ecology and environment, inc.

160 SPEAR STREET, SAN FRANCISCO, CALIFORNIA 94105, TEL. 415/777-2811 / FAX 415/777-4074

International Specialists in the Environment

FACSIMILE TRANSMISSION FORM

Date: 1/29/93	Time: 4:00 Pm
Project Charge Nº: XA-602	Total Nº of Pages: (including fax form) 7
To: Mark Armstrong	
Location / Company: Earth Metrics	
Fax Phone Nº: (415) 742-1033	
From: Bob Enkeboll	

Message:

Here is the information that you requested. Let me know if you want me to also mail a copy to you -

Bob

ecology and environment, inc.

160 SPEAR STREET, SAN FRANCISCO, CALIFORNIA 94105, TEL. 415/777-2811

International Specialists in the Environment

July 16, 1990

Mr. John Moe
Southern Pacific Transportation Company
One Market Plaza
San Francisco, California 94105

Dear John:

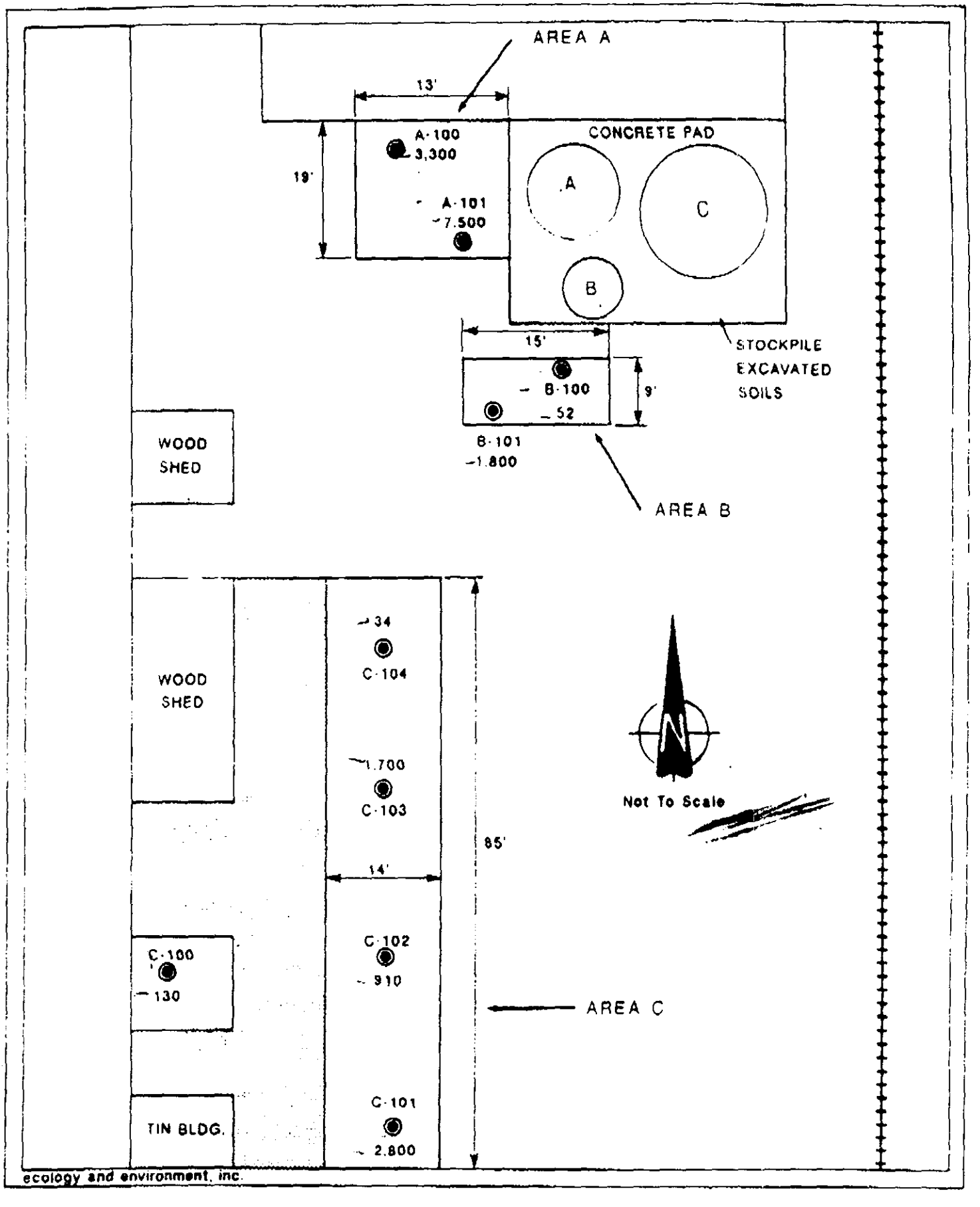
Re: Summary of Post-Excavation Sampling Results of the SPTCo. High Street Site, Oakland, California

This letter summarizes the soil excavation activities at Southern Pacific Transportation Company's (SPTCo.'s) property at 744 High Street in Oakland, California. Soil excavation occurred on two days, Monday, April 30 and Tuesday, May 8, 1990. Soil was excavated by IT Corporation under contract to SPTCo. Oversight and post-excavation sampling was provided by Ecology and Environment, Inc. (E & E).

Based on results of previous soil sampling conducted by E & E, three areas were identified as requiring remediation based on the presence of soil visibly stained with petroleum or on sample results indicating that PCBs above 50 ppm may be present. The remediation cleanup level for petroleum stained soil was 1,000 ppm total petroleum hydrocarbons. The three areas requiring excavation are shown on Figure 1. During the initial excavation on April 30, 1990, soil was excavated from the three areas to depths between 1 and 1.5 feet. A total of 13.7 cubic yards were excavated from area A; 7.5 cubic yards were excavated from area B, and 44.1 cubic yards were excavated from area C. In area B, surface soils were underlain at about 2 feet by dark gray clay. Area C was underlain at about 1 to 1.5 feet by a very hard, glossy, black, vesicular slag material. The deepest excavation in area A was about 1.5 feet and the material encountered was a brown soil. The objective of the excavation was to remove all soil from the three areas that were visibly stained with oil. Excavated soil was stockpiled on a concrete pad near monitoring well A-1 (see Figure 1). The excavated soil was placed directly on the concrete slab. Soil excavated from each area was stockpiled separately so that each pile could be handled separately, if necessary. Stockpiled soil was covered with plastic.

Following the excavation, E & E collected nine soil samples from the base of the excavations at locations shown in Figure 1. Two samples were collected from areas A and B and five were collected from area C. Soil samples from areas A and B were analyzed for TPHs; samples from

mbe/moe/12


AREA A
13'
A-100
3,300
19'
A-101
7,500
CONCRETE PAD
A
C
B
15'
STOCKPILE
EXCAVATED
SOILS
B-100
52
9'
B-101
1,800
AREA B
WOOD
SHED
WOOD
SHED
34
C-104
1,700
C-103
85'
14'
C-102
910
C-100
130
AREA C
C-101
2,800
TIN BLDG.
N
Not To Scale
ecology and environment, inc.

area C were analyzed for TPHs and PCBs. Analyses were performed by Curtis & Tompkins Laboratory in Berkeley, California, on a 24-hour turnaround of results for PCBs and a 48-hour turnaround for TPHs. Results are presented in Table 1.

The results indicated that the initial excavation had been adequate for PCBs, but TPHs exceeding the 1,000 ppm action level occurred in all three excavation areas. TPHs above 1,000 ppm were detected even though all visibly oil-stained soil had been removed.

A second phase of excavation was scheduled for May 8, 1990. The objective was to excavate soil to the gray clay that occurred at about 2 feet in area B. During the second phase of excavation, the gray clay was encountered in area A at about 2 feet and in area C at about 2.5 feet. In area C, the hard, slaggy material was entirely removed. During removal, several whole bottles were observed embedded in the slag, suggesting that the slag may have been poured onto the surface while molten and into which workers tossed occasional bottles. Volumes removed during the second phase of excavation were: 14.1 cubic yards from area A, 6.4 cubic yards from area B, and 66.1 cubic yards from area C. The total volume removed during both phases of excavation was: 27.8 cubic yards from area A, 13.9 cubic yards from area B, and 110.2 cubic yards from area C. The total volume excavated from the three areas was 151.9 cubic yards.

Following the second phase of excavation, eight soil samples were collected from the base of the excavation, with two samples collected from area A, two samples from area B, and four samples from area C. Samples were analyzed for TPHs by Curtis & Tompkins laboratory with a turnaround time of 48 hours. Results are presented in Table 2. the results reveal that the second phase of excavation was effective in removing all soil with TPHs over 1,000 ppm.

Soil excavated during Phase II was stockpiled in the same area as the soil excavated during Phase I. Because the Phase I sample results indicated PCBs were not a concern, soil excavated from the different areas was not segregated. The stockpile was covered with a plastic sheet. IT Corporation subsequently collected a composite sample from the stockpile for profiling so that the appropriate disposal alternative could be determined. E & E did not oversee this composite sampling.

If you have any questions concerning the excavation activities, please do not hesitate to call.

Sincerely,

ECOLOGY AND ENVIRONMENT, INC.

Chris Lichus for

Robert H. Enkeboll

Enclosure: Lab Report

mbe/moe/12

Table 1

INITIAL EXCAVATION SAMPLE RESULTS

Sample Number	TPH[1] (mg/kg)	Aroclor[2] 1221 (ug/kg)	Aroclor[2] 1232 (ug/kg)	Aroclor[2] 1016 (ug/kg)	Aroclor[2] 1242 (ug/kg)	Aroclor[2] 1248 (ug/kg)	Aroclor[2] 1254 (ug/kg)	Aroclor[2] 1260 (ug/kg)	Aroclor[2] 1262 (ug/kg)
A-100	3300	--	--	--	--	--	--	--	--
A-101	7500	--	--	--	--	--	--	--	--
B-100	52	--	--	--	--	--	--	--	--
B-101	1800	--	--	--	--	--	--	--	--
C-100	130	<22	<22	<22	520	<22	<22	69	<22
C-101	2800	<220	<220	<220	<220	<220	2500	<220	<220
C-102	910	<220	<220	<220	<220	<220	1500	<220	<220
C-103	1700	<220	<220	<220	<220	<220	<220	1600	<220
C-104	34	<22	<22	<22	<22	<22	<22	<22	<22

1 = EPA Method 418.1
Extraction Method = EPA 3550

2 = EPA Method 8080
Extraction Method = EPA 3550

mbe/ti

Table 2

SECOND PHASE EXCAVATION SAMPLE RESULTS

Sample Number	TPH[1] (mg/kg)
A-200	18
A-201	13
B-200	<10
B-201	<10
C-200	13
C-201	<10
C-202	20
C-203	<10

1 - EPA Method 418.1
Extraction Method = EPA 3550

mbe/t2