ENVIRONMENTAL CONSULTING & MANAGEMENT ROUX ASSOCIATES INC

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August 29, 1996

Richard H. Mohlenhoff, P.E. Environmental Compliance Engineer National Railroad Passenger Corporation 400 West 31st Street 6th Floor New York, New York 10001

Re: Phase I Soil Sampling Results in Support of Construction of the New Engine House and Related Track, Sunnyside Yard, Queens, New York

Dear Mr. Mohlenhoff:

This letter report is provided to AMTRAK as a summary of the Phase I Soil Sampling program conducted by Roux Associates, Inc. on July 24, 1996. As presented in the July 12, 1996 proposal, the sampling and analysis, which supports the New Engine House Construction Project (Project), was designed in two phases to allow the Project to proceed with minimal disruption of operations while identifying the need to manage construction derived materials as hazardous prior to construction.

A total of 16 samples, (EH-1 through EH-10, and EH-19, EH-20, EH-21, EH-23, EH-24, and EH-25 [Figure 1]) were collected approximately every 150 feet along the proposed feeder tracks to the proposed New Engine House. All samples were collected from zero to two feet below the bottom of the ballast layer. In addition to the routine samples, aliquots from samples EH-1, EH-2, EH-5, EH-6, and EH-8 were composited to form sample WC-1 which is used for waste characterization. Results from the composite sample were submitted to you previously, therefore, no further discussions regarding this sample are provided here. All samples were analyzed by IEA Laboratory, Inc. of Monroe, Connecticut for Total Petroleum Hydrocarbons (TPHs) using Method 418.1 and Polychlorinated Biphenyls (PCBs) using Method 8080.

Results and Discussion

The upper 0.5 feet of the sediments which comprise the 0-2 foot interval are typically brown to black, fine to coarse sand with traces of ballast and gravel. From 0.5 to 2 feet below the bottom of the ballast layer the sediments typically consist of tan, fine to coarse sand with traces of gravel.

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Analytical results are presented in Table 1. Total Petroleum hydrocarbon and PCBs were detected in all samples. Total petroleum hydrocarbon concentrations ranges from 48.6 milligrams per kilogram (mg/kg) in EH-8 to 1,270 mg/kg in sample EH-20. Results for PCBs range from 190 micrograms per kilogram (μ g/kg) in sample EH-1 to 17,000 μ g/kg in EH-9. Of the PCBs, only Aroclor 1260 was detected. Because the levels of PCBs in samples EH-3, EH-4, EH-6 through EH-10, EH-19, EH-20, and EH-24 exceeded the method detection limit of 33 μ g/kg, these samples were diluted and reanalyzed. Note that one μ g/kg is equivalent to one part per billion or ppb, and that one mg/kg is equivalent to one part per million or ppm.

No samples exceeded AMTRAKs internal guidance value of 1500 ppm for evaluating TPH in soils. The average TPH concentration for all 16 samples is approximately 500 ppm which is what was estimated to be background for the Sunnyside Yard as presented in the Phase I Remedial Investigation (RI) Report.

With the exception of sample EH-9, no levels of PCBs detected exceeded any established or proposed threshold(s). The PCB concentration in EH-9 (i.e., 17 ppm) exceeded AMTRAKs internal guidance of 10 ppm. However, it is currently anticipated that the NYSDEC will accept a 25 ppm level for PCBs in soils being proposed by AMTRAK. From a disposal perspective, all PCB concentrations are well below the 50 ppm cleanup level suggested by the Toxic Substances Control Act (TSCA).

We are prepared to begin the Phase II investigation at the proposed New Engine House as soon as we are notified by AMTRAK to proceed. If you have any questions regarding the information provided in this summary report please do not hesitate to call me at (516) 232-2600.

Sincerely Yours,

ROUX ASSOCIATES, INC. . Halloran

Neil J. Q'Halloran Senior Geochemist/ Project Manager

cc: J. H. Shaffer, AMTRAK J. D. Duminuco, Roux Associates

ROUX ASSOCIATES, INC.

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TABLES

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 Table 1. Summary of Polychlorinated Biphenyl Compounds and Total Petroleum Hydrocarbon Concentrations Detected in Soil Samples from the Proposed New Engine House Construction Project Area, Sunnyside, Queens, New York.

Sample Designation: Sample Depth: Sample Date:	EH-1 0-2 7/24/96	EH-2 0-2 7/24/96	EH-3DL* 0-2 7/24/96	EH-4DL* 0-2 7/24/96	EH-5 0-2 7/24/96	EH-6DL 0-2 7/24/96
(Concentrations in µg/kg)						
Aroclor-1016	36 U	37 U	360 U	380 U	37 U	380
Aroclor-1221	36 U	37 U	360 U	380 U	37 U	380
Aroclor-1232	36 U	37 U	360 U	380 U	37 U	380
Aroclor-1242	36 U	37 U	360 U	380 U	37 U	380
Aroclor-1248	36 U	37 U	360 U	380 U	37 U	380
Aroclor-1254	36 U	37 U	360 U	380 U	37 U	380
Aroclor-1260	190	790	3100	2800	560	5600
TPH (mg/kg)	57.1	231	986	349	279	1050
Sample Designation: Sample Depth: Sample Date:	EH-7DL* 0-2 7/24/96	EH-8DL* 0-2 7/24/96	EH-9DL* 0-2 7/24/96	EH-10DL* 0-2 7/24/96	EH-19DL* 0-2 7/24/96	EH-20D 0-2 7/24/96
(Concentrations in µg/kg)						
Arcolog 1016	190.11	190.11	010.11	260.11	270 11	370
Aroclor 1221	180 U	180 U	01010	360 U	370 U	370
Aroclor-1221	180 U	180 U	11 010	360 11	370 11	370
Aroclor-1232	180 U	180 U	11 010	360 U	370 11	370
Aroclor-1242	180 U	180 U	91011	360 U	370 U	370
Aroclor-1254	180 U	180 U	11 019	360 U	370 U	370
Aroclor-1260	1800	1900	17000	5800	3200	2100
TPH (mg/kg)	361	48.6	421	1090	330	1270
Sample Designation: Sample Depth: Sample Date:	EH-21 0-2 7/24/96	EH-23 0-2 7/24/96	EH-24DL* 0-2 7/24/96	EH-25 0-2 7/24/96		
(Concentrations in µg/kg)						
Arealan 1016	27.11	26.11	270 11	27.11		
Aroclor-1010	37 U	50 U	UU (د ۲۱ م ر د	U / د بر جد		
Aroclor-1221 Aroclor-1232	U / ز ۱۱ ۳۰	20 U	370 U	3/U 11 72		
Aroclor-1232	37 U	26 U	370 0	370		
Arocior-1242	ט <i>ו</i> כ זו דר	26 11	370 0	370		
Aroclor-1240	57 U 11 CC	24 11	370 0	370		
Aroclor-1260	37 U 1400	30 U 470	3300	420		
	1400	U				
TPH (malka)	443	126	450	459		

* - Samples designated with DL were diluted because the initial results were greater than the method detection limit.

FIGURES

