Treadwell&Rollo

2 February 2005
Project No. 3713.03

Ms. Donna Drogos
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Subject: Voluntary Site Cleanup
Percy Abram Jr. Senior Apartments
1094 Alcatraz Avenue
Oakland, CA

Dear Ms. Drogos:

On behalf of Christian Church Homes of Northern California (CCH), Treadwell and Rollo (T&R) is pleased to submit this letter to Alameda County Environmental Health (ACEH) requesting oversight of a voluntary cleanup at the above-referenced property (site) in Oakland, California.

The site is located at the corner of Alcatraz Avenue and Salem Street in Oakland (Figure 1). It is bordered by Alcatraz Avenue to the south, Salem Street to the east, the Sister Thea Bowman Manor to the west and a single-family residence with an in-law unit to the north. The site slopes gently down to the southwest, with a grade change of about 2.5 feet from the northeast corner to the southwest corner of the site. The site is blanketed by a shallow layer of artificial fill, approximately 2.5 feet thick in the northeast part of the site thinning to the southwest, where it is absent.

The contact for the site is Mr. Donald H. McCreary, Christian Church Homes of Northern California, 303 Hegenberger Road, Suite 201, Oakland, CA 94621, (510) 632-6712. CCH plans to build a senior housing building that will cover most of the site. Current plans consist of constructing a concrete parking garage with a partial podium level on the northern portion of the site. The southern portion of the site will be occupied by a four-story light steel-framed building. The project will include 44 units of senior housing.

Initial Sampling

On 29 December 2004, prior to the removal of asphalt at the site, T&R collected eight samples of shallow soil, designated as E-1 through E-8 (Figure 2), immediately below the asphalt layer. These samples were collected to profile soil to be excavated during redevelopment for disposal. Samples E-1 through E-4 were composited by the laboratory into sample E-1-4, and samples E-5 through E-8 were composited into sample E-5-8. The composite samples were analyzed for LUFT 5 metals and hydrocarbons. These results are presented in Table 1.

The results of the Total Petroleum Hydrocarbon (TPH) analysis indicated hydrocarbons were either not present or are present at low concentrations in the near-surface soil. TPH as gasoline and BTEX were not detected above the laboratory reporting limit in the samples analyzed. TPH as diesel and motor oil were detected in both composite samples at maximum concentrations of 4.1 milligrams per kilogram (mg/kg) and 35 mg/kg, respectively. These results are below Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs).

Concentrations of detected metals were compared with ESLs and waste disposal criteria. All of the metals detected in the composite samples were below ESLs and waste disposal criteria, except for lead and zinc in composite sample E-5-8. Therefore, soil to be removed from the southern portion of the site does not qualify as a hazardous waste.

Total lead was detected at a concentration of 330 mg/kg in sample E-5-8. Total zinc was detected at a concentration of 380 mg/kg in sample E-5-8. To determine whether the elevated lead concentrations were localized or relatively uniform in the northern portion of the site, we analyzed each discrete sample, E-5 through E-8, for total lead. Total lead was detected at concentrations ranging from 82 to 540 mg/kg in the discrete samples, with 3 out of 4 samples above 100 mg/kg, indicating analysis by the WET and TCLP would be required. Therefore, the elevated lead concentrations appear relatively uniform across the northern portion of the site, and composite sample E-5-8 appears representative of the average condition. Soluble zinc by the WET was detected at a concentration of 20 milligrams per liter (mg/l). The STLC for zinc is 24 mg/l. Therefore, the soil represented by E-5-8 is not classified as hazardous based on the soluble zinc concentration. However, soluble lead by the WET was detected at a concentration of 17 mg/l, which is higher that the STLC for lead of 5.0 mg/l. Therefore, the soil is considered California state hazardous waste based on the WET lead concentration. Soluble lead by the TCLP was detected at a concentration of 0.24 mg/l, which is less than the RCRA RL of 5.0 mg/l. Therefore, the soil is not classified as RCRA hazardous waste, and it will be disposed as a non-RCRA California hazardous waste.

Confirmation Sampling at Subgrade Level

On 17 and 18 January 2005, T&R collected additional samples from planned subgrade elevation to determine the extent that soil would need to be excavated. Two soil samples were collected at each of 24 locations, the first sample was collected from 0.5 feet below subgrade elevation (bse) and the second from 1.0 to 1.5 feet bse on a 25-by-25-foot grid (figure 2) to evaluate the soil that will remain in place after excavation. Initial testing was performed on the shallow samples, while the deeper samples were placed on hold. Analytical results are summarized in Table 2.

The initial results for the shallow samples showed that in two locations (A2 and A5), lead concentrations exceeded the ESL of 255 mg/kg for lead in shallow residential soil. Samples A2-1 and A5-1 contained lead at concentrations of 340 and 620 milligrams per kilogram (mg/kg), respectively. Based on these results, the soil at these two locations should be excavated and

disposed off site. Based on the previous profiling for samples E-1-4 and E-5-8, these concentrations indicate that the soil most likely meets criteria for hazardous waste.

To determine the depth to which the soil would need to be removed in these areas, the deeper samples from these two locations were then analyzed for total lead. Samples A2-2 and A5-2, at 1.0 feet bse, both contained lead at concentrations of 5.2 mg/kg, below the ESL for lead. Therefore, the soil in these areas should be excavated to 1.0 foot bse and disposed with the excavated soil from north of the A-A' line.

Results of Testing Soil for on Site Reuse

To evaluate whether soil to be excavated from the southeastern quadrant of the site is suitable for use as backfill in the A2 and A5 areas, previously collected discrete samples E-1, E-3 and E-4 were tested for total lead on 20 January 2005. The results showed that soil at E-1, E-3 and E-4 contained lead at 5.1, 10, and 64 mg/kg respectively. These concentrations are below the residential ESL for lead in soil. Because sample E-4 contained lead at 64 mg/kg, additional testing for soluble lead would be needed to evaluate whether it could be moved on site. We understand this soil has already been accepted for disposal as a non-hazardous waste, and therefore do not recommend its on-site reuse. Soil in the areas of samples E-1 and E-3, near grid points D5 and D6, may be reused onsite to backfill the A2 and A5 excavations.

Soil Excavation/Removal Completion

Upon completion of these soil excavation/removal activities we will issue a report describing these soil management activities, and requesting ACEH issue a letter to Christian Church Homes stating that no further action is required at the site.

Sincerely,
TREADWELL & ROLLO, INC.

Gregory Johnson R.E.A.
Senior Staff Scientist

Craig S. Shields, P.E.
Principal

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Attachments: Tables
Figures

cc. Donald H. McCreary – Christian Church Homes of Northern California
Lulit Taka – Kodama Diseno Architects
Tim Fitzmaurice – J.H. Fitzmaurice, Inc.

Table 1
Complete Results of Analytical Testing
Percy Abram Jr, Senior Apartments Project 3713.02
Oakland, California

Sample ID	Location	Sample Date	Total Petroleum Hydrocarbons			LUFT 5 Metals					Soluble Metals		
			Gasoline/BTEX	Diesel	Motor Oil	Cadmium	Chromium	Lead	Nickel	Zinc	TCLP Lead	STLC Lead	STLC Zinc
E-1-4*	South	12/29/2004	ND	4.1	35	< 1.5	43	21	25	55	--	--	--
E-5-8*	North	12/29/2004	ND	1.7	24	1.7	43	330	41	380	0.24	17	20
E-1	South	12/29/2004	--	--	--	--	--	5.1	--	--	--	--	--
E-3	South	12/29/2004	--	--	--	--	--	10	--	--	--	--	--
E-4	South	12/29/2004	--	--	--	--	--	64	--	--	--	--	--
E-5	North	12/29/2004	--	--	--	--	--	440	--	--	--	--	--
E-6	North	12/29/2004	--	--	--	--	--	200	--	--	--	--	--
E-7	North	12/29/2004	--	--	--	--	--	540	--	--	--	--	--
E-8	North	12/29/2004	--	--	--	--	--	82	--	--	--	--	--
STLC			NE	NE	NE	1.0	5.0	5.0	20	24	NA	5.0	24
RCRA RL			NE	NE	NE	1.0	5.0	5.0	NA	NA	5.0	NA	NA
TTLC			NE	NE	NE	100	2,500	1,000	2,000	5,000	NA	NA	NA

Notes:
Results presented in: 1) milligrams per kilogram (mg/kg) for Total Petroleum Hydrocarbons and LUFT 5 metals; and 2) milligrams per liter (mg/l) for Soluble Metals
ND = Not detected above the laboratory reporting limit
NE = Not established
NA = Not applicable to soluble test method
* = Four-point composite sample
-- = Not analyzed
STLC = Soluble Threshold Limit Concentration, milligrams per liter (mg/l)
RCRA RL = Regulatory Limit
TTLC = Total Threshold Limit Concentration, mg/kg

Table 2
Confirmation Sampling Results
Percy Abram Jr, Senior Apartments
Oakland, California

Sample ID	Sample Date	Total Lead	Reporting Limit
A1-1	1/18/2005	4.5	0.13
A2-1	1/18/2005	340	0.11
A2-2	1/21/2005	5.2	0.16
A3-1	1/18/2005	76	0.1
A4-1	1/18/2005	28	0.15
A5-1	1/18/2005	620	0.16
A5-2	1/21/2005	5.2	0.11
A6-1	1/17/2005	170	0.13
B1-1	1/18/2005	29	0.13
B2-1	1/18/2005	4.4	0.11
B3-1	1/18/2005	75	0.13
B4-1	1/18/2005	9.8	0.097
B5-1	1/18/2005	15	0.1
B6-1	1/17/2005	44	0.14
C1-1	1/17/2005	7.2	0.15
C2-1	1/18/2005	5.2	0.15
C3-1	1/18/2005	5.2	0.099
C4-1	1/18/2005	5.2	0.09
C5-1	1/18/2005	6.4	0.14
C6-1	1/17/2005	8	0.12
D1-1	1/17/2005	4.5	0.14
D2-1	1/17/2005	4.3	0.12
D3-1	1/17/2005	4.9	0.16
D4-1	1/17/2005	6	0.13
D5-1	1/17/2005	5.4	0.11
D6-1	1/17/2005	4.7	0.14

Notes:
Results presented in milligrams per kilogram (mg/kg)

Base map: The Thomas Guide
Alameda County
1999

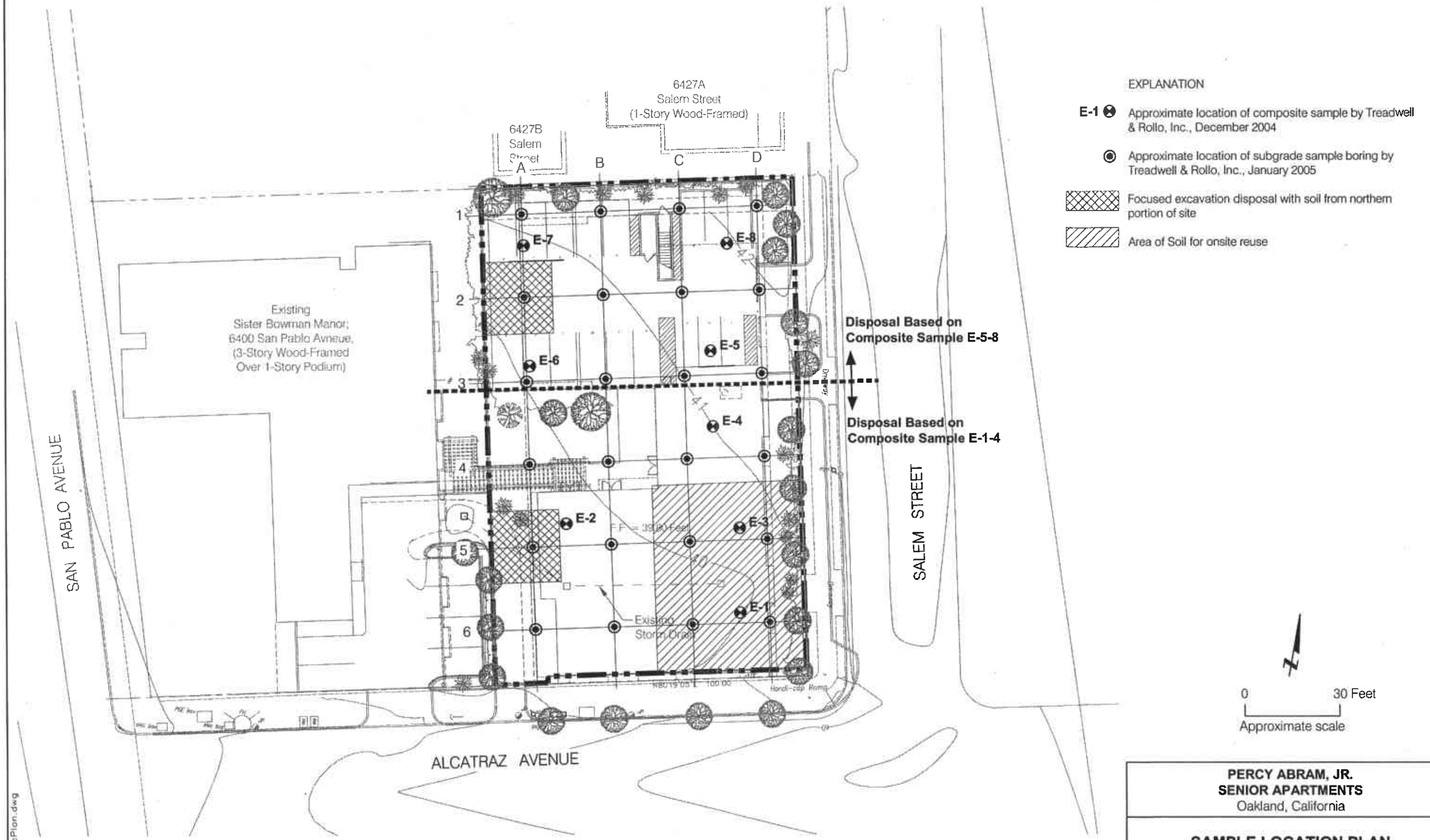
No scale

PERCY ABRAM, JR.
SENIOR APARTMENTS
Oakland, California

SITE LOCATION MAP

Treadwell&Rollo

Date 02/01/05	Project No. 3713.03	Figure 1



Sources: "Boundary and Topographic Survey, Percy Abram, Jr. Senior Apartments, Oakland, California," prepared by William Laird Surveying, dated 3 June 2003.
"Sheet A1.1, Site Plan, Percy Abram, Jr. Senior Apartments," prepared by Kadama Diseno Architects, dated 27 June 2003.

PERCY ABRAM, JR.
SENIOR APARTMENTS
Oakland, California

SAMPLE LOCATION PLAN

Date 02/01/05	Project No. 3713.03	Figure 2

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