	**1**	--
			--				--	**9**	--	--	**9**	--	--	--	--	--	--	--	--	--	--	--	--
			--				**1**	--	--	--	**1**	--	--	--	**1**	--	--	**1**	--	**1**	--	**1**	--

TABLE 5-1B
PROPOSED INVESTIGATION AND ESTIMATED NUMBER OF SAMPLE ANALYSES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	SAMPLE LOCATION, TYPE(S) AND NUMBER								ESTIMATED NUMBER OF SAMPLE ANALYSES												
			Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media	Hexane Wipe	Other	PCBs	SPLP PCBs	PAHs	SPLP PAHs	ETPH	SPLP ETPH	RSR 15 Metals	SPLP RSR 15 Metals	Arsenic	VOCs	SPLP VOCs	SVOCs	SPLP SVOCs
				Shallow	Intermediate	Deep																	
8	**Former Fuel Oil ASTs**																						
	PCB Area 5.7: Fuel Oil Tank Area	VOCs, PAHs, ETPH, PCBs	**9**	9	--	--	--	--	--	--	**9**	--	**9**	**9**	**9**	**9**	--	--	--	**9**	--	--	--
			6	6	6	6	--	**6**	--	--	**24**	**6**	**6**	**4**	**6**	**4**	--	--	--	**2**	--	--	--
			--				--	**10**	--	--	**10**	--	--	--	--	--	--	--	--	--	--	--	--
			--				**8**	--	--	--	**8**	--	--	--	**8**	--	--	**8**	--	**8**	--	**8**	--
9	**Transformer Areas**																						
	PCB Area 3.3: Northwest Transformer Area	PCBs, ETPH, PAHs	**5**	5	5	5	--	**5**	--	--	**20**	--	**4**	**2**	**4**	**2**	--	--	--	--	--	--	--
			--				**5**	--	--	--	**5**	--	--	--	**5**	--	**5**	--	--	**5**	--	**5**	--
			--				--	**17**	--	--	**17**	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 4.1: Former Transformer Area on the West Side of English Station	PCBs, ETPH, PAHs	**15**	15	15	15	--	**15**	--	--	**60**	**15**	**8**	**4**	**8**	**4**	--	--	--	--	--	--	--
			--				--	**8**	--	--	**10**	--	--	--	--	--	--	--	--	--	--	--	--
			--				**1**	--	--	--	**2**	--	--	--	**2**	--	**2**	--	--	**2**	--	**2**	--
	PCB Area 4.3: Southwest Transformer and Former Capcitor Area	PCBs, ETPH, PAHs	**28**	28	28	28	--	**28**	--	--	**112**	--	**8**	**8**	**8**	**8**	--	--	--	--	--	--	--
			--				--	**11**	--	--	**11**	--	--	--	--	--	--	--	--	--	--	--	--
			--				**1**	--	--	--	**1**				**1**		**1**			**1**		**1**	

TABLE 5-1B
PROPOSED INVESTIGATION AND ESTIMATED NUMBER OF SAMPLE ANALYSES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	SAMPLE LOCATION, TYPE(S) AND NUMBER								ESTIMATED NUMBER OF SAMPLE ANALYSES												
			Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media	Hexane Wipe	Other	PCBs	SPLP PCBs	PAHs	SPLP PAHs	ETPH	SPLP ETPH	RSR 15 Metals	SPLP RSR 15 Metals	Arsenic	VOCs	SPLP VOCs	SVOCs	SPLP SVOCs
				Shallow	Intermediate	Deep																	
10	**Former Interior Chemical Storage Areas (Excluding English Station Interior)**																						
	Foam House	VOCs, SVOCs, ETPH, PCBs, Metals					--	**2**	--	--	**2**	--	--	--	--	--	--	--	--	--	--	--	--
			2	2	2	2	--	--	--	--	**6**	--	--	--	**2**	--	--	**2**	--	**2**	--	**2**	--
							--	--	**4**	--	**4**	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 4.2: Storage and Shop Building	PCBs, ETPH, VOCs, SVOCs, Metals					--	**28**	--	--	**28**	--	--	--	--	--	--	--	--	--	--	--	--
			11	11	11	11	--	--	--	--	**33**	**11**	--	--	**3**	--	--	**3**	--	**3**	--	**3**	--
							1	--	**8**	--	**9**	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 4.4: Assembly Hall Building	PCBs					--	**14**	--	--	**14**	--	--	--	--	--	--	--	--	--	--	--	--
			4	4	4	4	--	--	--	--	**12**	**4**	--	--	--	--	--	--	--	--	--	--	--
11	**On-Site Fill Material (Evaluation of tracking across pads/structures not captured by other AOCs/PCB Areas)**	PAHs, ETPH, Metals	--				**2**	**3**	--	--	**5**	--	--	--	**2**	--	**2**	--	--	**2**	--	**2**	--
12	**Former Coal Yard (Includes AOC-12N, 12E, and 12W)**																						
12W	PCB Area 2.2: Former Coal Storage Areas	PCBs, ETPH, PAHs, Arsenic	**14**	14	14	14	--	--	--	--	**42**	**14**	**4**	--	**14**	**14**	--	--	**4**	--	--	--	--
	PCB Area 3.2: Area Adjacent to Bulkhead PCB Remediation	PCBs, ETPH, PAHs	**11**	11	11	11	--	**11**	--	--	**44**	**11**	**3**	**3**	**3**	**3**	--	--	--	--	--	--	--
12E	PCB Area 6.2: Mill River East Branch Area	PCBs, ETPH, PAHs	**60**	60	60	60	--	**60**	--	--	**240**	**60**	**15**	**15**	**30**	**15**	--	--	--	--	--	--	--
			4	4	--	4	--	**4**	--	--	**12**	**4**	**8**	**8**	**8**	**8**	--	--	--	--	--	--	--

TABLE 5-1B
PROPOSED INVESTIGATION AND ESTIMATED NUMBER OF SAMPLE ANALYSES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC LOCATION / DESCRIPTION	COCs	SAMPLE LOCATION, TYPE(S) AND NUMBER								ESTIMATED NUMBER OF SAMPLE ANALYSES												
			Soil Sample Locations	Proposed Soil Samples and Depths			Sediment Samples	Porous Media	Hexane Wipe	Other	PCBs	SPLP PCBs	PAHs	SPLP PAHs	ETPH	SPLP ETPH	RSR 15 Metals	SPLP RSR 15 Metals	Arsenic	VOCs	SPLP VOCs	SVOCs	SPLP SVOCs
				Shallow	Intermediate	Deep																	
13	**Former Wastewater Treatment System**																						
	PCB Area 5.1: Dumpster Area	VOCs, SVOCs, ETPH, PCBs, Metals	**14**	14	14	14	--	--	--	--	**42**	**14**	--	--	**4**	--	**4**	--	--	**4**	--	**4**	--
			7	7	--	--	--	**7**	--	--	**14**	--	--	--	--	--	--	--	--	--	--	--	--
	PCB Area 5.2: Former Wastewater Treatment System Area	PCBs, ETPH and PAHs	**11**	11	11	11	--	**11**	--	--	**44**	**11**	**3**	--	**3**	--	**3**	--	--	--	--	--	--
			--				--	**10**	--	--	**10**	--	--	--	--	--	--	--	--	--	--	--	--
			--				**5**	--	--	--	**5**	--	--	--	**5**	--	**5**	--	--	**5**	--	**5**	--
15	**Oil Stained Area North of English Station / Release to Catch Basin 4**	PCBs, ETPH and PAHs	**28**	28	28	28	--	**28**	--	--	**112**	**28**	**7**	--	**28**	--	--	--	--	--	--	--	--
			8	8	8	8	**1**	**8**	--	--	**33**	**8**	**1**	--	**8**	--	**1**	--	--	**1**	--	**1**	--
16	**English Station Interior**																						
	PCB Area 7.0: English Station Interior	VOCs, SVOCs, ETPH, PCBs, Metals	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	**Drainage Structures Associated With / Beneath English Station**	VOCs, SVOCs, ETPH, PCBs, Metals	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	**Loading Docks and Overhead Doors**	VOCs, SVOCs, ETPH, PCBs, Metals	--				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Site-Wide Groundwater	VOCs, SVOCs, ETPH, PCBs, Metals	The number of groundwater samples collected will depend on the final well network. See Table 5-1A for further discussion on Site-Wide groundwater.								--	--	--	--	--	--	--	--	--	--	--	--	--
	Totals		**402**	**394**	**355**	**362**	**74**	**477**	**12**	**0**	**1677**	**329**	**134**	**55**	**290**	**120**	**46**	**15**	**33**	**77**	**11**	**53**	**9**
	Total Proposed Sample Locations		**607**																				
	Total Proposed Samples		**1674**																				

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
PARCEL A								
2	**Station B Former UST Area**	Four soil borings will be advanced in areas where elevated PAHs were detected in soil around a former UST location. Soil samples will be collected from two separate depth intervals (intermediate and deep).	~8'	14'	No	--	7'-8'	13'-14'
12N	**PCB Area 6.1: Former Station B Area**	Four soil borings will be advanced around an area where elevated concentrations of TPH were detected in soil. Soil samples will be collected from two separate depth intervals (intermediate and deep) below porous media.	7'	7'	Yes	--	6'-7'	10'-11'
12W	**PCB Area 2.1: Elevated Railroad Tracks and Foundations**	Based on historical environmental reports, Tracks A, B, C, and D are covered by soil. All proposed samples will be surface soil samples unless concrete or asphalt is present. If concrete or asphalt is present at the surface of a planned sample location, the sample will be a porous media sample.	0.3'	1.5'	Yes, if present	0-0.25'	--	--
12W	**PCB Area 2.2: Former Coal Storage Areas**	Eighty seven soil borings will be advanced across this area of the Site to provide additional soil characterization. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media.	0-0.3'	4.3'-6.3'	Yes	0.5'-1.5'	3'-4'	7'-8'
PARCEL B								
3	**Former Septic Systems**	Little to no evaluation of soils surrounding the "Septic East" and "Septic West" structures has been completed to date. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) in the borings planned around these structures.	NA	NA	Yes	3'-4'	7'-8'	11'-12'

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
5	**Bulkhead PCB Remediation Area**	Nine soil borings will be advanced across the former bulkhead remediation area. Shallow soil samples will be collected from all nine soil borings; deep soil samples will be collected from three of the nine borings.	8.5'	~12.5'	No	0-0.25'	--	12'-13'
6	**PCB Area 3.1: Former Capacitor Area**	Thirteen soil borings will be advanced across this area. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media in each of the thirteen borings.	0-0.3'	2.3'-4.3'	Yes	0.5'-1.5'	2'-3'	5'-6'
7	**PCB Area 5.3: Exterior Area Adjacent to Oil Pump Room**	Eight soil borings will be advanced in this area. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the eight borings.	0.3'-1.3'	~12'	Yes	0.5'-1.5'	5.5'-6.5'	12'-13'
7	**PCB Area 5.4: Former Waste Oil AST Area**	Four soil borings will be advanced around a previous soil boring location where elevated concentrations of PCBs were detected in soil. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the four borings.	0.3'-1.3'	5.3'	Yes	0.3'-1.3'	3'-4'	5'-6'
7	**PCB Area 5.5: Tower GH-4 Area (PCB Delineation)**	Three soil borings will be advanced around a PCB hotspot to delineate impacts horizontally and vertically. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the three borings.	2'-2.3'	8'-8.3'	Yes	2'-3'	4'-5'	9'-10'
7	**PCB Area 5.5: Tower GH-4 Area (Petroleum Delineation)**	Five soil borings will be advanced around previous boring locations where minor petroleum-related impacts were observed in soil. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the five borings.	Odors and staining observed from 8.5'-15'	15'	Yes	8'-10'	13'-15	15'-17'
7	**PCB Area 5.6: Former Storage Building Area**	Four soil borings will be advanced around past sampling locations where PCB and petroleum-related impacts were detected in shallow soils. Two of the proposed soil borings will be drilled through concrete pad P08. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the four borings.	0.5'	1.8'	Yes	0.5'-1.5'	2'-3'	7'-8'

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
8	**PCB Area 5.7: Fuel Oil Tank Area (Petroleum Delineation)**	Nine soil borings will be advanced beneath the former containment dikes for the former fuel oil ASTs. Shallow soil samples will be collected from beneath the concrete containment structures in this area.	NA	NA	No	Directly below containment structure (~1'-2')	--	--
8	**PCB Area 5.7: Fuel Oil Tank Area (PCB Delineation)**	Six soil borings will be advanced in the vicinity of previous soil borings that exhibited elevated PCB concentrations. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the six borings.	0-0.25'	1.7'-2'	Yes	0.5'-1.5'	2'-3'	5'-6'
9	**PCB Area 3.3: Northwest Transformer Area**	Five soil borings will be advanced around previous boring locations where elevated concentrations of PCBs were detected. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the five borings.	5'-7'	20'-25' (1 isolated detection)	Yes	0.5'-1.5'	6'-7'	11'-12'
9	**PCB Area 4.1: Former Transformer Area on the West Side of English Station**	Fifteen soil borings will be advanced across this area, in close proximity to previous soil boring locations where elevated concentrations of PCBs were detected in soil. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the fifteen borings.	0-0.3'	6'-8'	Yes	0.5'-1.5'	2'-3'	6'-7'
9	**PCB Area 4.3: Southwest Transformer and Former Capcitor Area**	Twenty eight soil borings will be advanced across this area to further delineate the horizontal and vertical extents of PCB contaminated soils identified during previous investigations. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the twenty eight borings.	0.3'-1.3'	6.3'-8.3' (1 isolated detection)	Yes	0.5'-1.5'	1.5'-2.5'	5.5'-6.5'
10	**Foam House**	Two soil borings will be advanced through the floor of the Foam House building to collect soil samples. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below the floor of the building at both boring locations.	0-0.25' (located south of the Foam House)	0.75'-1.5'	Yes, the concrete floor of the Foam House will be sampled	0.5'-1.5'	1.5'-2.5'	2.5'-3.5'

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
10	**PCB Area 4.2: Storage and Shop Building**	Eleven soil borings will be advanced through the floor of the former Storage and Shop Building to collect soil samples. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below the floor of the building, at each of the boring locations.	0-0.3' along the southern side of the building	6'-8' along the southern side of building	Yes, the concrete floor of the Storage and Shop Building will be sampled	0.5'-1.5'	1.5'-2.5'	8'-9'
10	**PCB Area 4.4: Assembly Hall Building**	Four soil borings will be advanced through the floor of the former Assembly Hall to collect soil samples. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below the floor of the building at each of the boring locations.	Soil beneath, and in the immediate vicinity of the building has not been characterized.		Yes, the concrete floor of the Assembly Hall Building will be sampled	0.5'-1.5'	1.5'-2.5'	2.5'-3.5'
12W	**PCB Area 2.2: Former Coal Storage Areas (PCB Delineation)**	Ten soil borings will be advanced in this area to provide additional soil data where previous investigation is limited. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) at each of the boring locations.	Soil in this area of the Site has not been well characterized.		No	0-0.25'	0.5'-1.5'	3'-4'
12W	**PCB Area 2.2: Former Coal Storage Areas (PCB and Petroleum Delineation)**	Four soil borings will be advanced in the vicinity of a previous boring location where elevated concentrations of TPH were detected in soil. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) at each of the boring locations.	5'-7'	10'-12'	No	5'-7'	10'-12'	12'-14'
12W	**PCB Area 3.2: Area Adjacent to Bulkhead PCB Remediation**	Eleven soil borings will be advanced in the vicinity of the former Bulkhead Remediation Area, and in an area where widespread PCB contamination of soil has been identified. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep), below porous media in each of the eleven borings.	2'-4'	4.3'-6.3'	Yes	1'-2'	3'-4'	7'-8'
12E	**PCB Area 6.2: Mill River East Branch Area (PCB Delineation)**	Sixty soil borings will be advanced across this area of the Site to better characterize soils in this area, and to further delineate known areas of soil contamination. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep), below porous media at each boring location.	~0-1'	~0-1'	Yes	0.5'-1.5'	1.5'-2.5'	5'-6'

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
12E	**PCB Area 6.2: Mill River East Branch Area (Petroleum Delineation)**	Four soil borings will be advanced in the vicinity of a previous boring location where elevated concentrations of TPH were detected in soil. Soil samples will be collected from two separate depth intervals (shallow and deep) at each of the boring locations.	0-2'	0-2'	Yes	1'-3'	--	5'-7'
13	**PCB Area 5.1: Dumpster Area (PCB Delineation)**	Eight soil borings will be advanced in this area to further delineate the vertical extents of PCB contamination. Three of the soil borings will be advanced through the concrete pad at the former dumpster location; five soil borings will be advanced throuth the asphalt to the west of the dumpster pad. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep), below porous media in all eight of the borings.	0.3'-2.3'	3.3'-5.3'	No	0.5'-1.5'	2'-3'	5'-6'
13	**PCB Area 5.1: Dumpster Area Cooling Water Discharge Structure (PCB Delineation)**	Seven shallow soil or porous media samples (depending upon which material is present) will be collected from the area immediately north of the dumpster pad.	NA	NA	Yes, if present	0-0.25'	--	--
13	**PCB Area 5.1: Dumpster Area (Petroleum Delineation)**	Six soil borings will be advanced in the vicinity of previous boring locations where elevated concentrations of TPH were detected in soil. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) at each of the boring locations.	8'	13'	No	5'-7'	7'-9'	15'-17'
13	**PCB Area 5.2: Former Wastewater Treatment System Area (PCB Delineation)**	Seven soil borings will be advanced in this area where previous investigations have identified but not delineated PCB contamination in soil and where data gaps exist. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the seven borings.	0.25'-1.0'	2.3'-4.0'	Yes	0.5'-1.5'	1.5'-2.5'	5'-6'

TABLE 5-1C
GENERALIZED APPROACH TO THE COLLECTION OF SOIL SAMPLES
English Station
510 Grand Avenue
New Haven, Connecticut

AOC ID	AOC / PCB Area Description	Generalized Sampling Approach	Depth of Highest Detected Contaminant Concentration	Maximum Depth Exhibiting Contaminants of Concern	Sample Surficial Materials (Porous Media / Surficial Soil)? (Y/N)[1]	Proposed Soil Sample Depths[2,3]		
						Shallow Sample Range	Intermediate Sample Range	Deep Sample Range
13	**PCB Area 5.2: Former Wastewater Treatment System Area (PCB and Petroleum Delineation)**	Four soil borings will be advanced in the vicinity of a previous boring location where PCBs and petroleum-related impacts were identified. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the four borings.	13'-15'	13'-15'	Yes	11'-12'	14'-15'	17'-18'
15	**Oil Stained Area North of English Station**	Twenty eight soil borings will be advanced in an area along the northern side of English Station where a large oil stain is present. No significant effort has been undertaken to date to characterize this release. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the twenty eight borings.	NA	NA	Yes	0.5'-1.5'	1.5'-2.5'	4'-5'
15	**Release to Catch Basin 4**	Eight soil borings will be advanced along the Catch Basin 4 discharge piping (once located) to evaluate impacts to the surrounding soil resulting from the release of the large oil spill (detailed above) along the northern side of English Station. No significant effort has been undertaken to date to characterize this release. Soil samples will be collected from three separate depth intervals (shallow, intermediate and deep) below porous media from each of the eight borings.	NA	NA	Yes	4'-5'	6'-7'	8'-9'

NOTES:

1 Where the collection of porous media samples is specified, porous media will be sampled in accordance with the USEPA Region 1 Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs), dated May 2011. If no porous media is present where specified, then a surficial soil sample will be collected from the ground surface to a maximum depth of no greater than 3 inches.

2 Soil sample ranges presented are approximate. Actual sample depths may be adjusted based on historic contaminant detections, field observations and/or measurements, or unanticipated conditions.

3 Soil sample ranges are generally presented as 1-foot sample intervals, however 6-inch intervals may be used to collect PCB samples.

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Soil	VOCs	Field Sample, Field Duplicate, MS/MSD, EB, and Trip Blank	SW-846 5035A/8260B	Methanol - preserved in the field and Cool to 4°C (high-level); and water – preserved in the field and Cool to 4°C (low-level). (Soil/preservative ratio: 1:1)	High-Level: 14 days to analysis Low-Level: 48 hours to freezing at <- 7°C; 14 days to analysis	2-40 mL Methanol preserved VOA vials (high-level); or 2-40 mL vials with lab reagent water and magnetic stir bar (low-level)
Soil	SVOCs/ PAHs	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3540C, 3545A, 3546/8270D	Cool to 4°C	14 days to extraction; 40 days from extraction to analysis	1-4 oz. amber glass jar with Teflon lined cap
Soil	ETPH	Field Sample, Field Duplicate, and MS/MSD	CTDEEP Modified Method Rev. 0	Cool to 4°C	14 days to extraction 40 days to analysis	1-4 oz glass jar w/Teflon lined cap
Soil	PCB Aroclors	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3540C/8082A	Cool to 4°C	14 days to extraction; 40 days from extraction to analysis	1-4oz amber glass jar with Teflon lined cap
Soil	Metals	Field Sample, Field Duplicate, EB, and MS/DUP	SW-846 3050B/ 6010C/6020A/ 7471A	Cool to 4°C	Mercury: 28 days to analysis Other Metals: 180 days to analysis	1-8 oz. polyethylene/glass bottle and cap

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Soil/ Sediment	pH	Field Sample, Field Duplicate, and Lab Duplicate	SW-846 9045D	Cool to 4°C	24 hours to analysis	1-4 oz. glass jar with Teflon-lined cap
Soil/ Sediment	ORP	Field Sample, Field Duplicate, and Lab Duplicate	ASTM Method D 1498-00, modified	Cool to 4°C	24 hours to analysis	1-4 oz. glass jar with Teflon-lined cap
Soil/ Sediment	Corrosivity	Field Sample, Field Duplicate, and Lab Duplicate	SW-846 9045D	Cool to 4°C	24 hours to analysis	1-4 oz. amber glass jar with Teflon lined cap
Soil/ Sediment	Ignitability	Field Sample, Field Duplicate, and Lab Duplicate	SW-846 1030	Cool to 4°C	None	1-4 oz. amber glass jar with Teflon lined cap
Soil/ Sediment	TCLP VOCs	Field Sample, Field Duplicate, and MS/MSD	SW-846 1311/5030B/ 8260B	Cool to 4°C No headspace	14 days to analysis	1-4 oz glass jar with Teflon lined cap

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Soil/ Sediment	TCLP SVOCs	Field Sample, Field Duplicate, and MS/MSD	SW-846 Method 1311/3510C/ 8270D	Cool to 4°C	14 days to TCLP extraction; 7 days from TCLP extraction to SVOC extraction; 40 days from SVOC extraction to analysis	1-8 oz glass jar with Teflon lined cap
Soil/ Sediment	TCLP Metals	Field Sample, Field Duplicate, and MS/DUP	SW-846 1311/3005A, 3015A/6010C/ 7470A	Cool to 4°C	Mercury: 28 days Other metals: 180 days to analysis	1-8 oz glass bottle and cap
Soil/ Sediment	Reactive cyanide	Field Sample, Field Duplicate, and MS/DUP	SW-846 Update III Chapter 7, Section 7.3.4	Cool to 4°C; no headspace	3 days to analysis	1-4 oz. amber glass jar with Teflon lined cap
Soil/ Sediment	Reactive sulfide	Field Sample, Field Duplicate, and MS/DUP	SW-846 Update III Chapter 7, Section 7.3.3	Cool to 4°C; no headspace	3 days to analysis	1-4 oz. amber glass jar with Teflon lined cap
Wipe	PCBs	Field Sample, Field Duplicate	SW-846 3540C/8082A	Cool to 4°C	14 days to extraction; 40 days from extraction to analysis	1-4oz amber glass jar with Teflon lined cap

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Sediment	VOCs	Field Sample, Field Duplicate, EB, MS/MSD, and Trip Blank	SW-846 5035A/ 8260B	Methanol - preserved in the field and Cool to 4°C (high-level); and water – preserved in the field and Cool to 4ºC (low-level). (Sediment/ preservative ratio: 1:1)	High-Level: 14 days to analysis Low-Level: 48 hours to freezing at <- 7ºC; 14 days to analysis	2-40 mL Methanol preserved VOA vials (high-level); or 2-40 mL vials with lab reagent water and magnetic stir bar (low-level)
Sediment	SVOCs/ PAHs	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3540C, 3545A, 3546/8270D	Cool to 4°C	14 days to extraction; 40 days from extraction to analysis	1-4 oz. amber glass jar with Teflon lined cap
Sediment	ETPH	Field Sample, Field Duplicate, and MS/MSD	CTDEEP Modified Method Rev. 0	Cool to 4°C	14 days to extraction 40 days to analysis	1-4 oz glass jar w/Teflon lined cap
Sediment	PCB Aroclors	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3540C/8082A	Cool to 4°C	14 days to extraction; 40 days from extraction to analysis	1-4oz amber glass jar with Teflon lined cap

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Sediment	Metals	Field Sample, Field Duplicate, EB, and MS/DUP	SW-846 3050B/ 6010C/6020A/ 7471A	Cool to 4°C	Mercury: 28 days to analysis Other Metals: 180 days to analysis	1-8 oz. polyethylene/glass bottle and cap
Groundwater	VOCs	Field Sample, Field Duplicate, EB, MS/MSD, and Trip Blank	SW-846 5030B/8260B	Cool to 4°C HCl to pH<2	14 days to analysis	2-40 mL VOA vials
Groundwater	SVOCs/ PAHs	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3510C/8270C	Cool to 4°C	7 days to extraction; 40 days from extraction to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Groundwater	ETPH	Field Sample, Field Duplicate, and MS/MSD	CTDEEP Modified Method Rev. 0	Cool to 4°C	7 days to extraction 40 days to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Groundwater	PCB Aroclors	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3510C/8082A	Cool to 4°C	7 days to extraction; 40 days from extraction to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Groundwater	Metals	Field Sample, Field Duplicate, EB, and MS/DUP	SW-846 3005A, 3015A/6010C/ 6020A/7470A	pH <2 with HNO_3; Cool to 4°C	Mercury: 28 days to analysis Other Metals: 180 days to analysis	1 1-liter polyethylene/glass container

TABLE 5-2
Analytical Method Requirements for Sample Preservation and Hold Times
English Station
510 Grand Avenue
New Haven, Connecticut

Field Sample Matrix	Parameter	Sample Type	Preparation/ Analytical Method References	Sample Preservation	Holding Time from Collection	Container
Surface Water	VOCs	Field Sample, Field Duplicate, EB, MS/MSD, and Trip Blank	SW-846 5030B/8260B	Cool to 4°C HCl to pH<2	14 days to analysis	2-40 mL VOA vials
Surface Water	SVOCs/ PAHs	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3510C/8270C	Cool to 4°C	7 days to extraction; 40 days from extraction to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Surface Water	ETPH	Field Sample, Field Duplicate, and MS/MSD	CTDEEP Modified Method Rev. 0	Cool to 4°C	7 days to extraction 40 days to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Surface Water	PCB Aroclors	Field Sample, Field Duplicate, EB, and MS/MSD	SW-846 3510C/8082A	Cool to 4°C	7 days to extraction; 40 days from extraction to analysis	2 1-liter amber glass bottles with Teflon-lined cap
Surface Water	Metals	Field Sample, Field Duplicate, EB, and MS/DUP	SW-846 3005A, 3015A/6010C/ 6020A/7470A	pH <2 with HNO_3; Cool to 4°C	Surface water	Metals

Note: Solid media (e.g., concrete, asphalt, etc.) sampling and analytical methods will be as described for soils, with results reported on a dry weight basis.

TABLE 6-1
ESTIMATED PCB BULK SAMPLE QUANTITIES-STATION B AND EXTERIOR LOCATIONS
English Station
510 Grand Avenue
New Haven, Connecticut

General Location	Estimated Quantity of Bulk Building Material Product Samples
Station B - Basement	36
Station B – 1st Floor	171
Station B – 2nd Floor	12
Station B – Roof	39
Station B – Exterior	57
Exterior – Satellite Buildings/Structures	87
Exterior – Debris/ Miscellaneous	36
SAMPLE TOTAL	438

APPENDIX A

COPY OF PARTIAL CONSENT ORDER COWSPCB 15-001

STATE OF CONNECTICUT	:	AOWSPCB 13-001
	:	
V.	:	
	:	
THE UNITED ILLUMINATING COMPANY		

PARTIAL CONSENT ORDER NUMBER COWSPCB 15-001[1]

Date Issued: _____

A. The Commissioner of Energy and Environmental Protection (the "Commissioner") finds:

1. Respondent The United Illuminating Company ("UI") is a regional electric distribution company, established in New Haven, Connecticut in 1899, currently engaged in the purchase, transmission, distribution and sale of electricity and related services to residential, commercial and industrial customers.

2. Respondent has a business address of 180 Marsh Hill Road, Orange, Connecticut.

3. From 1914 until December of 2000, Respondent owned an approximately 8.9 acre parcel of land located at 510 Grand Avenue in New Haven, Connecticut, as set forth in Sections A.5. through A.10. below, said site is presently described in two deeds recorded at page 14 of volume 7814, and page 195 volume 7817 of the City of New Haven land records (the "Site"). The Site, part of an island in the Mill River, is depicted on the map included as Exhibit A to this Consent Order. For purposes of Respondent's obligations under this Consent Order, any reference to the Site includes all soil, surface water, groundwater and sediment located within the perimeter of the Site as shown on Exhibit A, but shall not include offsite soil, groundwater and sediment in the Mill River, including the East and West branches of said River or any areas that are offsite from the Site.

4. The Site is referred to and known as "English Station."

5. On or about August 16, 2000, Respondent transferred the Site to Quinnipiac Energy, LLC ("Quinnipiac Energy") as described in a deed which is recorded at page 72 of volume 5716 of the City of New Haven land records.

[1] This Consent Order is referred to herein as "Partial Consent Order", "Consent Order" or "order."

6. At some point prior to December 9, 2006, the Site was divided into two parcels, Parcel A and Parcel B.

7. Parcel A is located on the northern portion of the Site adjacent to Grand Avenue and includes, among other structures, a building known as Station B.

8. Parcel B is located on the southern portion of the Site and includes, among other structures, a former power generation building.

9. On December 9, 2006, Quinnipiac Energy sold Parcel A to Evergreen Power, LLC ("Evergreen"), as described in a deed which is recorded at page 14 of volume 7814 of the City of New Haven land records.

10. On December 13, 2006, Quinnipiac Energy sold Parcel B to ASNAT Realty, LLC ("ASNAT"), as described in a deed which is recorded at page 195 of volume 7817 of the City of New Haven land records.

SITE HISTORY AND ENVIRONMENTAL SETTING

11. Groundwater below and near the Site is classified as a GB groundwater area.

12. The surface water of the adjacent Mill River is classified as SD/SB.

13. From 1929 through 1992 Respondent operated an electrical power plant ("the Plant") at the Site.

14. The Plant was constructed on a man-made island in the middle of the Mill River located south of Grand Avenue in New Haven, CT. The island is constructed of historically placed fill and comprised of ash, dredge spoils, and other miscellaneous debris.

15. In 1992 the Plant was placed on deactivated status.

16. Respondent's activities on the Site involved the use and storage of equipment and oil, both containing polychlorinated biphenyls ("PCBs").

17. PCBs are a class of human-made chemicals whose manufacture, along with many of its uses, was banned by the United States Environmental Protection Agency ("EPA") in 1979. PCBs have been shown to cause cancer in animals. PCBs have been shown to cause other non-cancer health effects in animals and humans including, but not limited to, effects on the immune system, reproductive system, endocrine system, and

nervous system. Studies in humans provide supportive evidence for the potential impact of PCBs on humans.

18. Respondent's activities on the Site also involved the use and/or management of other equipment and/or materials that contained various pollutants including but not limited to metals, volatile organic compounds, semivolatile organic compounds, and total petroleum hydrocarbons.

19. Respondent operated five (5) PCB transformers ("PCB Transformers"), seventy (70) large high voltage capacitors, and eight (8) pieces of PCB containing electrical equipment including additional transformers and circuit breakers.

20. Respondent also operated two (2) PCB storage areas at the Site.

21. Respondent's employees routinely sprayed waste oil, including transformer oil contaminated with PCBs, for dust control, on coal piles, transit areas and handling areas.

22. Between 1975 and 1997, Respondent filed a number of spill reports with the Commissioner in connection with spills at the Site.

23. On or about December 8, 1997, while excavating on the Site, Respondent's employees discovered an oily material on the groundwater table at the Site, which later broke out through a rotted bulkhead and spilled into the Mill River. Analysis of the oily material indicated the presence of PCBs at levels near 350 parts per million ("ppm").

24. The Site has been the subject of a number of plans, reports and investigations that, among other things, have confirmed the presence of PCBs and other hazardous contaminants at the Site at levels exceeding Connecticut's Remediation Standards Regulations ("RSRs"), Regulations of Connecticut State Agencies ("R.C.S.A.") §§22a-133k-1 through 22a-133k-3. Notwithstanding that not all of the these plans, reports or investigations, may have been reviewed and approved by the Commissioner, these plans, reports and investigations shall be taken into account by Respondent in connection with its investigation and remedial actions hereunder, including the following:

- A 1999 Draft Asbestos and Hazardous Materials Survey for English Station, prepared by GEI Consultants, Inc.;

- A May 2000 Draft Remedial Action Report prepared by GEI Consultants, Inc.;

- A 2000 Dismantling Cost Study prepared by TLG Services, Inc.;

- A 2002 Site-Wide PCB Characterization and Clean-Up Plan, prepared by Advanced Environmental Interface;

- A 2012 Conceptual Remediation Action Plan for PCB Impacted soil, prepared by Stantec Consulting Services;

- A 2015 Subsurface Investigation Report for the Former English Station, prepared by HRP Associates; and

- A Revised Equipment Decontamination Work Plan, prepared by Partner Engineering and Science, Inc.

25. The RSRs apply to any action taken to remediate polluted soil or other environmental media, surface water or a groundwater plume at or emanating from a release area which action is required pursuant to Chapter 445 or 446k of the General Statutes.

26. On March 27, 2003 the Commissioner granted a Widespread Polluted Fill Variance for the Site in accordance with R.C.S.A. § 22a-133k-2(f)(1) ("Fill Variance").

27. On or about March 1, 2005, Quinnipiac Energy submitted a Significant Environmental Hazard Report to the Commissioner reporting that PCBs, at concentrations greater than thirty (30) times the industrial/commercial direct exposure criteria established by the RSRs, were present in surface soils at the Site, posing a potential risk to human health through contact and exposure as required by Connecticut General Statutes ("C.G.S.") § 22a-6u.

28. On or about May 22, 2007, EPA Region 1 conditionally approved a PCB cleanup plan for Parcel A of the Site proposed by Quinnipiac Energy, although the clean-up was not completed.

29. To date, five (5) PCB Transformers, which contained PCB transformer oil, remain at the Site in the Plant on Parcel B.

ESTABLISHING A FACILITY, CREATING A CONDITION, AND/OR MAINTAINING A FACILITY OR CONDITION WHICH CAN REASONABLY BE EXPECTED TO CREATE A SOURCE OF POLLUTION TO THE WATERS OF STATE

30. By virtue of the above, prior to the transfer of the Site to Quinnipiac Energy on August 16, 2000, Respondent established a facility or created a condition and/or maintained a facility or condition which reasonably can be expected to create a source of pollution to the waters of the State; maintained a discharge of waste in violation of Conn. Gen. Stat. §22a-427; initiated, created, or originated or maintained an unpermitted discharge in

violation of Conn. Gen. Stat. §22a-430; and/or disposed of PCBs or PCB-containing items, products or materials in violation of Conn. Gen. Stat. §22a-467. Respondent denies each such allegation and admits no liability hereunder.

31. Proper disposal of PCBs and the prevention of pollution are within the jurisdiction of the Commissioner under the provisions of Chapters 439, 445 and 446k of the Connecticut General Statutes, including but not limited to, §§ 22a-5, 22a-6, 22a-427, 22a-430, 22a-432, 22a-464, 22a-465, and §22a-467.

32. On April 8, 2013, the Commissioner issued Administrative Order # AOWSPCB 13-001 to Respondent and several other respondents, including ASNATand Evergreen (collectively, the "Current Owner"), Uri Kaufman, Ira Schwartz, and Mehboob Shah, as well as Quinnipiac Energy, and Grant MacKay Company Inc.

33. By agreement to the issuance of this Consent Order Respondent makes no admission of fact or law with respect to the matters addressed herein, including the allegations set forth above, other than the facts asserted in Sections A.1 through 5, A.13, A.15 and A.34 and Respondent shall not be deemed to have made any such admissions by the fact that the Respondent has agreed to perform work pursuant to this Consent Order.

34. The Commissioner and Respondent acknowledge and agree that the current zoning for the Site is heavy industrial and further acknowledge and agree that the remedial actions shall be consistent with this current zoned use.

B. Now, therefore, with the agreement of Respondent, the Commissioner, acting under §22a-6, §22a-424, §22a-425, §22a-427, §22a-430, §22a-431, §22a-432, §22a-449, §22a-465, and §22a-467 of the Connecticut General Statutes, orders Respondent as follows:

1. On-Site Remediation: Respondent shall conduct the investigation and cleanup of the Site in accordance with this Consent Order. Such investigation and cleanup shall be completed pursuant to a schedule acceptable to the Commissioner, provided however that the cleanup, not including any confirmatory monitoring performed by Respondent after the completion of such cleanup activities, shall be completed within 3 years of the Access Date defined in Section B.5 below, unless a later completion date is specified in writing by the Commissioner. Whenever this Consent Order refers to the RSRs, the standards shall be those in effect at the time of the Effective Date unless the Commissioner and the Respondent otherwise agree. The Commissioner and Respondent further agree as follows:

    a. On or before thirty (30) days from the Effective Date of this order, Respondent shall retain one or more Licensed Environmental Professional(s) ("LEP"(s)) acceptable to the Commissioner to prepare the documents and

implement or oversee the actions required by this order and shall, by that date, notify the Commissioner in writing of the identity of such LEP(s). Respondent shall retain one or more LEP(s) acceptable to the Commissioner until this order is fully complied with, and, within ten (10) days after retaining any LEP(s) other than the one(s) originally identified under this section, Respondent shall notify the Commissioner in writing of the identity of such other LEP(s). The consultants (LEP(s)) retained to perform PCB investigation, remediation, disposal, and confirmatory sampling must be familiar with the PCB requirements of both the applicable state and federal regulations, including but not limited to, those found at 40 CFR Part 761. Respondent shall submit to the Commissioner a description of the LEP's education, experience and training which is relevant to the work required by this order within ten (10) days after a request for such a description. Nothing in this section shall preclude the Commissioner from finding a previously acceptable LEP unacceptable; the Commissioner has determined that the LEPs listed on Exhibit B hereto are acceptable.

b. On or before sixty (60) days from the Access Date of this order, Respondent shall submit for the Commissioner's review and written approval a scope of study for an investigation of the Site and its potential impact on human health and the environment, including, but not limited to, the existing and potential extent and degree of contamination of soil and ground water, surface water, and sediment within the Site boundary (i.e., within the tunnel on the Site), as well as contamination of the Plant and any other building structures on the Site and any content therein (the "Scope of Study"). The Scope of Study shall:

- be consistent with and comply with the sampling requirements in 40 CFR Part 761 for PCBs, including but not limited to the Standard Operating Procedure for sampling on, into and through concrete;

- identify, document, inventory and assess asbestos and asbestos-containing materials to determine if such materials are friable, damaged, unstable, and accessible or may be disturbed by other actions required by this Consent Order, and to determine how to conduct asbestos abatement in a manner that is necessary to comply with all applicable laws in connection with a plan of abatement for such materials in accordance with Section B.1.e.8. below.

- other than with respect to asbestos characterization as addressed above, fully characterize PCB constituents of all caulk, paint, flooring, roofing, mastics, fireproofing, soundproofing, waterproofing, sealants and all other materials. Notwithstanding the above, Respondent shall investigate the presence of lead and mercury.

- identify non-hazardous and hazardous waste and other hazardous materials at the Site; and

- comply with all prevailing standards and guidelines, including, but not limited to, the Connecticut Department of Energy and Environmental Protection's (the "Department" or "DEEP") Site Characterization Guidance Document; and

- include:

    - the proposed location and depths of any additional ground water monitoring wells;

    - a proposed sampling and analytical program including at least the parameters to be tested, proposed sampling and analytical methods, for sediments within the boundary of the Site and soils, surface water, groundwater, the Plant and other structures at the Site and any contents therein as set forth above;

    - quality assurance and quality control procedures; and

    - a schedule for conducting the investigation.

The proposed Scope of Study for the Commissioner's review and approval may reference and evaluate existing data to support the proposed investigation.

c. If the Commissioner determines that the investigation carried out under the approved Scope of Study, in addition to previous studies and investigations of the Site, does not fully characterize the extent and degree of soil, sediment (within the boundaries of the Site), ground water, and surface water pollution at the Site as well as contamination of the Plant or other structures on the Site and any contents therein, to the satisfaction of the Commissioner, Respondent shall perform additional investigation in accordance with a supplemental plan and schedule approved in writing by the Commissioner. Unless otherwise specified in writing by the Commissioner, the supplemental plan and schedule shall be submitted by Respondent for the Commissioner's review and written approval on or before thirty (30) days after notice from the Commissioner that such supplemental plan is required.

d. Respondent shall implement the approved Scope of Study and, if same are required, any approved supplemental plan(s), in accordance with the approved schedule(s). Respondent shall notify the Commissioner of the date and time of installation of monitoring wells and of each soil, on-site

sediment, building material and water sampling event at least five (5) full business days prior to such installation or sampling.

e. Except as may be provided in the investigation schedule approved by the Commissioner, on or before thirty (30) days after the approved date for completion of the investigation, Respondent shall submit for the Commissioner's review and written approval a comprehensive and thorough report which:

1) describes in detail the investigation performed;
2) identifies the type, quantity and location of all asbestos, non-hazardous and hazardous wastes or other hazardous materials on the Site;
3) defines the existing and potential extent and degree of soil, sediment within the boundary of the Site, ground water, and surface water pollution as well as all contamination of the Plant and any other structures on the Site and contents therein;
4) evaluates the alternatives for remedial actions to abate on-site pollution and impacts for industrial/commercial use of the Site, including but not limited to any alternative specified by the Commissioner, which alternatives are in compliance with all applicable state and federal statutes and regulations, provided that

- to address the direct exposure and volatilization requirements under the RSRs for all contaminants (other than PCBs which are addressed below), Respondent will not be obligated to evaluate alternatives for remedial actions other than those required to comply with the commercial/industrial provisions in the RSRs;

- for PCBs, for direct exposure, a) outside the buildings, Respondent will not be obligated to evaluate alternatives for remedial actions other than those required to comply with 40 CFR Part 761 and with the inaccessible soil provisions of §22a-133k-2(b)(3) of the RSRs, b) inside the buildings, the Respondent shall only be obligated to evaluate alternatives for remedial actions associated with the high occupancy standards in 40 CFR Part 761, and c) under the buildings, the Respondent shall only be obligated to evaluate alternatives for remedial actions associated with the more stringent of the high occupancy standards in 40 CFR Part 761 and the inaccessible soil provisions of §22a-133k-2(b)(3) of the RSRs; and

- The RSR Pollutant Mobility provisions, for both PCBs and for releases into fill, apply in full to all alternatives; the Fill Variance exempts the Pollutant Mobility provisions with respect to the fill itself. The alternatives for remedial actions evaluated by Respondent must also include those alternatives for remedial actions required to comply with this Consent Order as set forth in this subsection B.1. and any approval

issued to Respondent by the Connecticut Department of Public Health requiring Respondent to abate asbestos containing materials that are friable, damaged, unstable, and accessible or may be disturbed by other actions required by this Consent Order.

5) states in detail the most expeditious schedule for performing each alternative;
6) lists all permits and approvals required for each alternative, including but not limited to any permits required under Sections 22a-32, 22a-42a, 22a-342, 22a-361, 22a-368, 22a-430, 22a-465 or 22a-467 of the Connecticut General Statutes;
7) proposes a preferred alternative from among those evaluated pursuant to and consistent with the provisions identified in Section B.1.e.4., with supporting justification therefor;
8) provides that Respondent shall only be required to abate asbestos that is friable, damaged, unstable, and accessible or may be disturbed by other actions required by this Consent Order, and to determine how to conduct asbestos abatement in a manner that is necessary to comply with all applicable laws; and
9) proposes a detailed program and schedule to perform the preferred on-site remedial actions, including but not limited to a schedule for applying for and obtaining all permits and approvals required for such remedial actions.

f. Unless otherwise specified in writing by the Commissioner, on or before thirty (30) days after approval of the report described in the preceding section, Respondent shall submit, for the Commissioner's review and written approval, contract plans and specifications for the approved remedial actions, a revised list of all permits and approvals required for such on-site actions, and a revised schedule for applying for and obtaining such permits and approvals, consistent with all applicable state and federal statutes and regulations and this Consent Order. Respondent shall use best efforts to obtain all required permits and approvals.

g. Respondent shall implement the approved remedial actions in accordance with the approved schedule. Respondent shall notify the Commissioner at least five (5) full business days prior to conducting remedial actions at the Site. Any such notice may include multiple dates that Respondent expects to be undertaking remediation at the Site. Within fifteen (15) days after completing such actions, Respondent shall certify to the Commissioner in writing that the actions have been completed as approved.

h. Except as may be provided in the approved remedial action schedule, on or before thirty (30) days after the approved date for completion of the remediation, Respondent shall submit for the Commissioner's review and written approval a comprehensive and thorough report which describes all remedial actions performed at the Site. Such report shall also include a soil,

on-site sediment, ground water and surface water post-remediation monitoring program to determine the degree to which the approved on-site remedial actions have been effective, and a schedule for performing the post-remediation monitoring program. Respondent shall implement the approved monitoring program to determine the effectiveness of the remedial actions in accordance with the approved schedule.

i. If the approved remedial actions do not result in the prevention and abatement of soil, on-site sediment, ground water, and surface water pollution and contamination of the Plant, other structures on the Site or items contained therein, in a manner that complies with all applicable state and federal statutes and regulations, to the satisfaction of the Commissioner, additional remedial actions and measures for monitoring and reporting on the effectiveness of those actions shall be performed in accordance with a supplemental plan and schedule approved in writing by the Commissioner, provided Respondent shall not be required to take actions more stringent than as provided in section B.1.e.4. and section B.1.k. Unless otherwise specified in writing by the Commissioner, the supplemental plan and schedule shall be submitted for the Commissioner's review and written approval on or before thirty (30) days after notice from the Commissioner that such supplemental plan is required.

j. On a schedule established by the Commissioner or, if no such schedule is established, on a quarterly basis beginning no later than ninety (90) days after completion of the approved remedial actions or, as applicable, supplemental remedial actions, Respondent shall submit for the Commissioner's review and written approval a report describing the results to date of the approved monitoring program to determine the effectiveness of the on-site remedial actions.

k. The current zoning of the Site is heavy industrial. The remedial actions shall be consistent with the current zoned use and be no more stringent than those alternatives referenced in Section B.1.e.4. and Section B.1.e.7., and, if approved therein, may make use of environmental land use restrictions ("ELURs") and/or existing or constructed features that render soil inaccessible or environmentally isolated in accordance with the RSRs. Nothing herein prevents Respondent from agreeing to a more stringent standard of remediation.

2. Revisions. Respondent may, by written request, ask that the Commissioner approve, in writing, revisions to any document approved hereunder in order to make such document consistent with law or for any other appropriate reason.

3. Site Security. Subject to Section B.18. concerning Site Access, upon the Access Date of this Consent Order and until Respondent is in full compliance with the requirements of Section B.1. hereto (as provided in Section B.7.), Respondent shall maintain security at the Site. Respondent shall maintain security at the Site to, at a

minimum, the current level of security maintained at the Site by the Current Owner and approved by the Commissioner.

4. Effective Date. Respondent's parent company has made application to the Public Utilities Regulatory Authority ("PURA") and Massachusetts Department of Public Utilities ("MDPU") for approval of a merger transaction ("Transaction") with a subsidiary of Iberdrola USA, Inc. (the "PURA Application"). Respondent shall promptly notify the Commissioner when the Transaction closes. The "Effective Date" of this order shall be the later of the Closing of the Transaction or when this Consent Order becomes a final order of the Commissioner; provided, however, that if the Transaction does not close within ninety (90) days following the receipt of PURA approval and approval of the MDPU, then the Commissioner has the discretion to terminate this agreement. If PURA does not approve the PURA Application then this agreement is null and void. Respondent shall have no obligations under this Consent Order until the Effective Date.

5. Access Date. The "Access Date" is the date that the Commissioner provides written notification to Respondent that the Commissioner has secured "Required Access" as defined in Section B.18. and that such Required Access is in effect after the Effective Date. For purposes of this Consent Order, Respondent shall have no obligations under this Consent Order prior to the Effective Date.

6. Progress Reports. On or before the last day of each month following the Effective Date and continuing until all actions required by this order have been completed as approved and to the Commissioner's satisfaction, Respondent shall submit a progress report to the Commissioner describing the actions which Respondent has taken to date to comply with this order including the amounts incurred regarding such compliance; provided, however, that for any period in which actions required by this order consist solely of groundwater monitoring, Respondent shall submit a progress report on or before the last day of each month in which a groundwater monitoring event takes place.

7. Full Compliance. Respondent shall not be considered in full compliance with this Consent Order until all actions required by this order have been completed as approved and to the Commissioner's satisfaction. Subject to Section B.15., upon such full compliance or in the event of payment by Respondent as provided in Section B.18. or Section B.24., the Commissioner will issue to Respondent a certificate of compliance, which shall fully and finally conclude Respondent's obligations with respect to the Site, and Respondent shall have no further obligation or liability for any matter within the jurisdiction of the Commissioner relating thereto, except in the event of Respondent's unlawful behavior or gross negligence.

8. Sampling. All sampling shall be performed in accordance with procedures specified or approved in writing by the Commissioner, or, if no such procedures have been specified or approved, in accordance with the most recent final version of EPA publication SW-846, entitled "Test Methods for Evaluating Solid Waste,

Physical/Chemical Methods," Standard Operating Procedures for Sampling Porous Surfaces For Polychlorinated Biphenyls, the most recent final version of the Department's "Site Characterization Guidance Document," and relevant policies and guidelines issued by the Commissioner.

9. Sample Analyses. All sample analyses which are required by this order and all reporting of such sample analyses shall be conducted by a laboratory certified by the Connecticut Department of Public Health and approved to conduct such analyses. In addition,

    - The Reasonable Confidence Protocols shall be used when there is a method published by Department. In all cases where the Reasonable Confidence Protocol method is used, a properly completed laboratory QA/QC certification form, certified by the laboratory shall be provided to the Commissioner with the analytical data.
    - In cases where a Reasonable Confidence Protocol method has not been published, the analytical data shall be generated using a method approved by the Commissioner, such method shall include and report a level of quality control and documentation equivalent to the Reasonable Confidence Protocols.
    - The reporting limit shall be established consistent with the Reasonable Confidence Protocols and standard industrial and laboratory practices. The Reporting Limit shall not be set at levels greater than those used in such standard practices, as determined by the Commissioner, in consultation with the Commissioner of Public Health and in no case shall be greater than the Applicable Criteria or Background Concentration established in §22a-133k-1 through §22a-133k-3 of the Regulations of Connecticut State Agencies. The Reporting Limit for a given sample shall be corrected for specific sample weight or volume, and dilutions, and, for soil and sediment samples moisture content (reported as dry weight).

10. Approvals. Respondent shall use best efforts to submit to the Commissioner all documents required by this order in a complete and approvable form. If the Commissioner notifies Respondent that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and Respondent shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty (30) days of the Commissioner's notice of deficiencies. In approving any document or other action under this order, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this order. Nothing in this section shall excuse noncompliance or delay. Any reference in this Consent Order to an approved document such as a scope of work or a schedule shall mean approved by the Commissioner.

11. Definitions. As used in this order, "Commissioner" means the Commissioner or a representative of the Commissioner.

12. Dates. The date of submission to the Commissioner of any document required by this order shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this order, including but not limited to, notice of approval or disapproval of any document or other action, shall be the date such notice is deposited in the U.S. mail or is personally delivered, whichever is earlier. Except as otherwise specified in this order, the word "day" as used in this order means calendar day. Any document or action which is required by this order to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed by the next day which is not a Saturday, Sunday or Connecticut or federal holiday.

13. Certification of Documents. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this order shall be signed by Respondent or, if a Respondent is not an individual, by such Respondent's chief executive officer or a duly authorized representative of such officer, or by a "responsible corporate officer" of Respondent as that term is defined in §22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the LEP(s) or other individual(s) responsible for actually preparing such document, and Respondent or Respondent's chief executive officer and each such individual shall certify in writing as follows:

> "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law."

14. False Statements. Any false statement in any information submitted pursuant to this order is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law.

15. Commissioner's Powers. Subject to provisions of Section B.23., nothing in this order shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by Respondent pursuant to this order have not successfully corrected all violations, fully characterized the extent and degree of any pollution or successfully abated or prevented pollution, the Commissioner may institute any

proceeding to require Respondent to undertake further investigation or further action to prevent or abate violations or pollution; provided, however, that in the event the Commissioner issues a certificate of compliance pursuant to Section B.7., the Commissioner may only institute any proceeding to require Respondent to undertake further investigation or further action to prevent or abate violations or pollution after issuing a certificate of compliance if the Commissioner determines that a certificate of compliance was obtained through the submittal of materially inaccurate or erroneous information, or otherwise materially misleading information or that material misrepresentations were made in connection with the obtaining of the certificate of compliance. In accordance with Conn. Gen. Stat. Sec. 22a-6dd, the requirements and standards for remediation required of Respondent pursuant to this Consent Order shall not be modified by the Department unless both the Department and Respondent agree to such modification.

16. Respondent's Obligations Under Law. Nothing in this order shall relieve Respondent of other obligations under applicable federal, state and local law.

17. No Assurance by Commissioner. No provision of this order and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by Respondent pursuant to this order will result in compliance or prevent or abate pollution.

18. Access to Site. The Commissioner and Respondent acknowledge that Respondent does not currently own, or control access to, the Site, and that Respondent requires access, without interference from the Current Owner or the property owner, necessary to be able to comply with its obligations under this Consent Order to investigate, remediate, monitor and secure the Site and shall not be obligated to proceed with such obligations that require Site access unless and until it has such access and only for so long as it continues to have access pursuant to the terms of this Section B.18. The Commissioner will endeavor, using all reasonable efforts, to obtain and, if so obtained, will use all reasonable efforts to maintain, access to, or control of, the Site, pursuant to a written access agreement, on terms that enable Respondent to comply with the terms and conditions of this Consent Order requiring Respondent to investigate, remediate, monitor and secure the Site, and that require the Current Owner (or, as applicable, any subsequent owners) to (i) refrain from engaging in actions that adversely, substantially and materially affect Respondent's ability to comply with the obligations under this Consent Order or otherwise engaging in activities that cause environmental conditions or exacerbate or contribute to existing environmental conditions at the Site that cause a significant increase in costs, (ii) agree to the recordation and implementation of ELURs pursuant to 40 CFR Part 761 and the RSRs, as applicable, and (iii) include notice of such ELURs in any sale or lease agreement regarding the Site and terms that expressly condition any such sale or lease agreement on the purchaser's or lessee's (as applicable) agreement to assume all liabilities arising from the failure by such purchaser or lessee to comply with the ELUR(s) ("Required Access"). Respondent shall make all reasonable efforts to

support any effort by the Commissioner to obtain the Required Access and shall not take any actions to impede or prevent the Required Access. Reasonable efforts by Respondent shall include, but not be limited to, providing a release, indemnification and hold harmless to the Current Owner from liability as the Current Owner arising solely out of the activities of Respondent or its contractors on the Site in the course of performing work under this Consent Order, and shall further include, if requested by the Commissioner, a release by Respondent of contribution claims against the Current Owner in respect of onsite conditions at the Site as long as the Current Owner, on behalf of itself and its owners, agents, officers, directors, shareholders, partners and members, also agrees to provide a reciprocal general release reasonably acceptable to Respondent. Reasonable efforts by Respondent shall not include paying the Current Owner or its owners, agents, officers, directors, shareholders, partners and members or reimbursing or funding, directly or indirectly, all or any part of any payment to the Current Owner or its owners, agents, officers, directors, shareholders, partners and members by others or remediating to standards that are more stringent than required by this Consent Order. In the event that the Commissioner after the Effective Date, in his sole discretion, determines (following consultation with Respondent) that the Commissioner is unable to secure the Required Access, the Commissioner may direct Respondent to make payment to the Commissioner in accordance with this section in lieu of completing performance of work otherwise required in this Consent Order. In the event that the Commissioner, after the Effective Date, is unable to maintain Required Access to the Site, then the three year period for completion in Section B.1. is tolled until either the Commissioner obtains access or until the Commissioner, following consultation with Respondent, but in his sole discretion, directs Respondent to make payment to the Commissioner in accordance with this section in lieu of completing performance of work otherwise required by this Consent Order. The Commissioner shall give notice of such direction to Respondent together with a draft certificate of compliance. Within one hundred twenty (120) days of receipt of such notice, Respondent shall pay, by cashier or certified check, $30 million minus any costs incurred or accrued for remediation and investigation (not including attorney's fees and any direct time charges of Respondent's employees, managers or officers) after the Effective Date of this order for compliance with this order, to the account designated by the Commissioner, and such payment shall fully resolve Respondent's obligations herein and the Commissioner shall provide a certificate of compliance as provided for in Section B.7. herein. The Commissioner shall use the funds for the investigation and remediation of the Site, and any funds remaining after the completion of the investigation and remediation of the Site shall, with the concurrence of the Governor and the Attorney General, be used for a public purpose. Within thirty (30) days of the Commissioner's issuance of such notice and certificate of compliance, Respondent shall provide a detailed accounting of any remedial costs incurred. Payment of the funds required by this section shall satisfy Respondent's obligations under this Consent Order.

19. No Effect on Rights of Other Persons. This order neither creates nor affects any rights of persons, entities (of any form or nature) or municipalities that are not parties to this order. Without limiting the generality of the foregoing, the parties expressly disclaim any intent to create any rights enforceable by any non-parties as third-party beneficiaries hereunder.

20. Notice to Commissioner of Changes. Within fifteen (15) days of the date Respondent becomes aware of a change in any information submitted to the Commissioner under this order, or that any such information was inaccurate or misleading or that any relevant information was omitted, Respondent shall submit the correct or omitted information to the Commissioner.

21. Notification of Noncompliance. In the event that Respondent becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this order or of any document required hereunder, Respondent shall immediately notify by telephone the individuals identified in the next section and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. Within five (5) days of the initial notice, Respondent shall submit in writing the date, time, and duration of the noncompliance and the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and Respondent shall comply with any dates which may be approved in writing by the Commissioner. Notification by Respondent shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.

22. Submission of Documents. Any document required to be submitted to the Commissioner under this order shall, unless otherwise specified in this order or in writing by the Commissioner, be directed to:

    Gary Trombly, Jr.
    Department of Energy and Environmental Protection
    Storage Tank & PCB Enforcement Unit
    79 Elm Street
    Hartford, Connecticut 06106

    And

    Craig Bobrowiecki
    Department of Energy and Environmental Protection
    Remediation Division
    79 Elm Street
    Hartford, Connecticut 06106

23. Effect of Order. Except as provided herein, as of the Effective Date, other than as may be necessary to compel Respondent's compliance with this Consent Order (i) this Consent Order fully resolves all matters alleged in Administrative Order No. AOWSPCB 13-001 against Respondent at the Site, and all known claims of the Commissioner against Respondent related to environmental conditions at the Site, (ii) subject to Section B.15., upon such full compliance or in the event of payment by Respondent as provided for in Section B.18. and Section B.24., the Commissioner will issue to Respondent a certificate of compliance, which shall fully and finally conclude Respondent's obligations with respect to the Site and Respondent shall have no further obligation or liability for any matter within the jurisdiction of the Commissioner relating thereto, except in the event of Respondent's unlawful behavior or gross negligence, (iii) the Commissioner agrees to dismiss all claims, orders, demands, and allegations raised in Administrative Order No. AOWSPCB 13-001 against Respondent in connection with environmental conditions at the Site.Nothing in this Consent Order shall prevent the Commissioner from maintaining Administrative Order No. AOWSPCB 13-001 and proceedings relating thereto, or initiating new proceedings or actions, with respect to environmental impacts at off-site locations, including, but not limited to, sediments, soil, groundwater or any contaminants that have emanated offsite from the Site.

24. Provisions Relating to the Cost of Compliance with this Order. If the total costs to Respondent of performing the obligations after the Effective Date of this Consent Order exceed $30 million, the State, at Respondent's request, will discuss options for recovering or funding any costs above that amount, for example, through public funding or recovery from third parties, but is not bound to agree to or support any means of recovery or funding. Nothing in this section shall alter Respondent's obligation to fully comply with this Consent Order, including but not limited to, the time for compliance during any time that there are discussions about recovery of costs exceeding $30 million. Respondent shall comply with this Consent Order even if the costs of such compliance exceed $30 million, except in the event of payment by Respondent as provided for in Section B.18.

    Respondent shall maintain an accounting of all of the costs incurred or accrued regarding compliance with this Consent Order. Upon issuance of a certificate of compliance pursuant to Section B.7. herein, to the extent that the costs incurred by Respondent under this Consent Order for the investigation and remediation of the Site after the Effective Date are less than $30 million, then Respondent shall remit to the State the difference between such costs and $30 million for a public purpose as determined in the discretion of the Governor, the Attorney General, and the Commissioner .. Within thirty (30) days of a written demand by the Commissioner for the accounting of the costs incurred by Respondent regarding compliance with this Consent Order, Respondent shall provide a detailed accounting of such costs. Within thirty (30) days following a written demand by the Commissioner and the issuance by the Commissioner of a certificate of compliance resolving Respondent's liabilities regarding matters addressed in this

Consent Order, Respondent shall make payment of the difference between such costs (which shall include any costs incurred or accrued in relation to the cessation of activities) and $30 million to the recipient identified by the Commissioner.

Respondent consents to the issuance of this Partial Consent Order without further notice. The undersigned certifies that JAMES P. TORGERSON is fully authorized to enter into this Partial Consent Order and to legally bind Respondent The United Illuminating Company to the terms and conditions of the Consent Order.

Respondent The United Illuminating Company

BY: _____

DATE: 9/16/15

ORDER NO. _____

Issued as a final order of the Commissioner of Energy and Environmental Protection.

BY: _____

Commissioner

DATE: _____

Exhibit A - English Station, 510 Grand Avenue, New Haven

EXHIBIT B TO PARTIAL CONSENT ORDER NUMBER COWSPCB 15-001

Project Management Consultant:
TRC Environmental Corporation
21 Griffin Road North
Windsor, Connecticut 06095
860-298-9692

Project Licensed Environmental Professional (LEP):
Sarah Trombetta, CPG, LEP, CHMM
TRC Windsor, Connecticut Office
Licensed Environmental Professional, Connecticut (#294, 1998)
Certified Professional Geologist, American Institute of Professional Geologist, (#8899, 1993)
Certified Hazardous Materials Manager (#15404, 2010)

Project Support LEP:
Marya Mahoney, LEP
TRC Windsor, Connecticut Office
Licensed Environmental Professional, Connecticut, (#478, 2007)

TRC Project Resources:

Ed Doubleday, Project Management and Project Performance
TRC Windsor, Connecticut Office
Certified Project Management Professional (2011)
FEMA Incident Command Station Certification (2008)
U.S. Naval Academy

Carl Stopper, P.E., Connecticut Professional Engineer, TRC PCB and Site Remediation Expert
TRC Windsor, Connecticut Office
Professional Engineer, Connecticut (#13255, 1984)

Eric Plimpton, P.E., Connecticut Professional Engineer, TRC Asbestos Materials Expert
TRC Windsor Connecticut Office
Professional Engineer, Connecticut (#20593) 1998
Certified Hazardous Materials Manager, Master Level (#11384) 2002
Certified Safety Management Practitioner (#14197) 2013
Asbestos Analyst, AIHA (#4554) 1992
Asbestos Project Monitor, Connecticut (#000082) 1993
Asbestos Management Planner, Connecticut (#000219) 2002
Asbestos Inspector, Connecticut (#000074/000219) 1993
Asbestos Project Designer, Connecticut (#000152) 1999
Lead Inspector/Risk Assessor, Connecticut (#001206) 1996
Lead Planner Project Designer, Connecticut (#001866) 1998

David Sullivan, TRC Indoor TSCA/PCB Expert
TRC Lowell, Massachusetts Office
Massachusetts Licensed Site Professional (#1488, 2004)
Extensive experience with USEPA Region I TSCA Office and Managers

Stacy McAnulty, P.E., TRC Site Remediation and PCB Sediment Expert
TRC Madison, Wisconsin, Office
Professional Engineer in Wisconsin, Maine, Colorado, and North Carolina

APPENDIX B

HISTORICAL ANALYTICAL SUMMARY TABLES

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-001	MW-002	MW-003	MW-004D
	SAMPLE ID	Volatilizaiton	Protection	GW-1	GW-2	GW-3	ES MW4D
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
1,1-Dichloroethane		34800		1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U	1 U	5.0
Chloroform		287	14100	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane		20400	62000	1 U	1 U	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U	1 U	1.0
Bromodichloromethane				1 U	1 U	1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-004S	MW-005	MW-006	MW-007
	SAMPLE ID	Volatilizaiton	Protection	GW-45	MW-5A	GW-6	GW-7
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
1,1-Dichloroethane		34600		1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U	1 U	1 U
Chloroform		287	14100	1 U	4.0	1 U	1 U
1,1,1-Trichloroethane		20400	82000	1 U	1 U	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U	1 U	1 U
Bromodichloromethane				1 U	1 U	1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-009A	MW-010	MW-012	MW-013
	SAMPLE ID	Volatilization	Protection	GW-9A	GW-10	GW-12	GW-13
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/19/98	06/19/98
1,1-Dichloroethane		34600		1 U	5.0 J	1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U	1 U	1 U
Chloroform		287	14100	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane		20400	82000	1 U	2.0 J	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U	1 U	1 U
Bromodichloromethane				1 U	1 U	1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-014D	MW-014S	MW-015	MW-016
	SAMPLE ID	Volatilization	Protection	ES MW14D	GW-14S	GW-15	GW-16
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/18/98	06/18/98
1,1-Dichloroethane		34600		1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U	1 U	1 U
Chloroform		287	14100	12.0	1 U	1 U	1 U
1,1,1-Trichloroethane		20400	62000	1 U	1 U	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U	1 U	1 U
Bromodichloromethane				2.0	1 U	1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-021	MW-022
	SAMPLE ID	Volatilizaiton	Protection	GW-21	GW-22
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98
1,1-Dichloroethane		34600		1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U
Chloroform		287	14100	1 U	1 U
1,1,1-Trichloroethane		20400	62000	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U
Bromodichloromethane				1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-017D	MW-017S	MW-019	MW-020
	SAMPLE ID	Volatilizaiton	Protection	ES MW17D	GW-17S	GW-19	GW-20
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/18/98	06/18/98
1,1-Dichloroethane		34600		1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene				1 U	1 U	1 U	1 U
Chloroform		287	14100	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane		20400	82000	1 U	1 U	1 U	1 U
Trichloroethylene		219	2340	1 U	1 U	1 U	1 U
Bromodichloromethane				1 U	1 U	1 U	1 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE SAMPLE ID DATE	Residential Volatilization Jan. 1996	Surface Water Protection Jan. 1996	MW-014D ES MW14D 06/18/98	MW-014S GW-14S 06/19/98	MW-015 GW-15 06/18/98	MW-016 GW-16 06/18/98
Acenaphthylene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	[0.47]	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	[0.73]	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	[0.92]	0.3 U	0.3 U
Phenanthrene			0.3	0.07 U	[0.36]	0.07 U	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-009A	MW-010	MW-012	MW-013
	SAMPLE ID	Volatilizaiton	Protection	GW-9A	GW-10	GW-12	GW-13
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/19/98	06/19/98
Acenaphthylene			0.3	[2.2]	0.3 U	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Phenanthrene			0.3	[0.61]	0.07 U	0.07 U	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-004S	MW-005	MW-006	MW-007
	SAMPLE ID	Volatilizaiton	Protection	GW-45	MW-5A	GW-6	GW-7
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
Acenaphthylene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Phenanthrene			0.3	0.07 U	0.07 U	0.07 U	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-001	MW-002	MW-003	MW-004D
	SAMPLE ID	Volatilizaiton	Protection	GW-1	GW-2	GW-3	ES MW4D
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
Acenaphthylene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Phenanthrene			0.3	0.07 U	0.07 U	0.07 U	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-017D	MW-017S	MW-019	MW-020
	SAMPLE ID	Volatilizaiton	Protection	ES MW17D	GW-17S	GW-19	GW-20
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/18/98	06/18/98
Acenaphthylene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	0.3 U	0.3 U	0.3 U
Phenanthrene			0.3	[0.54]	0.07 U	[1.3]	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

CONSTITUENT (Units in ppb)	SITE	Residential	Surface Water	MW-021	MW-022
	SAMPLE ID	Volatilization	Protection	GW-21	GW-22
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98
Acenaphthylene			0.3	0.3 U	0.3 U
Benzo(a)anthracene			0.3	0.3 U	0.3 U
3,4-Benzofluoranthene			0.3	0.3 U	0.3 U
Benzo(k)fluoranthene			0.3	0.3 U	0.3 U
Phenanthrene			0.3	0.07 U	0.07 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE	Residential	Surface Water	MW-001	MW-002	MW-003	MW-004D
		SAMPLE ID	Volatilizaiton	Protection	GW-1	GW-2	GW-3	ES MW4D
		DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
Cadmium				0.008	0.005 U	0.005 U	0.005 U	0.005 U
Lead				0.013	0.005 U	0.005 U	0.005 U	0.005 U
Selenium				0.05	0.01 U	0.01 U	0.01 U	0.02 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT	(Units in mg/l)	SITE	Residential	Surface Water	MW-004S	MW-005	MW-006	MW-007
		SAMPLE ID	Volatilization	Protection	GW-45	MW-5A	GW-6	GW-7
		DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98	06/18/98	06/18/98
Cadmium				0.006	0.005 U	0.005 U	0.005 U	0.005
Lead				0.013	0.005 U	[0.022]	[0.021]	0.009
Selenium				0.05	0.01 U	0.01 U	0.01 U	0.01 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT (Units in mg/l)	SITE	Residential	Surface Water	MW-009A	MW-010	MW-012	MW-013
	SAMPLE ID	Volatilizaiton	Protection	GW-9A	GW-10	GW-12	GW-13
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/19/98	06/19/98
Cadmium			0.006	0.005 U	0.005 U	0.005 U	0.005 U
Lead			0.013	0.005 U	0.005 UJ	0.005 UJ	0.007 J
Selenium			0.05	0.01 U	<0.01 R	<0.01 R	<0.01 R

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT (Units in mg/l)	SITE	Residential	Surface Water	MW-014D	MW-014S	MW-015	MW-016
	SAMPLE ID	Volatilizaiton	Protection	ES MW14D	GW-14S	GW-15	GW-16
	DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/18/98	06/18/98
Cadmium			0.008	0.005 U	0.005 U	0.005 U	0.005 U
Lead			0.013	0.005 U	0.006 J	0.005 UJ	0.005
Selenium			0.05	0.01 J	<0.01 R	<0.01 R	0.01 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE	Residential	Surface Water	MW-021	MW-022
		SAMPLE ID	Volatilizaiton	Protection	GW-21	GW-22
		DATE	Jan. 1996	Jan. 1996	06/18/98	06/18/98
Cadmium				0.008	0.005 U	0.005 U
Lead				0.013	0.005 UJ	0.005 U
Selenium				0.05	<0.01 R	0.01 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Groundwater Analytical Data

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE	Residential	Surface Water	MW-017D	MW-017S	MW-019	MW-020
		SAMPLE ID	Volatilizaiton	Protection	ES MW17D	GW-17S	GW-19	GW-20
		DATE	Jan. 1996	Jan. 1996	06/18/98	06/19/98	06/18/98	06/18/98
Cadmium				0.006	0.005 U	0.005 U	0.005 U	0.005 U
Lead				0.013	0.005 U	0.005 UJ	0.005 UJ	0.005 UJ
Selenium				0.05	0.01 U	<0.01 R	<0.01 R	<0.01 R

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English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT (Units in ug/l)	SITE		MW-021	TB-018	TB-111
	SAMPLE ID	10 Times GA	ES-MW21 (15-17)	ES-TB18 (12-14)	TB-111 (10-12)
	DATE	GWPC	05/28/98	05/28/98	07/01/98
	DEPTH (ft)	CTEDP Jan. 1996	16.00	13.00	11.00
Acenaphthene (SPLP)		4200	5 U	5 U	7.0
Acenaphthylene (SPLP)		4200	5 U	5 U	5.0
Fluorene (SPLP)		2800	5 U	5 U	11.0
Naphthalene (SPLP)		2800	5 U	5 U	16.0
Phenanthrene (SPLP)		2000	5 U	5 U	24.0

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[redacted]h Station
Summary [redacted]il Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE		MW-018	MW-021	SED-02	TB-018
		SAMPLE ID	GB Mobility	ES-MW18 (14-16)	ES-MW21 (7-9)	ES SED2 (0.5)	ES-TB18 (12-14)
		DATE	Criteria	05/29/98	05/28/98	06/12/98	05/28/98
		DEPTH (ft)	CTDEP Jan. 1996	15.00	8.00	0.50	13.00
Lead (SPLP)			0.15	0.008	0.005 U	0.005 U	0.005 U

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English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-01B ES-TB1B (12-14) 05/28/98 13.00
Arsenic				10	4.5 J
Barium				4700	51.3
Cadmium				34	0.5 U
Chromium					9.2
Lead				500	[2160]
Mercury				20	0.07
Selenium				340	0.5 U

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English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE			AST-01	MW-018	MW-021	SED-02
		SAMPLE ID	GB Mobility	Residential	ES AST1 (2)	ES-MW18 (14-16)	ES-MW21 (7-9)	ES SED2 (0.5)
		DATE	Criteria	Criteria	06/11/98	05/29/98	05/28/98	06/12/98
		DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	2.00	15.00	8.00	0.50
Arsenic				10	1.5	2.8 J	2.1 J	5.3
Barium				4700	22	18.3	35.8	62
Cadmium				34	0.5 U	0.9	0.5 U	0.5 U
Chromium					28.7 J	14.9	17.9	32.0 J
Lead				500	35.9	38.3	22.7	110
Mercury				20	0.03	0.24	0.07	1.66
Selenium				340	0.5 U	0.5 U	0.5 U	1.5

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English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	AST-01 ES AST1 (2) 06/11/98 2.00	MW-018 ES-MW18 (14-16) 05/29/98 15.00	MW-021 ES-MW21 (15-17) 05/28/98 16.00	SED-02 ES SED2 (0.5) 06/12/98 0.50
TPH			2500	500	[16263]	238	[3805]	191

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CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-018 ES-TB18 (12-14) 05/28/98 13.00	TB-109 TB-109 (10-12) 07/01/98 11.00	TB-110 TB-110 (5-7) 07/01/98 6.00	TB-110 TB-110 (10-12) 07/01/98 11.00
TPH			2500	500	405	[682]	[1759]	[2749]

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English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	AST-01 ES AST1 (2) 06/11/98 2.00	MW-018 ES-MW18 (14-16) 05/29/98 15.00	MW-021 ES-MW21 (15-17) 05/28/98 16.00	SED-02 ES SED2 (0.5) 06/12/98 0.50
PCB's				1	[2]	1.0 U	1.0 U	[1]

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Date: 07/27/98

English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-110 TB-110 (13-15) 07/01/98 14.00	TB-111 TB-111 (2-4) 07/01/98 3.00	TB-111 TB-111 (5-7) 07/01/98 6.00	TB-111 TB-111 (10-12) 07/01/98 11.00
TPH			2500	500	[2160]	[1267]	244	[1809]

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English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE			MW-018	MW-021	SED-02	TB-018
	SAMPLE ID	GB Mobility	Residential	ES-MW18 (14-16)	ES-MW21 (15-17)	ES SED2 (0.5)	ES-TB18 (12-14)
	DATE	Criteria	Criteria	05/29/98	05/28/98	06/12/98	05/28/98
	DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	15.00	16.00	0.50	13.00
Acenaphthene		84000	1000000	1000 U	4496.0	10000 U	100 U
Acenaphthylene		84000	1000000	1000 U	1000 U	10000 U	145.0
Anthracene		400000	1000000	1000 U	5414.0	10000 U	100 U
Benzo(a)anthracene		1000	1000	1000 U	[9320.0]	10000 U	182.0
Benzo(a)pyrene		1000	1000	1000 U	[8488.0] J	10000 U	288.0 J
3,4-Benzofluoranthene		1000	1000	1000 U	1000 U	10000 U	203.0
Benzo(k)fluoranthene		1000	8400	1000 U	1000 U	10000 U	100 U
Chrysene		960	84000	1000 U	[8964.0]	10000 U	226.0
Fluoranthene		56000	1000000	1000 U	26005.0 J	10000 U	389.0 J
Fluorene		56000	1000000	1000 U	1272.0	10000 U	100 U
Naphthalene		56000	1000000	1000 U	1000 U	10000 U	[65797.0]
Phenanthrene		40000	1000000	1000 U	9818.0	10000 U	203.0
Pyrene		40000	1000000	1000 U	29130.0	10000 U	529.0

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English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE			TB-018
		SAMPLE ID	GB Mobility	Residential	ES-TB18 (12-14)
		DATE	Criteria	Criteria	05/28/98
		DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	13.00
PCB's				1	1.0 U

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English Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-109 TB-109 (10-12) 07/01/98 11.00	TB-110 TB-110 (5-7) 07/01/98 6.00	TB-110 TB-110 (10-12) 07/01/98 11.00	TB-110 TB-110 (13-15) 07/01/98 14.00
Acenaphthene		84000	1000000	10000 U	100 U	10000 U	100 U
Acenaphthylene		84000	1000000	10000 U	100 U	10000 U	100 U
Anthracene		400000	1000000	10000 U	124.0	10000 U	100 U
Benzo(a)anthracene		1000	1000	10000 U	472.0	10000 U	100 U
Benzo(a)pyrene		1000	1000	10000 U	498.0 U	10000 U	100 U
3,4-Benzofluoranthene		1000	1000	10000 U	203.0	10000 U	100 U
Benzo(k)fluoranthene		1000	8400	10000 U	406.0	10000 U	100 U
Chrysene		960	84000	10000 U	506.0	10000 U	100 U
Fluoranthene		56000	1000000	10000 U	797.0	10000 U	100 U
Fluorene		56000	1000000	10000 U	100 U	10000 U	100 U
Naphthalene		56000	1000000	10000 U	100 U	10000 U	100 U
Phenanthrene		40000	1000000	10000 U	414.0	10000 U	100 U
Pyrene		40000	1000000	10000 U	964.0	30159.0	100 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

Date: 07/27/98

[redacted] Station
Summary of Soil Analytical Data
AOC 7 Waste Oil AST/Oil Pump House and
AOC 13 Former Wastewater Treatment Facility

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-111 TB-111 (2-4) 07/01/98 3.00	TB-111 TB-111 (5-7) 07/01/98 6.00	TB-111 TB-111 (10-12) 07/01/98 11.00
Acenaphthene		84000	1000000	100 U	1000 U	4848.0
Acenaphthylene		84000	1000000	100 U	1000 U	3898.0
Anthracene		400000	1000000	100 U	1000 U	11650.0
Benzo(a)anthracene		1000	1000	100 U	1000 U	[12803.0]
Benzo(a)pyrene		1000	1000	100 U	1000 U	[8662.0]
3,4-Benzofluoranthene		1000	1000	100 U	1000 U	[7092.0]
Benzo(k)fluoranthene		1000	8400	100 U	1000 U	[4063.0]
Chrysene		960	84000	100 U	1000 U	[11907.0]
Fluoranthene		58000	1000000	100 U	1000 U	38611.0
Fluorene		58000	1000000	100 U	1000 U	7539.0 J
Naphthalene		58000	1000000	100 U	1000 U	2203.0
Phenanthrene		40000	1000000	100 U	1249.0 U	[44611.0]
Pyrene		40000	1000000	100 U	1000 U	38244.0

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-003 ES-MW3 (15-17) 06/04/98 16.00	TB-006 ES-TB6 (1-7) 06/04/98 4.00	TB-007 ES-TB7 (5) 06/04/98 5.00	TB-007A ES-TB7A (7-9) 06/04/98 8.00
TPH			2500	500	25 U	[4397] J	489	25 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
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CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-102 TB-102 (6-8) 06/30/98 7.00	TB-102 TB-102 (8-12) 06/30/98 10.00	TB-103 TB-103 (4-6) 06/30/98 5.00	TB-103 TB-103 (8-10) 06/30/98 9.00
TPH			2500	500	63	68	25 U	384

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	CS-005 ES-CS5 (0) 06/11/98 0.00	MW-003 ES-MW3 (15-17) 06/04/98 16.00	TB-006 ES-TB6 (1-7) 06/04/98 4.00	TB-007 ES-TB7 (5) 06/04/98 5.00
PCB's				1	[15]	1.0 U	1.0 U	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-103 TB-103 (10-12) 06/30/98 11.00
TPH			2500	500	93

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-003 ES-MW3 (15-17) 06/04/98 16.00	TB-006 ES-TB6 (1-7) 06/04/98 4.00	TB-007 ES-TB7 (5) 06/04/98 5.00	TB-007A ES-TB7A (7-9) 06/04/98 8.00
Anthracene		400000	1000000	100 U	198.0	100 U	100 U
Benzo(a)anthracene		1000	1000	100 U	411.0	124.0	100 U
Benzo(a)pyrene		1000	1000	100 U	393.0	100 U	184.0
Benzo(k)fluoranthene		1000	8400	100 U	426.0	100 U	627.0
Chrysene		960	84000	100 U	692.0	100 U	109.0
Fluoranthene		56000	1000000	100 U	778.0	193.0	206.0
Naphthalene		56000	1000000	100 U	156.0	100 U	100 U
Phenanthrene		40000	1000000	100 U	771.0	142.0	135.0
Pyrene		40000	1000000	100 U	811.0	218.0	228.0

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English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE			TB-007A
		SAMPLE ID	GB Mobility	Residential	ES-TB7A (7-9)
		DATE	Criteria	Criteria	06/04/98
		DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	8.00
PCB's				1	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 2 Station B Underground Storage Tanks

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-001 ES-MW1 (5-7) 06/02/98 6.00	MW-002 ES-MW2 (13-17) 06/02/98 15.00	TB-001 ES-TB1 (7-8) 06/02/98 7.50	TB-101 TB-101 (12-14) 06/30/98 13.00
TPH			2500	500	[1287]	[1212]	[7179]	25 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 1 Station B

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-003 ES-MW3 (15-17) 06/04/98 16.00	TB-006 ES-TB6 (1-7) 06/04/98 4.00	TB-007A ES-TB7A (7-9) 06/04/98 8.00
Arsenic				10	2.3	6.1	2.8
Barium				4700	9.0	29.0	44.0
Chromium					4.5	8.4	4.9
Lead				500	2.4	43.1	50.4
Mercury				20	0.02 U	0.25	0.76

Values represent total concentrations unless noted < =Not detected at indicated reporting limit NA =Not analyzed

English Station
Summary of Soil Analytical Data
AOC 3 Former Septic Systems

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-008A ES-TB8A (1-3) 06/04/98 2.00	TB-008B ES-TB8B (15-17) 06/04/98 16.00
Arsenic				10	[23.1]	6.6
Barium				4700	100	28.0
Chromium					3.7	18.4
Lead				500	[807]	18.4
Mercury				20	0.38	0.02
Selenium				340	3.4	0.5 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 2 Station B Underground Storage Tanks

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-001 ES-MW1 (5-7) 06/02/98 6.00	MW-002 ES-MW2 (13-17) 06/02/98 15.00	TB-001 ES-TB1 (7-8) 06/02/98 7.50
Arsenic				10	1.4	1.5	1.0 U
Barium				4700	73	34	22
Chromium					9.3	11.6	11.3
Lead				500	24.5	51.5	11.5
Mercury				20	0.05	0.06	0.03
Selenium				340	0.5 U	0.5 U	0.6

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 3 Former Septic Systems

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE		TB-008A	TB-008B
		SAMPLE ID	GB Mobility	ES-TB8A (1-3)	ES-TB8B (15-17)
		DATE	Criteria	06/04/98	06/04/98
		DEPTH (ft)	CTDEP Jan. 1996	2.00	16.00
Lead (SPLP)			0.15	0.021	0.005 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-11 ES PCB11 (1) 06/11/98 1.00	PCB-12 ES PCB12 (1) 06/11/98 1.00	PCB-13 ES PCB13 (0.5) 06/11/98 0.50	PCB-14 ES PCB14 (1) 06/11/98 1.00
TPH			2500	500	25 U	25 U	27	118

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

Summary of Soil Analytical Data
AOC 6 Capacitor Release

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-15 ES PCB15 (0.5) 06/11/98 0.50	PCB-16 ES PCB16 (1) 06/11/98 1.00	PCB-17 ES PCB17 (0.5) 06/11/98 0.50	PCB-18 ES PCB18 (1) 06/11/98 1.00
TPH			2500	500	25 U	25 U	25 U	25 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

Station
Summary of Soil Analytical Data
AOC 6 Capacitor Release

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-18 ES PCB18A (2) 06/11/98 2.00	PCB-19 ES PCB19 (0.5) 06/11/98 0.50	PCB-19 ES PCB19A (2.5) 06/11/98 2.50
TPH			2500	500	25 U	28	25

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

Lighthouse Station
Summary of Soil Analytical Data
AOC 6 Capacitor Release

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	CS-001 ES-CS1 (0.5) 06/11/98 0.50	CS-002 ES-CS2 (0.1) 06/11/98 0.10	CS-003 ES-CS3 (0) 06/11/98 0.00	CS-004 ES CS4 (0) 06/11/98 0.00
PCB's				1	[3]	[10]	1.0 U	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

Station
Summary of Soil Analytical Data
AOC 6 Capacitor Release

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-11 ES PCB11 (1) 06/11/98 1.00	PCB-12 ES PCB12 (1) 06/11/98 1.00	PCB-13 ES PCB13 (0.5) 06/11/98 0.50	PCB-14 ES PCB14 (1) 06/11/98 1.00
PCB's				1	1.0 U	1.0 U	1.0 U	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-016 ES-MW16 (6-8) 05/29/98 7.00	MW-017D ESMW17D 26-28 06/10/98 27.00	MW-017S ES-MW17 (4-6) 05/29/98 5.00	SS-001 ES SS1S 0 06/19/98 0.00
Arsenic				10	4.6 J	8.3 J	2.7 J	1.0 U
Barium				4700	30.4	56	24.9	23
Cadmium				34	0.5 U	3.2	0.5 U	0.5 U
Chromium					18.2	72.9	5.9	9.6
Lead				500	20.8	107	22.3	27.1 J
Mercury				20	0.19	0.56	0.25	0.30
Selenium				340	0.5 U	2.1	0.5 U	0.5 U
Silver				340	0.2 U	1.0	0.2 U	0.2 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

[redacted] Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	SS-001 ES SS1D 0.5 06/19/98 0.50	TB-021 ES-TB21 (0-2) 05/29/98 1.00	TB-024 ES-TB24 (6-8) 05/29/98 7.00	TB-025 ES-TB25 (2-4) 05/29/98 3.00
Arsenic				10	4.0	2.4 J	1.0 UJ	1.9 J
Barium				4700	71	34.1	11.1	28.1
Cadmium				34	0.6	0.5 U	0.5 U	0.5 U
Chromium					25.1	10.2	0.5 U	5.2
Lead				500	185 J	18.2	8.1	43.4
Mercury				20	0.18	0.13	0.02 U	0.14
Selenium				340	0.5 U	0.5 U	0.5 U	0.5 U
Silver				340	0.2 U	0.2 U	0.2 U	0.2 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 6 Capacitor Release

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-15 ES PCB15 (0.5) 06/11/98 0.50	PCB-16 ES PCB16 (1) 06/11/98 1.00	PCB-17 ES PCB17 (0.5) 06/11/98 0.50	PCB-18 ES PCB18 (1) 06/11/98 1.00
PCB's				1	1.0 U	1.0 U	[2]	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

Station
Summary of Soil Analytical Data
AOC 6 Capacitor Release

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-18 ES PCB18A (2) 06/11/98 2.00	PCB-19 ES PCB19 (0.5) 06/11/98 0.50	PCB-19 ES PCB19A (2.5) 06/11/98 2.50
PCB's				1	1.0 U	1.0 U	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT (Units in mg/l)	SITE		TB-021	TB-024	TB-025
	SAMPLE ID	GB Mobility	ES-TB21 (0-2)	ES-TB24 (6-8)	ES-TB25 (2-4)
	DATE	Criteria	05/29/98	05/29/98	05/29/98
	DEPTH (ft)	CTDEP Jan. 1996	1.00	7.00	3.00
Lead (SPLP)		0.15	0.005 U	0.005 U	0.007
Selenium (SPLP)		0.5	0.01 U	0.01 U	0.01 U

Values represent total concentrations unless noted <=Not detected at indicated reporting limit NA=Not analyzed

English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE		MW-016	MW-017D	MW-017S	SS-001	SS-001
		SAMPLE ID	GB Mobility	ES-MW16 (6-8)	ESMW17D 26-28	ES-MW17 (4-6)	ES SS1S 0	ES SS1D 0.5
		DATE	Criteria	05/29/98	06/10/98	05/29/98	06/19/98	06/19/98
		DEPTH (ft)	CTDEP Jan. 1996	7.00	27.00	5.00	0.00	0.50
Lead (SPLP)			0.15	0.005 U	0.005 U	0.005 U	0.005 U	0.068 J
Selenium (SPLP)			0.5	0.01 U	0.02	0.01 U	0.005 U	0.005 U

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English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	SS-001 ES SS1D 0.5 06/19/98 0.50	TB-021 ES-TB21 (0-2) 05/29/98 1.00	TB-024 ES-TB24 (6-8) 05/29/98 7.00	TB-025 ES-TB25 (2-4) 05/29/98 3.00
PCB's				1	[14]	1.0 U	1.0 U	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-016 ES-MW16 (6-8) 05/29/98 7.00	MW-017D ESMW17D 26-28 06/10/98 27.00	MW-017S ES-MW17 (4-6) 05/29/98 5.00	SS-001 ES SS1S 0 06/19/98 0.00
PCB's				1	1.0 U	1.0 U	1.0 U	[1]

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[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 9 Transformers

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	CS-006 ES C56 0 06/19/98 0.00	PCB-01 ES PCB1 (1) 06/11/98 1.00	PCB-02 ES PCB2 (1.5) 06/11/98 1.50	PCB-03 ES PCB3 (0.2) 06/11/98 0.20
PCB's				1	1.0 U	[440]	[2300]	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 9 Transformers

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE			TB-115
		SAMPLE ID	GB Mobility	Residential	TB-115 (5-7)
		DATE	Criteria	Criteria	07/01/98
		DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	6.00
TPH			2500	500	25 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 9 Transformers

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-32 PCB-32 07/07/98 0.00	PCB-33 PCB-33 07/07/98 0.00	PCB-34 PCB-34 07/07/98 0.00	PCB-35 PCB-35 07/07/98 0.00
TPH			2500	500	120	25 U	25 U	41

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 9 Transformers

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-10 ES PCB10 (0.5) 06/11/98 0.50	PCB-20 ES PCB20 0.7 06/18/98 0.70	PCB-21 ESPCB21 0.5 06/18/98 0.50	PCB-31 PCB-31 07/07/98 0.00
TPH			2500	500	25 U	25 UJ	25 UJ	382

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 9 Transformers

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-06 ES PCB6 (0.2) 06/11/98 0.20	PCB-07 ES PCB7 (0.5) 06/11/98 0.50	PCB-08 ES PCB8 (0.8) 06/11/98 0.80	PCB-09 ES PCB9 (0.8) 06/11/98 0.80
TPH			2500	500	[9091]	[600]	33	32

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
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English Station
Summary of Soil Analytical Data
AOC 9 Transformers

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-02 ES PCB2 (1.5) 06/11/98 1.50	PCB-03 ES PCB3 (0.2) 06/11/98 0.20	PCB-04 ES PCB4 (0.2) 06/11/98 0.20	PCB-05 ES PCB5 (0.5) 06/11/98 0.50
TPH			2500	500	58	[9203]	[11235]	165

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-113 TB-113 (8-12) 07/01/98 10.00	TB-114 TB-114 (4-6) 07/01/98 5.00	TB-114 TB-114 (6-8) 07/01/98 7.00	TB-114 TB-114 (10-12) 07/01/98 11.00
TPH			2500	500	25 U	25 U	204	25 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-112 TB-112 (0-2) 07/01/98 1.00	TB-112 TB-112 (4-6) 07/01/98 5.00	TB-112 TB-112 (12-14) 07/01/98 13.00	TB-113 TB-113 (4-6) 07/01/98 5.00
TPH			2500	500	[5734]	124	428	136

Values represant total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	SS-001 ES SS1D 0.5 06/19/98 0.50	TB-021 ES-TB21 (0-2) 05/29/98 1.00	TB-024 ES-TB24 (6-8) 05/29/98 7.00	TB-025 ES-TB25 (2-4) 05/29/98 3.00
TPH			2500	500	[1008] J	[1947]	87	[869]

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English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-016 ES-MW16 (6-8) 05/29/98 7.00	MW-017D ESMW17D 26-28 06/10/98 27.00	MW-017S ES-MW17 (4-6) 05/29/98 5.00	SS-001 ES SS1S 0 06/19/98 0.00
TPH			2500	500	30	270	[1851] J	[35520] J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-114 TB-114 (6-8) 07/01/98 7.00	TB-114 TB-114 (10-12) 07/01/98 11.00
Acenaphthene		84000	1000000	100 U	100 U
Acenaphthylene		84000	1000000	100 U	100 U
Anthracene		400000	1000000	100 U	100 U
Benzo(a)anthracene		1000	1000	100 U	100 U
Benzo(a)pyrene		1000	1000	100 U	100 U
3,4-Benzofluoranthene		1000	1000	100 U	100 U
Benzo(k)fluoranthene		1000	8400	100 U	100 U
Chrysene		960	84000	100 U	100 U
Fluoranthene		56000	1000000	100 U	100 U
Fluorene		56000	1000000	100 U	100 U
Naphthalene		56000	1000000	100 U	100 U
Phenanthrene		40000	1000000	100 U	100 U
Pyrene		40000	1000000	100 U	100 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-112 TB-112 (12-14) 07/01/98 13.00	TB-113 TB-113 (4-6) 07/01/98 5.00	TB-113 TB-113 (8-12) 07/01/98 10.00	TB-114 TB-114 (4-6) 07/01/98 5.00
Acenaphthene		84000	1000000	100 U	1000 U	100 U	100 U
Acenaphthylene		84000	1000000	100 U	1000 U	100 U	100 U
Anthracene		400000	1000000	100 U	1000 U	100 U	100 U
Benzo(a)anthracene		1000	1000	100 U	[1026.0]	100 U	100 U
Benzo(a)pyrene		1000	1000	100 U	[1638.0]	100 U	100 U
3,4-Benzofluoranthene		1000	1000	100 U	[1315.0]	100 U	100 U
Benzo(k)fluoranthene		1000	8400	100 U	1000 U	100 U	100 U
Chrysene		980	84000	100 U	1000 U	100 U	100 U
Fluoranthene		56000	1000000	100 U	1706.0	100 U	100 U
Fluorene		56000	1000000	100 U	1000 U	100 U	100 U
Naphthalene		56000	1000000	100 U	1000 U	100 U	100 U
Phenanthrene		40000	1000000	193.0	1000 U	100 U	100 U
Pyrene		40000	1000000	113.0	2412.0	100 U	100 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
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English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	SS-001 ES SS1D 0.5 06/19/98 0.50	TB-021 ES-TB21 (0-2) 05/29/98 1.00	TB-024 ES-TB24 (6-8) 05/29/98 7.00	TB-025 ES-TB25 (2-4) 05/29/98 3.00
Acenaphthene		84000	1000000	100 U	10000 U	100 U	10000 U
Acenaphthylene		84000	1000000	100 U	10000 U	100 U	10000 U
Anthracene		400000	1000000	100 U	10000 U	156.0	10000 U
Benzo(a)anthracene		1000	1000	105.0	10000 U	286.0	10000 U
Benzo(a)pyrene		1000	1000	100 U	10000 U	100 U	10000 U
3,4-Benzofluoranthene		1000	1000	100 U	10000 U	100 U	10000 U
Benzo(k)fluoranthene		1000	8400	100 U	10000 U	100 U	10000 U
Chrysene		980	84000	120.0	10000 U	287.0	10000 U
Fluoranthene		56000	1000000	326.0	10000 U	543.0 J	10000 U
Fluorene		56000	1000000	100 U	10000 U	100 U	10000 U
Naphthalene		56000	1000000	100 U	10000 U	134.0	10000 U
Phenanthrene		40000	1000000	193.0	10000 U	585.0	10000 U
Pyrene		40000	1000000	250.0	10000 U	468.0	10000 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 8 Oil AST's

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-016 ES-MW16 (6-8) 05/29/98 7.00	MW-017D ESMW17D 26-28 06/10/98 27.00	MW-017S ES-MW17 (4-6) 05/29/98 5.00	SS-001 ES SS1S 0 06/19/98 0.00
Acenaphthene		84000	1000000	50746.0 J	100 U	10000 U	100 U
Acenaphthylene		84000	1000000	21676.0	100 U	10000 U	100 U
Anthracene		400000	1000000	100206.0	100 U	10000 U	100 U
Benzo(a)anthracene		1000	1000	[150051.0]	100 U	10000 U	100 U
Benzo(a)pyrene		1000	1000	[121791.0] J	100 UJ	10000 U	100 U
3,4-Benzofluoranthene		1000	1000	[76163.0]	100 U	10000 U	100 U
Benzo(k)fluoranthene		1000	8400	[47403.0]	100 U	10000 U	100 U
Chrysene		960	84000	[151896.0]	100 U	10000 U	100 U
Fluoranthene		56000	1000000	[257812.0] J	100 U	10000 U	100 U
Fluorene		56000	1000000	36119.0	100 U	10000 U	100 U
Naphthalene		56000	1000000	10000 U	100 U	10000 U	100 U
Phenanthrene		40000	1000000	[280191.0]	100 U	10000 U	100 U
Pyrene		40000	1000000	[308657.0]	100 U	10000 U	100 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 9 Transformers

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-08 ES PCB8 (0.8) 06/11/98 0.80	PCB-09 ES PCB9 (0.8) 06/11/98 0.80	PCB-10 ES PCB10 (0.5) 06/11/98 0.50	PCB-20 ES PCB20 0.7 06/18/98 0.70
PCB's				1	1.0 U	[1]	1.0 U	1.0 U

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[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 9 Transformers

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-04 ES PCB4 (0.2) 06/11/98 0.20	PCB-05 ES PCB5 (0.5) 06/11/98 0.50	PCB-06 ES PCB6 (0.2) 06/11/98 0.20	PCB-07 ES PCB7 (0.5) 06/11/98 0.50
PCB's				1	1.0 U	1.0 U	[4]	1.0 U

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[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 9 Transformers

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-21 ESPCB21 0.5 06/18/98 0.50	PCB-31 PCB-31 07/07/98 0.00	PCB-32 PCB-32 07/07/98 0.00	PCB-33 PCB-33 07/07/98 0.00
PCB's				1	1.0 U	[94]	[53]	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

Station
Summary of Soil Analytical Data
AOC 9 Transformers

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	PCB-34 PCB-34 07/07/98 0.00	PCB-35 PCB-35 07/07/98 0.00	TB-115 TB-115 (5-7) 07/01/98 6.00	TB-116 TB-116 (5-7) 07/01/98 6.00
PCB's				1	1.0 U	1.0 U	1.0 U	1.0 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

Groundwater Station
Summary of Soil Analytical Data
AOC 10 Former Interior Chemical Storage Areas

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE			MW-012	MW-013	MW-014D	MW-014S
	SAMPLE ID	GB Mobility	Residential	ES-MW12 (2-4)	ES-MW13 (13-15)	ES MW14D(26-28)	ES-MW14 (1-3)
	DATE	Criteria	Criteria	06/01/98	06/01/98	06/11/98	06/01/98
	DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	3.00	14.00	27.00	2.00
Acenaphthene		84000	1000000	100 U	100 U	218.0	100 U
Acenaphthylene		84000	1000000	100 U	100 U	128.0	100 U
Anthracene		400000	1000000	100 U	100 U	562.0	100 U
Benzo(a)anthracene		1000	1000	100 U	100 U	[1023.0]	260.0
Benzo(a)pyrene		1000	1000	100 U	100 U	561.0	312.0
3,4-Benzofluoranthene		1000	1000	100 U	100 U	550.0	100 U
Benzo(g,h,i)perylene		42000	2033000	500 U	500 U	1081.0	500 U
Benzo(k)fluoranthene		1000	8400	100 U	100 U	550.0	100 U
Chrysene		960	84000	100 U	100 U	721.0	297.0
Fluoranthene		56000	1000000	100 U	115.0	1417.0	573.0
Fluorene		56000	1000000	100 U	100 U	239.0	100 U
Naphthalene		56000	1000000	100 U	100 U	178.0	100 U
Phenanthrene		40000	1000000	100 U	100 U	1200.0	295.0
Pyrene		40000	1000000	100 U	121.0	2205.0	534.0

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

Naval Station
Summary of Soil Analytical Data
AOC 10 Former Interior Chemical Storage Areas

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE			MW-020	TB-018A	TB-108	TB-108
	SAMPLE ID	GB Mobility	Residential	ES-MW20 (11-13)	ES-TB18A(16-18)	TB-108 (8-10)	TB-108 (12-14)
	DATE	Criteria	Criteria	05/27/98	05/28/98	07/01/98	07/01/98
	DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	12.00	17.00	9.00	13.00
Acenaphthene		84000	1000000	100 U	10000 U	10000 U	1000 U
Acenaphthylene		84000	1000000	100 U	10000 U	10000 U	1000 U
Anthracene		400000	1000000	100 U	10000 U	10000 U	1000 U
Benzo(a)anthracene		1000	1000	100 U	10000 U	10000 U	1000 U
Benzo(a)pyrene		1000	1000	100 U	10000 U	10000 U	1000 U
3,4-Benzofluoranthene		1000	1000	100 U	10000 U	10000 U	1000 U
Benzo(g,h,i)perylene		42000	2033000	500 U	50000 U	50000 U	5000 U
Benzo(k)fluoranthene		1000	8400	100 U	10000 U	10000 U	1000 U
Chrysene		980	84000	100 U	10000 U	10000 U	1000 U
Fluoranthene		56000	1000000	100 U	[59574.0] J	10000 U	1691.0
Fluorene		56000	1000000	100 U	10000 U	10000 U	1000 U
Naphthalene		56000	1000000	100 U	10000 U	10000 U	1000 U
Phenanthrene		40000	1000000	100 U	38833.0	10000 U	1483.0
Pyrene		40000	1000000	100 U	[61277.0]	10000 U	1658.0

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[ ] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 10 Former Interior Chemical Storage Areas

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-012 ES-MW12 (2-4) 06/01/98 3.00	MW-013 ES-MW13 (13-15) 06/01/98 14.00	MW-014D ES MW14D(26-28) 06/11/98 27.00	MW-014S ES-MW14 (1-3) 06/01/98 2.00
Arsenic				10	1.0 U	1.0 U	[10.5]	6.7
Barium				4700	36	43	42	79
Cadmium				34	0.5 U	0.5 U	0.5 U	0.5 U
Chromium					3.6	15.7	23.9 J	14.2
Lead				500	4.3	76.0	70.0	80.0
Mercury				20	0.02 U	1.41	0.83	0.15
Selenium				340	0.5 U	0.7	1.4	0.5 U
Silver				340	0.2 U	0.2 U	0.4	0.2 U

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[ ] = Greater than Action Level

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-020 ES-MW20 (11-13) 05/27/98 12.00	TB-018A ES-TB18A(16-18) 05/28/98 17.00
Arsenic				10	4.3	[10.7] J
Barium				4700	38	10.2
Cadmium				34	0.6 U	5.0
Chromium					10.2	90.4
Lead				500	11.0	350
Mercury				20	0.02 U	3.46
Selenium				340	0.6 U	0.6 U
Silver				340	0.2 U	4.6

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English Station
Summary of Soil Analytical Data
AOC 10 Former Interior Chemical Storage Areas

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-012 ES-MW12 (2-4) 06/01/98 3.00	MW-013 ES-MW13 (13-15) 06/01/98 14.00	MW-014D ES MW14D(26-28) 06/11/98 27.00	MW-014S ES-MW14 (1-3) 06/01/98 2.00
TPH			2500	500	25 U	45	[588]	140

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
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Station
Summary of Soil Analytical Data
AOC 10 Former Interior Chemical Storage Areas

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-020 ES-MW20 (11-13) 05/27/98 12.00	TB-018A ES-TB18A(16-18) 05/28/98 17.00	TB-108 TB-108 (8-10) 07/01/98 9.00	TB-108 TB-108 (12-14) 07/01/98 13.00
TPH			2500	500	29 J	[1492]	[4162]	[1542]

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
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Date: 07/27/98

English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-009 ES-TB9 (3-7) 06/04/98 5.00	TB-010 ES-TB10(11-13) 06/04/98 12.00
Acenaphthene		84000	1000000	100 U	100 U
Acenaphthylene		84000	1000000	100 U	100 U
Anthracene		400000	1000000	100 U	100 U
Benzo(a)anthracene		1000	1000	100 U	100 U
Benzo(a)pyrene		1000	1000	100 U	100 U
3,4-Benzofluoranthene		1000	1000	100 U	100 U
Benzo(k)fluoranthene		1000	8400	100 U	100 U
Chrysene		980	84000	100 U	100 U
Fluoranthene		56000	1000000	100 U	100 U
Phenanthrene		40000	1000000	100 U	100 U
Pyrene		40000	1000000	100 U	100 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	SED-01 ES SED1 (1) 06/12/98 1.00	TB-005 ES-TB5 (4-6) 06/04/98 5.00	TB-008A ES-TB8A (1-3) 06/04/98 2.00	TB-008B ES-TB8B (15-17) 06/04/98 16.00
Acenaphthene		84000	1000000	10000 U	100 U	100 U	100 U
Acenaphthylene		84000	1000000	10000 U	100 U	100 U	100 U
Anthracene		400000	1000000	10000 U	100 U	100 U	100 U
Benzo(a)anthracene		1000	1000	10000 U	100 U	100 U	100 U
Benzo(a)pyrene		1000	1000	10000 U	100 U	100 U	100 U
3,4-Benzofluoranthene		1000	1000	10000 U	100 U	100 U	100 U
Benzo(k)fluoranthene		1000	8400	10000 U	100 U	100 U	100 U
Chrysene		980	84000	10000 U	100 U	100 U	100 U
Fluoranthene		56000	1000000	10000 U	100 U	100 U	100 U
Phenanthrene		40000	1000000	10000 U	100 U	100 U	100 U
Pyrene		40000	1000000	10000 U	100 U	100 U	100 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-007 ES-MW7 (7-9) 06/04/98 8.00	MW-009A ES-MW9A(0-2) 05/26/98 1.00	MW-010 ESMW10 9-11 06/09/98 10.00	MW-022 ESMW22 7-9 06/09/98 8.00
Acenaphthene		84000	1000000	100 U	100 U	181.0	100 U
Acenaphthylene		84000	1000000	100 U	100 U	384.0	100 U
Anthracene		400000	1000000	100 U	100 U	664.0	100 U
Benzo(a)anthracene		1000	1000	100 U	100 U	[1089.0]	100 U
Benzo(a)pyrene		1000	1000	100 U	100 U	830.0	113.0
3,4-Benzofluoranthene		1000	1000	100 U	100 U	954.0	100 U
Benzo(k)fluoranthene		1000	8400	100 U	100 U	161.0	100 U
Chrysene		980	84000	100 U	100 U	[1536.0]	100 U
Fluoranthene		58000	1000000	100 U	135.0	2774.0	132.0
Phenanthrene		40000	1000000	100 U	100 U	448.0	100 U
Pyrene		40000	1000000	100 U	120.0	3333.0	142.0

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English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT (Units in ug/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-004D ESMW4D 36-40 06/10/98 38.00	MW-004S ES-MW45 (11-13) 05/27/98 12.00	MW-005 ES-MW5 (2-4) 05/26/98 3.00	MW-006 ESMW6 6-9 06/09/98 7.00
Acenaphthene		84000	1000000	100 U	100 U	100 U	100 U
Acenaphthylene		84000	1000000	100 U	100 U	100 U	122.0
Anthracene		400000	1000000	100 U	100 U	100 U	100 U
Benzo(a)anthracene		1000	1000	100 U	100 U	100 U	633.0
Benzo(a)pyrene		1000	1000	100 UJ	100 U	100 U	572.0
3,4-Benzofluoranthene		1000	1000	100 U	100 U	100 U	432.0
Benzo(k)fluoranthene		1000	8400	100 U	100 U	100 U	222.0
Chrysene		960	84000	100 U	100 U	100 U	100 U
Fluoranthene		56000	1000000	100 U	100 U	100 U	662.0
Phenanthrene		40000	1000000	100 U	100 U	100 U	464.0
Pyrene		40000	1000000	100 U	100 U	100 U	919.0

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-004D ESMW4D 36-40 06/10/98 38.00	MW-004S ES-MW4S (11-13) 05/27/98 12.00	MW-005 ES-MW5 (2-4) 05/26/98 3.00	MW-006 ESMW6 5-9 06/09/98 7.00
Arsenic				10	1.0 UJ	[39.4]	[47.2]	[68.6]
Barium				4700	24	30	50	32
Cadmium				34	0.5 U	0.5 U	0.5 U	24.3
Chromium					4.9	18.1	9.4	30.8
Lead				500	2.3	43.7	33.1	470
Mercury				20	0.02 U	0.10	0.06	0.59
Selenium				340	0.6	0.5 U	1.0	4.2

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Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-007 ES-MW7 (7-9) 06/04/98 8.00	MW-009A ES-MW9A(0-2) 05/26/98 1.00	MW-010 ESMW10 9-11 06/09/98 10.00	MW-022 ESMW22 7-9 06/09/98 8.00
Arsenic				10	[14.7]	[18.3]	3.6	[23.0]
Barium				4700	35	54	57	24
Cadmium				34	0.5 U	0.5 U	0.5 U	0.9
Chromium					12.0	9.8	9.3	27.1
Lead				500	49.4	62.9	97.1	13.0
Mercury				20	0.22	0.25	2.86	0.16
Selenium				340	5.2	1.1	1.5	3.5

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English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	SED-01 ES SED1 (1) 06/12/98 1.00	TB-005 ES-TB5 (4-6) 06/04/98 5.00	TB-008A ES-TB8A (1-3) 06/04/98 2.00	TB-008B ES-TB8B (15-17) 06/04/98 16.00
Arsenic				10	[16.3]	4.9	[23.1]	6.6
Barium				4700	31	53.0	100	28.0
Cadmium				34	0.5 U	0.5 U	0.5 U	0.5 U
Chromium					92.1 J	8.5	3.7	18.4
Lead				500	429	165	[807]	18.4
Mercury				20	1.67	1.20	0.38	0.02
Selenium				340	0.5 U	0.5 U	3.4	0.5 U

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[ ] = Greater than Action Level

Station
Summary Of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-009 ES-TB9 (3-7) 06/04/98. 5.00	TB-010 ES-TB10(11-13) 06/04/98 12.00	TB-104 TB-104 (2-4) 06/30/98 3.00	TB-104 TB-104 (4-6) 06/30/98 5.00
Arsenic				10	[93.0]	[13.8]	[10.1]	7.2
Barium				4700	50.0	102	NA	NA
Cadmium				34	3.7	4.0	NA	NA
Chromium					8.6	21.0	NA	NA
Lead				500	318	475	8.2	11.3
Mercury				20	0.94	2.03	NA	NA
Selenium				340	0.5 U	0.5 U	NA	NA

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Lilgish Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT (Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-106 TB-106 (3-5) 06/30/98 4.00	TB-107 TB-107 (2-4) 07/01/98 3.00	TB-107 TB-107 (6-8) 07/01/98 7.00
Arsenic			10	3.3	[34.4]	[11.8]
Barium			4700	NA	NA	NA
Cadmium			34	NA	NA	NA
Chromium				NA	NA	NA
Lead			500	19.5	80.5	78.3
Mercury			20	NA	NA	NA
Selenium			340	NA	NA	NA

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
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Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT	(Units in mg/l)	SITE		MW-004D	MW-004S	MW-005	MW-006	MW-007
		SAMPLE ID	GB Mobility	ESMW4D 36-40	ES-MW45 (11-13)	ES-MW5 (2-4)	ESMW6 5-9	ES-MW7 (7-9)
		DATE	Criteria	06/10/98	05/27/98	05/26/98	06/09/98	06/04/98
		DEPTH (ft)	CTDEP Jan. 1996	38.00	12.00	3.00	7.00	8.00
Arsenic (SPLP)			0.5	0.05 U	0.05 U	0.05 U	0.06	0.05 U
Cadmium (SPLP)			0.05	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Lead (SPLP)			0.15	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT (Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-107 TB-107 (6-8) 07/01/98 7.00
TPH		2500	500	129

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-104 TB-104 (6-8) 06/30/98 7.00	TB-106 TB-106 (8-10) 06/30/98 9.00	TB-106 TB-106 (10-12) 06/30/98 11.00	TB-107 TB-107 (2-4) 07/01/98 3.00
TPH			2500	500	25 U	[2118]	[2498]	380

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	TB-009 ES-TB9 (3-7) 06/04/98 5.00	TB-010 ES-TB10(11-13) 06/04/98 12.00	TB-104 TB-104 (2-4) 06/30/98 3.00	TB-104 TB-104 (4-6) 06/30/98 5.00
TPH			2500	500	57	25 U	[598]	45

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
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English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	SED-01 ES SED1 (1) 06/12/98 1.00	TB-005 ES-TB5 (4-6) 06/04/98 5.00	TB-008A ES-TB8A (1-3) 06/04/98 2.00	TB-008B ES-TB8B (15-17) 06/04/98 16.00
TPH			2500	500	35	97	25 U	25 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE			MW-007	MW-009A	MW-010	MW-022
		SAMPLE ID	GB Mobility	Residential	ES-MW7 (7-9)	ES-MW9A(0-2)	ESMW10 9-11	ESMW22 7-9
		DATE	Criteria	Criteria	06/04/98	05/26/98	06/09/98	06/09/98
		DEPTH (ft)	CTDEP Jan. 1996	CTDEP Jan. 1996	8.00	1.00	10.00	8.00
TPH			2500	500	25 U	25 U	30	25 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT	(Units in mg/kg)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	Residential Criteria CTDEP Jan. 1996	MW-004D ESMW4D 36-40 06/10/98 38.00	MW-004S ES-MW4S (11-13) 05/27/98 12.00	MW-005 ES-MW5 (2-4) 05/26/98 3.00	MW-006 ESMW6 5-9 06/09/98 7.00
TPH			2500	500	25 U	25 U	[1384] J	[974]

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[] = Greater than Action Level

English Station
Summary of Soil Analytical Data
AOC 12 Coal Storage

Date: 07/27/98

CONSTITUENT (Units in mg/l)	SITE SAMPLE ID DATE DEPTH (ft)	GB Mobility Criteria CTDEP Jan. 1996	MW-009A ES-MW9A(0-2) 05/26/98 1.00	MW-010 ESMW10 9-11 06/09/98 10.00	MW-022 ESMW22 7-9 06/09/98 8.00	SED-01 ES SED1 (1) 06/12/98 1.00	TB-005 ES-TB5 (4-6) 06/04/98 5.00
Arsenic (SPLP)		0.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadmium (SPLP)		0.05	0.005 U	0.005 U	[0.052]	0.005 U	0.005 U
Lead (SPLP)		0.15	0.014	0.005 U	0.008	0.023	0.005 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed
[ ] = Greater than Action Level

CONSTITUENT (Units in mg/l)	SITE		TB-008A	TB-008B	TB-009	TB-010
	SAMPLE ID	GB Mobility	ES-TB8A (1-3)	ES-TB8B (15-17)	ES-TB9 (3-7)	ES-TB10(11-13)
	DATE	Criteria	06/04/98	06/04/98	06/04/98	06/04/98
	DEPTH (ft)	CTDEP Jan. 1996	2.00	16.00	5.00	12.00
Arsenic (SPLP)		0.5	0.05 U	0.05 U	0.05 U	0.05 U
Cadmium (SPLP)		0.05	0.005 U	0.005 U	0.005 U	0.007
Lead (SPLP)		0.15	0.021	0.005 U	0.005 U	0.005 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit NA = Not analyzed

[Table 1]
Area 1, Area 2 and Area 3
All Soil Sampling and Analytical Data

Sample Date	Area	Location		Analysis Date	Depth Below Orignal Grade	Soil [ppm]
06/02/98	1	A	13	06/08/98	3.18	ND
06/02/98	1	B	13	06/08/98	7.75	3.60
06/02/98	1	B	13	06/08/98	9.75	ND
06/02/98	1	B	13	06/08/98	11.75	ND
06/02/98	1	B	14	06/08/98	11.21	ND
06/02/98	1	C	14	06/08/98	12.04	ND
06/02/98	1	D	13	06/08/98	8.84	4.10
06/02/98	1	D	13	06/08/98	10.84	ND
06/02/98	1	D	13	06/08/98	12.34	3.10
06/02/98	1	D	14	06/08/98	12.23	ND
06/02/98	1	E	13	06/08/98	9.08	2.50
06/02/98	1	E	13	06/08/98	11.08	1.60
06/02/98	1	E	14	06/08/98	11.86	ND
06/02/98	1	F	13	06/08/98	8.62	2.20
06/02/98	1	F	13	06/08/98	10.62	1.40
06/02/98	1	F	13	06/08/98	12.12	ND
06/02/98	1	F	14	06/08/98	5.23	1.70
06/02/98	1	G	13	06/08/98	8.77	12.90
06/02/98	1	G	13	06/08/98	10.77	1.20
06/02/98	1	G	13	06/08/98	12.27	ND
06/22/98	1	G	13	06/23/98	9.72	1.60
06/02/98	1	G	14	06/08/98	8.56	3.80
06/02/98	1	G	14	06/08/98	10.56	ND
06/02/98	1	G	14	06/08/98	12.06	1.90
06/03/98	2	A	11	06/12/98	0.5	1.80
06/02/98	2	A	12	06/09/98	-0.5	8.50
06/03/98	2	B	11	06/11/98	1.68	22.50
06/03/98	2	B	11	06/11/98	3.68	3.90
06/03/98	2	B	11	06/11/98	5.68	2.10
06/26/98	2	B	11	06/30/98	4.54	ND
06/02/98	2	B	12	06/09/98	6.38	2.30
06/02/98	2	B	12	06/09/98	8.38	ND
06/02/98	2	B	12	06/09/98	10.38	ND
06/02/98	2	B	12	06/09/98	12.38	ND
06/03/98	2	C	11	06/11/98	5.67	6.00
06/03/98	2	C	11	06/11/98	7.67	4.40
06/03/98	2	C	11	06/11/98	9.67	ND
06/03/98	2	C	11	06/15/98	11.67	ND
06/03/98	2	C	11	06/11/98	3.67	2.20
06/03/98	2	D	11	06/11/98	1.73	ND
06/03/98	2	D	11	06/11/98	3.73	ND
06/03/98	2	D	11	06/15/98	7.73	3.20
06/03/98	2	D	11	06/15/98	9.73	ND
06/03/98	2	D	11	06/15/98	11.73	ND
06/03/98	2	D	11	06/11/98	5.73	ND
06/02/98	2	D	12	06/12/98	6.13	ND
06/02/98	2	D	12	06/12/98	8.13	ND

[Table 1]
Area 1, Area 2 and Area 3
All Soil Sampling and Analytical Data

Sample Date	Area	Location		Analysis Date	Depth Below Orignal Grade	Soil [ppm]
06/02/98	2	D	12	06/12/98	10.13	4.60
06/02/98	2	D	12	06/12/98	12.13	ND
06/03/98	2	E	11	06/10/98	3.95	6.10
06/03/98	2	E	11	06/10/98	5.95	17.40
06/03/98	2	E	11	06/10/98	7.95	13.70
06/26/98	2	E	11	06/30/98	8.88	ND
06/02/98	2	E	12	06/15/98	7.61	ND
06/02/98	2	E	12	06/15/98	9.61	ND
06/02/98	2	E	12	06/15/98	11.61	1.30
06/03/98	2	F	11	06/10/98	4.02	ND
06/03/98	2	F	11	06/10/98	6.02	16.90
06/03/98	2	F	11	06/10/98	8.02	11.30
06/03/98	2	F	11	06/10/98	10.02	ND
06/03/98	2	F	11	06/11/98	12.02	ND
06/26/98	2	F	11	06/30/98	8.91	ND
06/03/98	2	F	12	06/09/98	8.55	8.80
06/03/98	2	F	12	06/09/98	10.55	2.60
06/03/98	2	F	12	06/09/98	12.05	2.00
06/03/98	2	G	12	06/10/98	7.74	1.60
06/03/98	2	G	12	06/10/98	9.74	ND
07/14/98	3	D	10	07/16/98	5.55	8.50
07/14/98	3	E	10	07/16/98	9.3	4.30
07/14/98	3	F	10	07/16/98	9.22	2.70
07/14/98	3	G	11	07/16/98	7.23	14.40
07/17/98	3	G	11	07/20/98	9.35	ND

[Table 2]
Area 1, Area 2 and Area 3
Pre and Post Remediation Soil Contamination Data

Sample Date	Area	Location		Analysis Date	Depth Below Orignal Grade	Soil [ppm]
06/02/98	1	G	13	06/08/98	8.77	12.90
06/02/98	1	G	13	06/08/98	12.27	ND
06/03/98	2	B	11	06/11/98	1.68	22.50
06/26/98	2	B	11	06/30/98	4.54	ND
06/03/98	2	E	11	06/10/98	5.95	17.40
06/03/98	2	E	11	06/10/98	7.95	13.70
06/26/98	2	E	11	06/30/98	8.88	ND
06/03/98	2	F	11	06/10/98	6.02	16.90
06/03/98	2	F	11	06/10/98	8.02	11.30
06/26/98	2	F	11	06/30/98	8.91	ND
07/14/98	3	G	11	07/16/98	7.23	14.40
07/17/98	3	G	11	07/20/98	9.35	ND

[Table 3]
Area 1, Area 2 and Area 3
All Wipe Sampling and Analytical Data

Sample Date	Area	Location		Analysis Date	Surface Wipe [ug / 100 cm2]
06/02/98	1	A	14	06/09/98	23.0
06/22/98	1	A	14	06/23/98	ND
06/03/98	2	G	12	06/09/98	73.0
07/21/98	2	G	12	07/22/98	3.6

[Table 4]
Bulkhead Deadman
All Wipe Sampling and Analytical Data

Sample Date	Area	Location		Analysis Date	Surface Wipe [ug / 100 cm2]
07/17/98	3	F	10	07/21/98	12
07/21/98	3	F	10	07/22/98	14
07/23/98	3	F	10	07/27/98	ND<5.0

[Table 5]
Ground Water
All Sampling and Analytical Data

Sample Date	Location	Analysis Date	Ground Water [ppb]
07/17/98	River	07/21/98	ND
07/22/98	GP-15	07/29/98	1.6
08/03/98	GP-3	08/05/98	2.7
07/14/98	Area 1 Well	07/18/98	<0.5
07/14/98	Area 2 Well	07/18/98	ND
07/14/98	Area 3	07/18/98	<0.5
07/14/98	MW-3	07/18/98	ND
07/14/98	MW-4	07/14/98	ND
07/14/98	6" Well	07/14/98	ND

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID	TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
B-14 "S"	ND	6/2/98	6/3/98	
C-14 "S"	ND	6/2/98	6/3/98	
D-14 "S"	ND	6/2/98	6/3/98	
E-14 "S"	ND	6/2/98	6/3/98	
F-14 "S"	1.7	6/2/98	6/3/98	
G-14 "S"	3.8	6/2/98	6/3/98	
G-14 0 - 2'	ND	6/2/98	6/3/98	
G-14 2 - 3.5'	1.9	6/2/98	6/3/98	

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID	TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
B-13 "S"	3.6	6/2/98	6/4/98	
B-13 0 - 2'	ND	6/2/98	6/4/98	
B-13 2 - 4'	ND	6/2/98	6/4/98	
D-13 "S"	4.1	6/2/98	6/4/98	
D-13 0 - 2'	ND	6/2/98	6/4/98	
D-13 2 - 3.5'	3.1	6/2/98	6/4/98	
E-13 0 - 2'	1.6	6/2/98	6/4/98	
F-13 "S"	2.2	6/2/98	6/4/98	
G-13 "S"	12.9	6/2/98	6/4/98	
G-13 0 - 2'	1.2	6/2/98	6/4/98	
G-13 2 - 3.5'	ND	6/2/98	6/4/98	

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID	TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
A-13 "S"	ND	6/2/98	6/5/98	
E-13 "S"	2.5	6/2/98	6/5/98	
F-13 0 - 2'	1.4	6/2/98	6/5/98	
F-13 2 - 3.5'	ND	6/2/98	6/5/98	

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID	TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
A-12 "S"	8.5 ✓	6/2/98	6/9/98	
B-12 "S"	2.3 ✓	6/2/98	6/9/98	
B-12 0 - 2'	ND ✓	6/2/98	6/9/98	
B-12 2 - 4'	ND ✓	6/2/98	6/9/98	
B-12 4 - 6'	ND ✓	6/2/98	6/9/98	
F-12 "S"	8.8 ✓	6/3/98	6/9/98	
F-12 0 - 2'	2.6 ✓	6/3/98	6/9/98	
F-12 2 - 3.5'	2.0 ✓	6/3/98	6/9/98	
G-12 "S"	1.6 ✓	6/3/98	6/10/98	
G-12 0 - 2'	ND ✓	6/3/98	6/10/98	
E-11 "S"	6.1 ✓	6/3/98	6/10/98	
E-11 0 - 2'	17.4	6/3/98	6/10/98	

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID		TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
E-11	2 - 4'	13.7	6/3/98	6/10/98	
F-11 "S"		ND	6/3/98	6/10/98	
F-11	0 - 2'	18.9	6/3/98	6/10/98	
F-11	2 - 4'	11.3	6/3/98	6/10/98	
F-11	4 - 6'	ND	6/3/98	6/10/98	
F-11	6 - 8'	ND	6/3/98	6/11/98	
D-11 "S"		ND	6/3/98	6/11/98	
D-11	0 - 2'	ND	6/3/98	6/11/98	
D-11	2 - 4'	ND	6/3/98	6/11/98	
C-11 "S"		2.2	6/3/98	6/11/98	
C-11	0 - 2'	6.0	6/3/98	6/11/98	
C-11	2 - 4'	4.4	6/3/98	6/11/98	
C-11	4 - 6'	ND	6/3/98	6/11/98	
B-11 "S"		22.5	6/3/98	6/11/98	
B-11	0 - 2'	3.9	6/3/98	6/11/98	
B-11	2 - 4'	2.1	6/3/98	6/11/98	
Pea Stone - Composite		ND	6/3/98	6/11/98	

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID		TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
A-11 "S"		1.8	6/3/98	6/12/98	
D-12 "S"		ND	6/2/98	6/12/98	
D-12	0 - 2'	ND	6/2/98	6/12/98	
D-12	2 - 4'	4.6	6/2/98	6/12/98	
D-12	4 - 6'	ND	6/2/98	6/12/98	

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID		TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
E - 12	0 - 2'	ND ✓	6/2/98	6/15/98	
E -12 "S"		ND ✓	6/2/98	6/15/98	
E - 12	2 - 4'	1.3 ✓	6/2/98	6/15/98	
D - 11	4 - 6'	3.2 ✓	6/3/98	6/15/98	
D - 11	6 - 8'	ND ✓	6/3/98	6/15/98	
D - 11	8 - 10'	ND ✓	6/3/98	6/15/98	
C - 11	6 - 8'	ND ✓	6/3/98	6/15/98	

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID	TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
G - 13 P Surface	1.6	6/22/98	6/23/98	

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID	TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
B-11 P	ND	6/26/98	6/30/98	
E-11 P	ND	6/26/98	6/30/98	
F-11 P	ND	6/26/98	6/30/98	

ENGLISH STATION

PCB

Chip Samples - Remediation

SAMPLE ID	TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
C - 4 P Top Concrete	ND	6/25/98	7/1/98	
C - 4 P Bottom Concret	ND	6/25/98	7/1/98	
C - 3 P Bottom Concret	ND	6/25/98	7/2/98	
C - 3 P Top Concrete	ND	6/25/98	7/6/98	

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID		TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
F-10 P	Surface	2.7	7/14/98	7/16/98	
E-10 P	Surface	4.3	7/14/98	7/16/98	
D-10 P	Surface	8.5	7/14/98	7/16/98	
Vault Soil		14.4	7/14/98	7/16/98	

ENGLISH STATION

PCB

Soil Samples - Remediation

SAMPLE ID	TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
G - 11 P	ND	7/17/98	7/20/98	

ENGLISH STATION
PCB

Wipe Samples - Remediation

SAMPLE ID	TEST RESULT ug/100cm^2	SAMPLE DATE	ANALYSIS DATE	COMMENTS
A - 14 Wipe	23.0	6/2/98	6/3/98	
C - 13 Wipe	3.0	6/2/98	6/3/98	
C - 12 Wipe	9.0	6/2/98	6/3/98	
Vault Wipe	73.0	6/2/98	6/3/98	

Avg 2 Side

ENGLISH STATION
PCB

Wipe Samples - Remediation

SAMPLE ID	TEST RESULT ug/100cm^2	SAMPLE DATE	ANALYSIS DATE	COMMENTS
A - 14 P	ND	6/22/98	6/23/98	
Concrete Footing P	< 1.0	6/22/98	6/23/98	

ENGLISH STATION
PCB

Wipe Samples - Remediation

SAMPLE ID	TEST RESULT ug/100cm^2	SAMPLE DATE	ANALYSIS DATE	COMMENTS
Vault Wipe - P	ND	7/14/98	7/15/98	

Area 3 Side

ENGLISH STATION
PCB

Wipe Samples - Remediation

SAMPLE ID	TEST RESULT ug/100cm^2	SAMPLE DATE	ANALYSIS DATE	COMMENTS
E - 10 P	3.0	7/17/98	7/21/98	
F - 10 P	12.0	7/17/98	7/21/98	

ENGLISH STATION

PCB

WATER SAMPLE - Remediation

SAMPLE ID	TEST RESULT ug/L	SAMPLE DATE	ANALYSIS DATE	COMMENTS
Area 1 Well	< 0.50	7/14/98	7/18/98	
Area 2 Well	ND	7/14/98	7/18/98	
Area 3 Groundwater	< 0.50	7/14/98	7/18/98	
MW 3	ND	7/14/98	7/18/98	
MW 4	ND	7/14/98	7/18/98	
6" Well	ND	7/14/98	7/18/98	

ENGLISH STATION

PCB

WATER SAMPLE - Remediation

SAMPLE ID	TEST RESULT ug/L	SAMPLE DATE	ANALYSIS DATE	COMMENTS
River Water West of Remediation	ND	7/17/98	7/21/98	

ENGLISH STATION

PCB

WATER SAMPLE - Remediation

SAMPLE ID	TEST RESULT ug/L	SAMPLE DATE	ANALYSIS DATE	COMMENTS
GP - 15	1.6	7/22/98	7/29/98	

Sheet2

ENGLISH STATION

PCB

Soil Samples

SAMPLE ID		TEST RESULT mg/Kg (ppm)	SAMPLE DATE	ANALYSIS DATE	COMMENTS
GP - 20 A	0 - 2'	ND	4/22/99	4/26/99	
GP - 20 A	2 - 4'	ND	4/22/99	4/26/99	
GP - 20 A	4 - 6'	ND	4/22/99	4/26/99	
GP - 20 A	6 - 8'	8.2	4/22/99	4/26/99	
GP - 20 A	8 - 10'	1.1	4/22/99	4/26/99	
GP - 20 A	10 - 12'	ND	4/22/99	4/26/99	
GP - 30	0 - 2'	ND	4/22/99	4/26/99	
GP - 30	2 - 4'	ND	4/22/99	4/26/99	
GP - 30	4 - 6'	3.8	4/22/99	4/26/99	
GP - 30	6 - 8'	5.4	4/22/99	4/26/99	
GP - 30	8 - 10'	ND	4/22/99	4/26/99	
GP - 30	10 - 12'	ND	4/22/99	4/26/99	
GP - 31	0 - 2'	ND	4/22/99	4/27/99	
GP - 31	2 - 4'	ND	4/22/99	4/27/99	
GP - 31	4 - 6'	ND	4/22/99	4/28/99	
GP - 31	6 - 8'	7.1	4/22/99	4/27/99	
GP - 31	8 - 10'	ND	4/22/99	4/27/99	
GP - 31	10 - 12'	ND	4/22/99	4/28/99	
GP - 32	0 - 2'	ND	4/22/99	4/29/99	
GP - 32	2 - 4'	ND	4/22/99	4/28/99	
GP - 32	4 - 6'	1.2	4/22/99	4/28/99	
GP - 32	6 - 8'	8.7	4/22/99	4/28/99	
GP - 32	8 - 10'	2.6	4/22/99	4/28/99	
GP - 32	10 - 12'	ND	4/22/99	4/29/99	
GP - 33	0 - 2'	ND	4/22/99	4/29/99	
GP - 33	2 - 4'	ND	4/22/99	4/29/99	
GP - 33	4 - 6'	ND	4/22/99	4/29/99	
GP - 33	6 - 8'	ND	4/22/99	4/29/99	
GP - 33	8 - 10'	ND	4/22/99	4/29/99	
GP - 33	10 - 11'	ND	4/22/99	4/29/99	

ENGLISH STATION

PCB

SOIL SAMPLES

SAMPLE ID		TEST RESULT mg/Kg	SAMPLE DATE	ANALYSIS DATE	COMMENTS
MW 50	0' - 2'	ND	10/12/99	10/27/99	
MW 50	2' - 4'	ND	10/12/99	10/27/99	
MW 50	4' - 6'	1.4	10/12/99	10/27/99	type 1260
MW 50	8' - 10'	ND	10/12/99	10/27/99	
MW 50	10' - 12'	ND	10/12/99	10/27/99	
MW 51	0' - 2'	ND	10/12/99	10/25/99	
MW 51	2' - 4'	ND	10/12/99	10/25/99	
MW 51	4' - 6'	ND	10/12/99	10/26/99	
MW 51	6' - 8'	1.7	10/12/99	10/26/99	type 1260
MW 51	8' - 10'	ND	10/12/99	10/26/99	
MW 51	10' - 12'	ND	10/12/99	10/26/99	
MW 52	4' - 6'	ND	10/12/99	10/27/99	
MW 53	0' - 2'	ND	10/12/99	10/21/99	
MW 53	2' - 4'	ND	10/12/99	10/21/99	
MW 53	4' - 6'	ND	10/12/99	10/21/99	
MW 53	6' - 8'	2.6	10/12/99	10/25/99	type 1260
MW 53	8' - 10'	ND	10/12/99	10/25/99	
MW 53	10' - 12'	ND	10/12/99	10/25/99	

English Station
Summary of Soil Analytical Data
Station B
(AOC 1)

PERIOD: From 06/01/1998 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	Indust./Comm. Criteria CTDEP Jan. 1996	GB Mobility Criteria CTDEP Jan. 1996	MW-003 ES-MW3 (15-17) 06/04/1998 16.00	TB-006 ES-TB6 (1-7) 06/04/1998 4.00	TB-007 ES-TB7 (5) 06/04/1998 5.00	TB-007A ES-TB7A (7-9) 06/04/1998 8.00
Anthracene	(ug/kg)	2500000	400000	100U	198.0	100U	100U
Benzo(a)anthracene	(ug/kg)	7800	1000	100U	411.0	124.0	100U
Benzo(a)pyrene	(ug/kg)	1000	1000	100U	393.0	100U	184.0
Benzo(k)fluoranthene	(ug/kg)	78000	1000	100U	426.0	100U	627.0
Chrysene	(ug/kg)	780000	960	100U	692.0	100U	109.0
Fluoranthene	(ug/kg)	2500000	56000	100U	778.0	193.0	206.0
Naphthalene	(ug/kg)	2500000	56000	100U	156.0	100U	100U
Phenanthrene	(ug/kg)	2500000	40000	100U	771.0	142.0	135.0
Pyrene	(ug/kg)	2500000	40000	100U	811.0	216.0	228.0
TPH	(mg/kg)	2500	2500	25U	[4397]J	489	25U
ETPH	(mg/kg)	2500	2500	NA	NA	NA	NA

Only those parameters detected are shown.
Sample ES-TB(1-7) was superceded by TB-217 ETPH Analysis

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
Station B
(AOC 1)

PERIOD: From 06/01/1998 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft)	Indust./Comm. Criteria CTDEP Jan. 1996	GB Mobility Criteria CTDEP Jan. 1996	TB-102 TB-102 (6-8) 06/30/1998 7.00	TB-102 TB-102 (8-12) 06/30/1998 10.00	TB-103 TB-103 (4-6) 06/30/1998 5.00	TB-103 TB-103 (8-10) 06/30/1998 9.00
Anthracene	(ug/kg)	2500000	400000	NA	NA	NA	NA
Benzo(a)anthracene	(ug/kg)	7800	1000	NA	NA	NA	NA
Benzo(a)pyrene	(ug/kg)	1000	1000	NA	NA	NA	NA
Benzo(k)fluoranthene	(ug/kg)	78000	1000	NA	NA	NA	NA
Chrysene	(ug/kg)	780000	960	NA	NA	NA	NA
Fluoranthene	(ug/kg)	2500000	56000	NA	NA	NA	NA
Naphthalene	(ug/kg)	2500000	56000	NA	NA	NA	NA
Phenanthrene	(ug/kg)	2500000	40000	NA	NA	NA	NA
Pyrene	(ug/kg)	2500000	40000	NA	NA	NA	NA
TPH	(mg/kg)	2500	2500	63	68	25U	384
ETPH	(mg/kg)	2500	2500	NA	NA	NA	NA

Only those parameters detected are shown.
Sample ES-TB(1-7) was superceded by TB-217 ETPH Analysis

NA=Not analyzed