ENVIRONMENTAL CONSULTING & MANAGEMENT
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October 1, 1997

Richard Gardineer, P.E.
Regional Remediation Engineer
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, New York 11101

Re: Summary of Results from Additional Soil Samples Collected in Operable Unit 1 at Sunnyside Yard, Queens, New York

Dear Mr. Gardineer:

As you are aware from our June 24, 1997 meeting and subsequent July 8, 1997 correspondence, Amtrak agreed to sample two additional soil borings within Operable Unit 1 (OU-1) at Sunnyside Yard, Queens, New York (Yard) in response to the New York State Department of Environmental Conservation's (NYSDEC's) concern regarding a "regular tight grid" spacing for installation of soil borings in OU-1. This letter report presents the results of that limited investigation.

On August 20, 1997, Roux Associates, Inc. (Roux Associates) completed two soil borings (HST-19 and HST-20) in OU-1 at the NYSDEC-approved locations shown on the attached Figure 1. Soil samples were collected at each location from the 0 to 2 feet below land surface (bls) interval and the vadose zone (i.e., the interval immediately above the water table) to be analyzed for the constituents of concern at OU-1 (i.e., polychlorinated biphenyls [PCBs], carcinogenic polycyclic aromatic hydrocarbons [CPAHs], and lead).

The soil borings were advanced from land surface to the water table using decontaminated hand tools (i.e., posthole digger and hand auger). Soil excavated from each distinct sample interval was placed on plastic, homogenized, and a representative sample collected.

All soil samples were placed on ice immediately after collection and transported to IEA Laboratory, Monroe, Connecticut for analyses using the 1995 NYSDEC Analytical Services Protocols CLP Methods.

On September 5, 1997, a duplicate 0 to 2 feet bls sample was collected at HST-20 to replace the original sample which was misplaced at the laboratory.

The lithology encountered in each boring consisted of less than one foot of ballast with dark brown fine to coarse sand with trace gravel overlying tan to orange brown fine to coarse sand with trace gravel.

The soil analytical data are presented in Tables 1 through 3, attached and the data are summarized below.

Polychlorinated Biphenyls - Results of the PCB analyses are presented in Table 1. As shown in the table, PCB concentrations ranged from not detected to a high of 400 micrograms per kilogram (µg/kg) or 0.4 parts per million (ppm), well below the NYSDEC-recommended soil cleanup level of 25 ppm.

Carcinogenic Polycyclic Aromatic Hydrocarbons - Table 2 presents the results of the CPAH analyses. As shown in the table, total CPAH concentrations ranged from not detected to a high of 412 µg/kg or 0.412 ppm, well below the NYSDEC-recommended soil cleanup level for total CPAHs of 10 ppm.

Lead - The results of the lead analyses are presented in Table 3. As shown in the table, lead concentrations ranged from 4 milligrams per kilogram (mg/kg) or ppm, to 18.8 mg/kg, or ppm, well below the NYSDEC-recommended soil cleanup level for lead of 1,000 ppm.

In conclusion, the analytical data from the two additional soil borings in OU-1 indicate that no NYSDEC-recommended soil cleanup levels were exceeded for the contaminants of concern. Therefore, Roux Associates, on behalf of Amtrak, is requesting written confirmation from the NYSDEC that no further action other than specified in the August 13, 1997 Record of Decision for Operable Unit 1, Sunnyside Yard, Queens, New York will be required.

If you have any questions or require additional information, please do not hesitate to call.

Sincerely,

ROUX ASSOCIATES, INC.

Harry Gregory
Project Hydrogeologist/
Project Manager

Joseph D. Duminuco
Principal Hydrogeologist

Attachments

cc: H. Agrawal, P.E., NYSDEC
W. Kuehner, NYSDOH
R. Noonan, Amtrak
R. LaRosa, P.E., Amtrak
R. Mohlenhoff, P.E., Amtrak
I. Oncu, P.E., Amtrak
J. Matthews, Amtrak
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L. Steffes, Esq., Amtrak
S. Jurow, NJT
C. Warren, Esq., Robinson, Silverman, et al.
C. Rosenthal, Esq., Kalkines, Arky, Zall & Bernstein

TABLES

Table 1. Summary of Polychorinated Biphenyl Compound Concentrations Detected in Additional Soil Samples Collected in Operable Unit 1, Sunnyside Yard, Queens, New York.

Parameter (Concentrations in µg/kg)	NYSDEC Recommended Soil Cleanup Level	HST-19 0-2 8/21/97	HST-19 2-3.7 8/21/97	HST-20 0-2 9/6/97	HST-20 3-5 8/21/97
Sample Designation:		**HST-19**	**HST-19**	**HST-20**	**HST-20**
Sample Depth (ft bls):		**0-2**	**2-3.7**	**0-2**	**3-5**
Sample Date:		**8/21/97**	**8/21/97**	**9/6/97**	**8/21/97**
Aroclor-1016	--	33 U	33 U	33 U	33 U
Aroclor-1221	--	67 U	67 U	67 U	67 U
Aroclor-1232	--	33 U	33 U	33 U	33 U
Aroclor-1242	--	33 U	33 U	33 U	33 U
Aroclor-1248	--	33 U	33 U	33 U	33 U
Aroclor-1254	--	**15 J**	33 U	**40**	**280**
Aroclor-1260	--	**62**	33 U	**87**	**120 J**
Total Aroclors	25,000	**77**	0	**127**	**400**

µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
U - Compound was analyzed for but not detected
J - Estimated value

Table 2. Summary of Carcinogenic Polycyclic Aromatic Hydrocarbons (CPAHs) Concentrations Detected in Additional Soil Samples Collected in Operable Unit 1, Sunnyside Yard, Queens, New York.

Parameter (Concentrations in µg/kg)	NYSDEC Recommended Soil Cleanup Level	**Sample Designation:** **HST-19**	**HST-19**	**HST-20**	**HST-20**
		Sample Depth (ft bls): **0-2**	**2-3.7**	**0-2**	**3-5**
		Sample Date: **8/21/97**	**8/21/97**	**9/6/97**	**8/21/97**
Benzo(a)anthracene	--	**14 J**	330 U	330 U	**32 J**
Benzo(a)pyrene	--	**14 J**	330 U	**160 J**	**29 J**
Benzo(b)fluoranthene	--	**23 J**	330 U	**12 J**	**50 J**
Benzo(k)fluoranthene	--	330 U	330 U	330 U	330 U
Chrysene	--	**24 J**	330 U	330 U	**57 J**
Dibenzo(a,h)anthracene	--	330 U	330 U	330 U	330 U
Indeno(1,2,3-cd)pyrene	--	**16 J**	330 U	**240 J**	**25 J**
Total CPAH	10,000	**91**	0	**412**	**193**

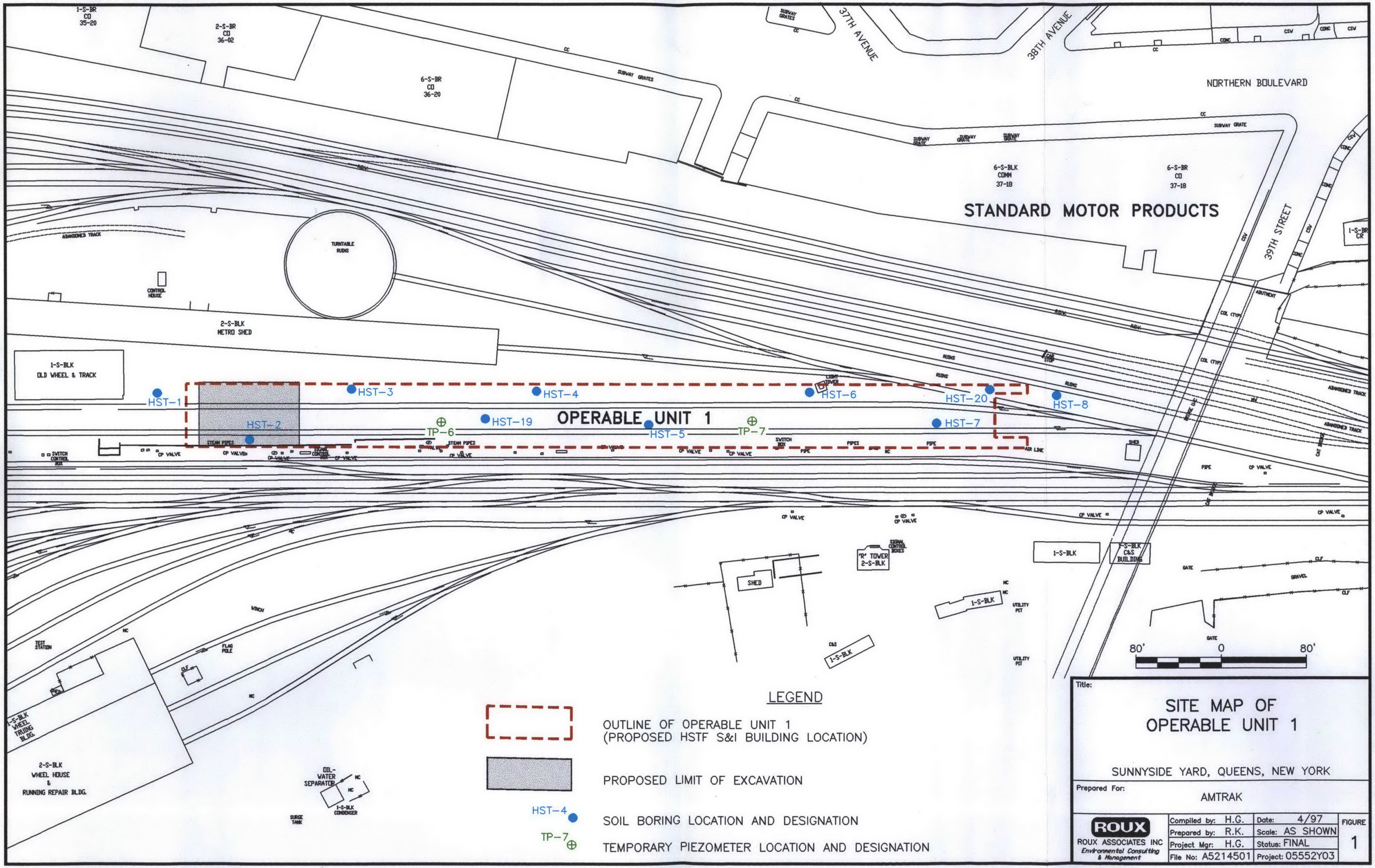
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
U - Compound was analyzed for but not detected
J - Estimated value

Table 3. Summary of Lead Concentrations Detected in Additional Soil Samples Collected in Operable Unit 1, Sunnyside Yard, Queens, New York.

Parameter (Concentrations in mg/kg)	NYSDEC Recommended Soil Cleanup Level	HST-19 0-2 8/21/97	HST-19 2-3.7 8/21/97	HST-20 0-2 9/6/97	HST-20 3-5 8/21/97
Sample Designation:		**HST-19**	**HST-19**	**HST-20**	**HST-20**
Sample Depth (ft bls):		**0-2**	**2-3.7**	**0-2**	**3-5**
Sample Date:		**8/21/97**	**8/21/97**	**9/6/97**	**8/21/97**
Lead	1,000	**9.3**	**4.0**	**18.8**	**6.7**

mg/kg - Milligrams per kilogram
ft bls - Feet below land surface

FIGURES



LEGEND

OUTLINE OF OPERABLE UNIT 1
(PROPOSED HSTF S&I BUILDING LOCATION)

PROPOSED LIMIT OF EXCAVATION

HST-4 SOIL BORING LOCATION AND DESIGNATION

TP-7 TEMPORARY PIEZOMETER LOCATION AND DESIGNATION

Title:

SITE MAP OF OPERABLE UNIT 1

SUNNYSIDE YARD, QUEENS, NEW YORK

Prepared For:

AMTRAK

ROUX ASSOCIATES INC
Environmental Consulting & Management

Compiled by: H.G.	Date: 4/97	FIGURE
Prepared by: R.K.	Scale: AS SHOWN	1
Project Mgr: H.G.	Status: FINAL	
File No: A5214501	Project: 05552Y03	