April 28 , 2015

Mr. Jerry Wickham
Senior Hazardous Materials Specialist
Alameda County Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-5477

Subject: Import Fill Material Information
Public Storage #CA13186
6800 Overlake Place
Newark, California

Introduction

Antea Group is pleased to provide this additional information related to imported fill material proposed to be used at the Public Storage construction site located at 6800 Overlake Place in Newark, California. This information is provided in response to Alameda County Health Care Services Agency correspondence to Public Storage dated February 19, 2015 outlining requirements for the imported soil.

Background

The soil to be imported is currently in-place at the Morris Hymen Critical Care center expansion at Washington Hospital at 2000 Mowry Avenue in Fremont, California. The area this imported soil will be extracted from is part of a series of construction projects at the Washington Hospital.

In preparation for this construction the hospital structure previously atop this soil was demolished and the underlying soil exposed.

A Department of Toxic Substances Control (DTSC) document titled *Information Advisory Clean Imported Fill Material* (DTSC2001) was followed in the testing of the proposed import soil.

The imported soil is proposed for use at a Public Storage construction site at 6800 Overlake Place in Newark.

In a letter from Alameda County Health Care Services Agency to Public Storage dated February 19, 2015 additional information related to this imported soil was requested.

Information Requested on Proposed Import Materials

1) A description including maps and/or aerial photos showing the location(s) where the fill came from.
    a. Import will come from a project called the Morris Hymen Critical Care center expansion at Washington Hospital. The excavation is approximately 370 x 200 x ~20 feet (ft) deep. This excavation project is ongoing and has removed the top 8 ft of the excavation as of 4-22-2015. This proposed import material will come from the 8 ft below ground surface (bgs) level.
    b. Please see "Project Location.pdf" in the link below for the location and map of the project.
    c. Please see "Civil Drawings, C.1-C.5.pdf" for the extent of the excavation for the project.

2) Background information and/or reports on the fill source

    Due to the size of the relevant reports and information for the import soil, please see link below for all available information. Multiple documents referenced below are included in this link.
    a. Historical background information for the borrow site as well as the surrounding properties can be found in the file "ACWD UST Reports Combined.pdf"
    b. Initial analytical results for the import soil are contained in a *Soil Investigation Report, Washington Hospital, CC/ED Building, Fremont, California* dated October 1, 2013.
    c. Additional samples were collected by Pacific States Environmental in 2015, "PSEC Environmental Soil Sampling, 3-23-2015.

3) The volume of the fill and the volume that each sample represents.
    a. Total volume at the Morris Hymen project is an estimated 60,000 cubic yards (CY). Since the project has been ongoing, only 35,000 CY remain on site available for import. The site excavation area encompasses approximately 1.70 acres.
    b. 57 environmental soil samples have been collected in total for the 1.70 acre parcel. On a cubic yard basis it calculates to be 1 sample per 1052.63 CY of total excavation from this single site.
        i. 46 samples were collected as part of Fugro's soil sampling investigation in 2013. "*Soil Investigation Report, Washington Hospital, CC/ED Building, Fremont, California*, Fugro, 10-1-2013.pdf
        ii. 11 samples were collected by Pacific States Environmental in 2015, "*PSEC Environmental Soil Sampling*, 3-23-15.pdf

4) The type of samples - composite or discrete.
    a. Discrete

5) The type of fill and the heterogeneity.
    a. Homogenous; Sandy Gravel (GW). Medium dense, dark brown, moist, fine to coarse, sub-rounded to sub-angular, fine to coarse grained sand, with silt.
    b. Additional soils information is also contained in Fugro's *Geotechnical Study and Geologic Hazards Evaluation CC/ED Building, Washington Hospital Fremont, California* dated May, 2005.

6) Whether the fill contains any debris or construction material.
    a. No

7) Whether any staining or odor was observed.
    a. No

8) Locations and depths where the imported fill is to be placed on site.
    a. The imported soil will be placed at a maximum depth of approximately 3 ft bgs in excavated utility corridors, at grade level around the perimeter of the building pad, and at grade level in the northern pond area surrounding the bio-retention pond on the attached figure.

9) Laboratory analytical results.
    i. See the following reports in the link below, specifically:
    ii. Fugro's *Soil Investigation Report, Washington Hospital, CC/ED Building, Fremont, California* Soil Investigation, Fugro, dated October 1, 2013 and,
    iii. "*PSEC Environmental Soil Sampling* dated 3-23-15.pdf"

Tabulated data and figures for these analytical results are included as attachments.

In reviewing the analytical results, it appears one sample from the 2015 sampling (PS-4-6') contained a constituent that exceeded Tier 1 2013 environmental screening levels. This sample reported 100 micrograms per kilogram (µg/kg) of Benzo(a)pyrene with a Tier 1 2013 ESL of 38 µg/kg.

https://app.box.com/s/2ekmigow1sa91xcj9g8lvlp02ht5iznk

Please contact Andy Lojo at 510-588-8524 or Jan Wagoner at 916-503-1275 if you have any questions on the information provided herein.

Sincerely,

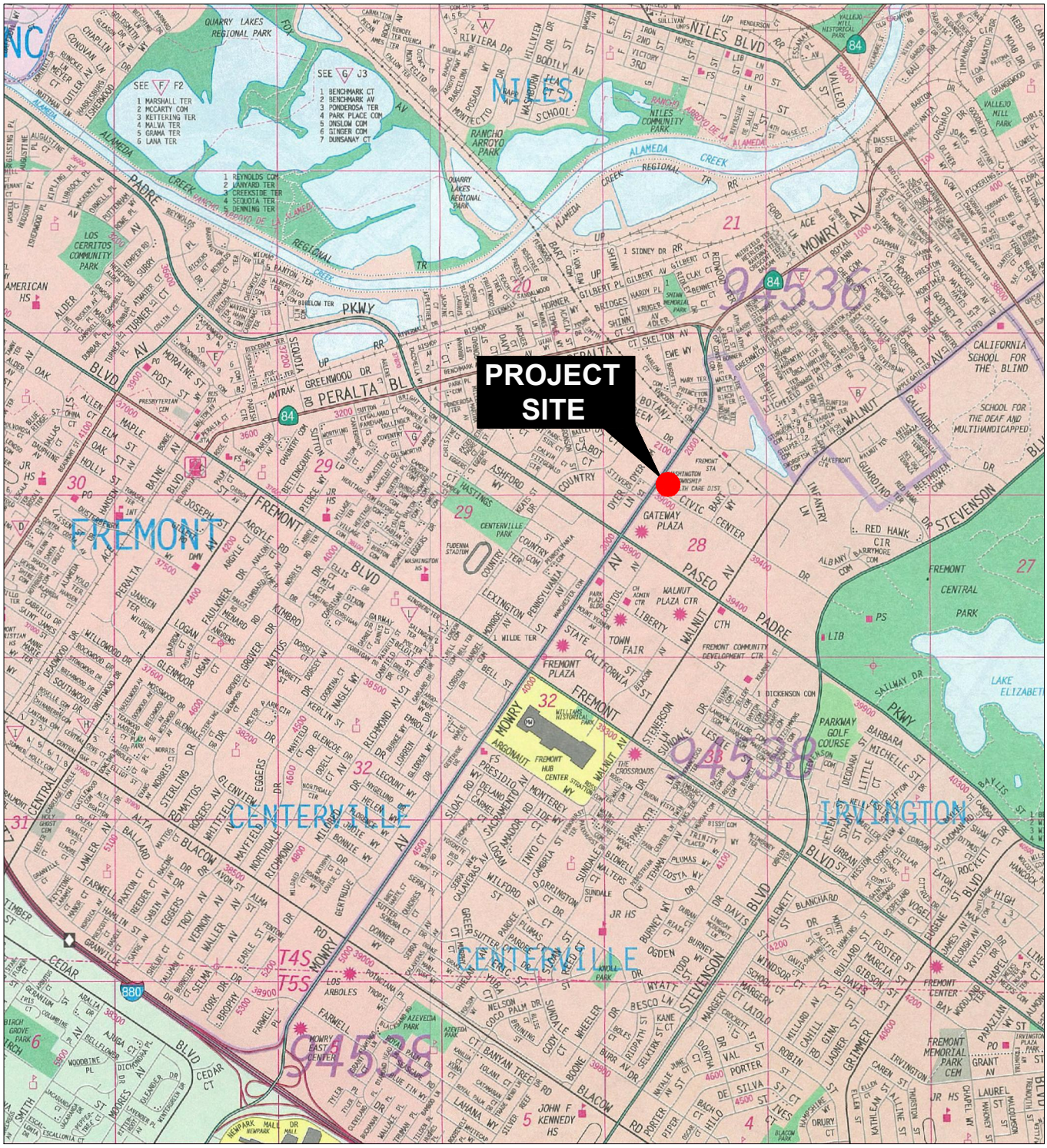
Jan W. Wagoner
Senior Project Manager
Antea Group
916-503-1275
Jan.Wagoner@ateagroup.com

Andrew Lojo, PG
Senior Consultant
Antea Group
510-588-8524
Andy.Lojo@anteagroup.com

Attachments:

1. Analytical Results and Figure from 2013 Fugro Consultants sampling
2. Analytical Results and Figure from 2015 PSEC sampling
3. Subject Property Layout – 3800 Overlake Place, Newark, CA

August 2013
Project No. 04.72139106



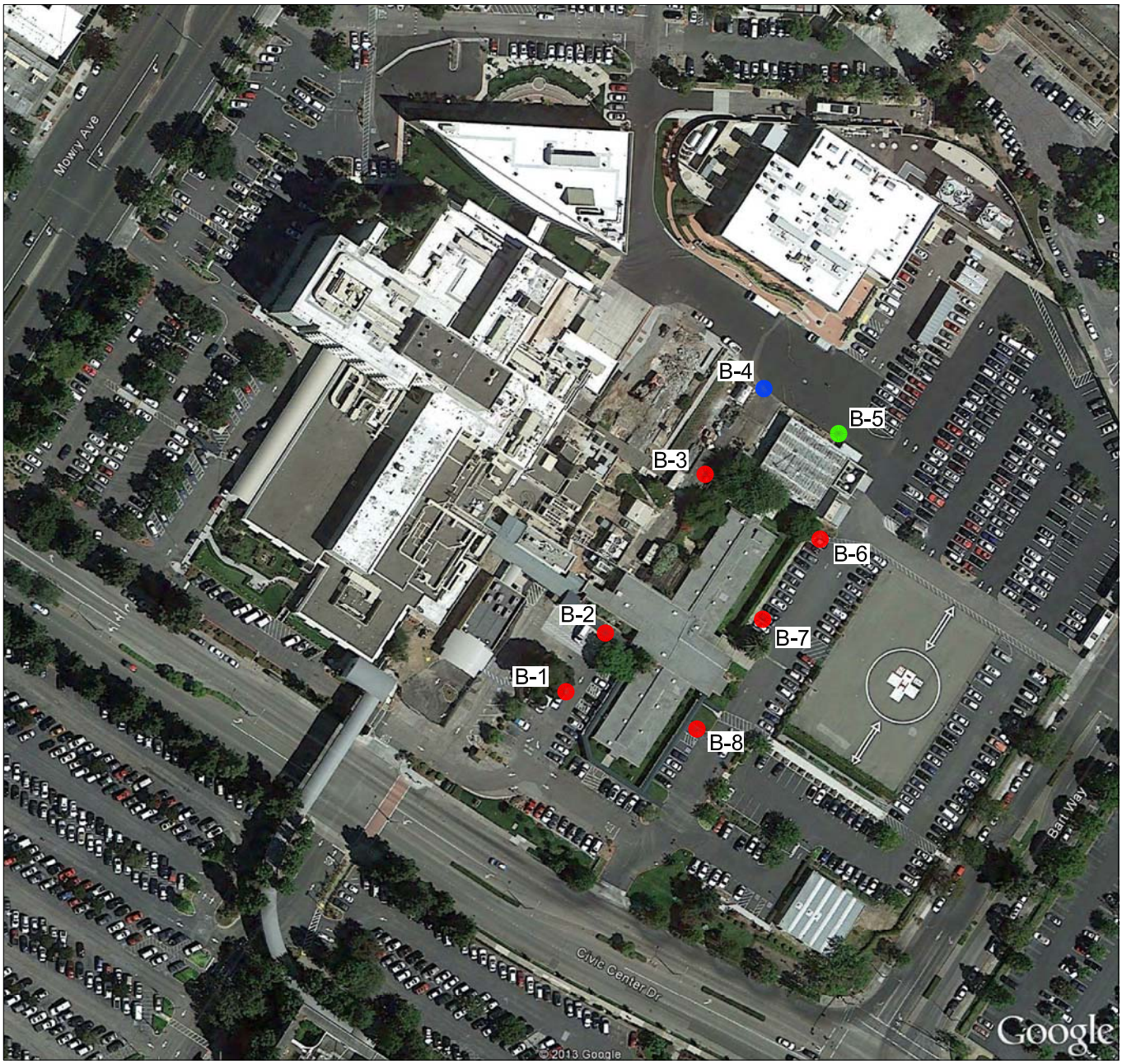
BASE MAP SOURCE: Thomas Guide 2001, Alameda & Contra Costa Counties (p. 752 & 753).

NORTH
0 2400
FEET

VICINITY MAP
Washington Hospital
Fremont, California

PLATE 1

M:\Drafting\JOBFILES\2013\04.72139106\DrawingsA\04.72139106-01 vicn.dwg 08-21-2013 - 4:56pm



BASE MAP SOURCE: Aerial photograph provided by Google Earth Pro, 2013.

LEGEND

B-8 Approximate Location of Boring to depth of 30 ft bgs

B-5 Approximate Location of Boring to depth of 35 ft bgs

B-4 Approximate Location of Boring to depth of 40 ft bgs

NORTH

0 150

FEET

M:\Drafting\JOBFILES\2013\04.72139106\Drawings\A04.72139106-02 site.dwg 08-21-2013 - 4:13pm

SITE PLAN

Washington Hospital
Fremont, California

PLATE 2

Table 1
Summary of Analytical Results - Soil
Washington Hospital
Fremont, California

Analyte	Units	SAMPLE ID										Screening Criteria		
		B-1@0.5	B-1@1.5	B-1@4	B-1@14	B-1@28	B-2@1	B-2@2	B-2@7	B-2@20	B-2@27	TTLC	ESLs	
Sample Depth	feet	0.5	1.5	4.0	14	28	1.0	2.0	7.0	20	27		Tier 1	Construction Worker
Sample Date		9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013			
Hydrocarbons														
TPHg	mg/kg	--	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	NE	100	1,800
TPHd	mg/kg	--	**4.8**	**12**	**4.2**	**18**	--	**11**	**5.2**	**21**	**5.5**	NE	100	900
TPHmo	mg/kg	--	**7.0**	**20**	**3.7**	**31**	--	**12**	**5.2**	**47**	**5.2**	NE	500	28,000
Volatile Organic Compounds														
Benzene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NE	44	71,000
Toluene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NE	2,900	4,300,000
Ethylbenzene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NE	3,300	490,000
Total Xylenes	µg/kg	--	<15	<15	<15	<15	--	<15	<15	<15	<15	NE	2,300	2,500,000
Organochlorine Pesticides														
DDD	µg/kg	<2.0	<2.0	--	--	--	<2.0	<2.0	--	--	--	1,000*	2,400	70,000
DDE	µg/kg	<2.0	<2.0	--	--	--	<2.0	<2.0	--	--	--	1,000*	1,700	50,000
DDT	µg/kg	**3.0**	<2.0	--	--	--	<2.0	<2.0	--	--	--	1,000*	1,700	50,000
alpha-Chlordane	µg/kg	<1.0	<1.0	--	--	--	<1.0	<1.0	--	--	--	NE	NE	NE
Chlordane	µg/kg	<8.5	<8.5	--	--	--	<8.5	<8.5	--	--	--	2,500	440	12,000
gamma-Chlordane	µg/kg	<1.0	<1.0	--	--	--	<1.0	<1.0	--	--	--	NE	NE	NE
Remaining Pesticides	µg/kg	ND	ND	--	--	--	ND	ND	--	--	--	varies	varies	varies
Metals														
Antimony	mg/kg	--	<2.0	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	500	20	120
Arsenic	mg/kg	--	**6.1**	**6.2**	**3.9**	**4.3**	--	**6.1**	**5.7**	**3.3**	**5.4**	500	0.39/11**	10
Barium	mg/kg	--	**180**	**150**	**97**	**79**	--	**180**	**110**	**53**	**76**	10,000	750	61,000
Beryllium	mg/kg	--	<1.0	<1.0	<1.0	<0.99	--	<0.99	<1.0	<1.0	<1.0	75	4.0	180
Cadmium	mg/kg	--	<1.0	<1.0	<1.0	<0.99	--	<0.99	<1.0	<1.0	<1.0	100	12	110
Chromium	mg/kg	--	**55**	**58**	**43**	**56**	--	**58**	**49**	**39**	**40**	2,500#	750#	460,000†
Soluble Chromium (WET)	mg/L	--	<1.0	<1.0	--	<1.0	--	<1.0	--	--	--	5.0 (STLC)	NE	NE
Soluble Chromium (TCLP)	mg/L	--	<0.050	<0.050	--	<0.050	--	<0.050	--	--	--	5.0 (TCLP)	NE	NE
Cobalt	mg/kg	--	**11**	**11**	**6.6**	**6.2**	--	**11**	**10**	**5.1**	**8.1**	8,000	23	49
Copper	mg/kg	--	**26**	**27**	**18**	**20**	--	**27**	**23**	**14**	**18**	2,500	230	12,000
Lead	mg/kg	--	**6.7**	**6.8**	**4.6**	**4.1**	--	**6.8**	**5.8**	**3.4**	**4.9**	1,000	80	320
Mercury	mg/kg	--	<0.10	<0.10	<0.10	<0.10	--	<0.10	<0.10	<0.10	<0.10	20	6.7	27
Molybdenum	mg/kg	--	<1.0	<1.0	<1.0	**2.6**	--	<0.99	<1.0	**3.6**	<1.0	3,500	40	1,500
Nickel	mg/kg	--	**69**	**72**	**53**	**48**	--	**71**	**67**	**37**	**49**	2,000	150	6,100
Selenium	mg/kg	--	<1.0	<1.0	<1.0	<0.99	--	**1.1**	**1.0**	<1.0	<1.0	100	10	1,500
Silver	mg/kg	--	<1.0	<1.0	<1.0	<0.99	--	<0.99	<1.0	<1.0	<1.0	500	20	1,500
Thallium	mg/kg	--	<1.0	<1.0	<1.0	<0.99	--	<0.99	<1.0	<1.0	<1.0	700	0.78	3.1
Vanadium	mg/kg	--	**31**	**31**	**25**	**22**	--	**32**	**26**	**17**	**25**	2,400	200	1,500
Zinc	mg/kg	--	**44**	**44**	**38**	**42**	--	**43**	**41**	**32**	**38**	5,000	600	93,000

Notes:
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHmo = Total Petroleum Hydrocarbons as motor oil
mg/kg = Milligrams per kilogram
µg/kg = Micrograms per kilogram
mg/L = Milligrams per liter
< = Not detected at or above laboratory detection limit
ND = Not Detected
-- = Not Analyzed
NE = Not Established
† = Assumes Chromium III
# = Total Chromium
* = Cummulative TTLC threshold of 1,000 µg/kg for DDD, DDE, and DDT

TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
TCLP = Toxcity Characteristic Leaching Procedure
ESL = Environmental Screening Levels, RWQCB Screening for Environmental Concerns at Sites with Contaminated Soil and Goundwater -- Revised May 2013. Table K-3: ESL for Direct Exposure Soil Screening Levels Construction/Trench Worker Exposure Scenario
** Background Arsenic Concentration in San Francisco Bay Region soils. Master's Thesis "Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region", dated Dece http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/ESL/2011_Arsenic_Background_Duverge.pdf

Exceeds 10x STLC

Table 1
Summary of Analytical Results - Soil
Washington Hospital
Fremont, California

Analyte	Units	SAMPLE ID													Screening Criteria		
		B-3@0.5	B-3@1.5	B-3@4	B-3@9	B-3@19	B-3@29	B-4@1	B-4@2	B-4@7	B-4@12	B-4@22	B-4@32	B-4@39	TTLC	ESLs	
Sample Depth	feet	0.5	1.5	4.0	9.0	19	29	1.0	2.0	7.0	12	22	32	39		Tier 1	Construction Worker
Sample Date		9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013			
Hydrocarbons																	
TPHg	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NE	100	1,800
TPHd	mg/kg	--	**12**	**2.8**	**5.6**	**5.0**	**4.4**	--	**11**	**9.3**	**11**	**5.5**	**8.3**	**16**	NE	100	900
TPHmo	mg/kg	--	**11**	**3.2**	**5.5**	**5.1**	**4.8**	--	**13**	**8.1**	**10**	**5.2**	**9.3**	**15**	NE	500	28,000
Volatile Organic Compounds																	
Benzene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE	44	71,000
Toluene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE	2,900	4,300,000
Ethylbenzene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE	3,300	490,000
Total Xylenes	µg/kg	--	<15	<15	<15	<15	<15	--	<15	<15	<15	<15	<15	<15	NE	2,300	2,500,000
Organochlorine Pesticides																	
DDD	µg/kg	**5.8**	<2.0	--	--	--	--	<2.0	<2.0	--	--	--	--	--	1,000*	2,400	70,000
DDE	µg/kg	**25**	**5.1**	--	--	--	--	**19**	**2.9**	--	--	--	--	--	1,000*	1,700	50,000
DDT	µg/kg	**2.6**	<2.0	--	--	--	--	<2.0	**17**	--	--	--	--	--	1,000*	1,700	50,000
alpha-Chlordane	µg/kg	<1.0	<1.0	--	--	--	--	<1.0	<1.0	--	--	--	--	--	NE	NE	NE
Chlordane	µg/kg	<8.5	<8.5	--	--	--	--	<8.5	<8.5	--	--	--	--	--	2,500	440	12,000
gamma-Chlordane	µg/kg	<1.0	<1.0	--	--	--	--	<1.0	<1.0	--	--	--	--	--	NE	NE	NE
Remaining Pesticides	µg/kg	ND	ND	--	--	--	--	ND	ND	--	--	--	--	--	varies	varies	varies
Metals																	
Antimony	mg/kg	--	<2.0	<2.0	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	500	20	120
Arsenic	mg/kg	--	**6.5**	**6.3**	**5.5**	**4.2**	**3.5**	--	**6.1**	**5.5**	**4.5**	**3.8**	**4.5**	**6.1**	500	0.39/11**	10
Barium	mg/kg	--	**170**	**230**	**110**	**78**	**110**	--	**150**	**120**	**120**	**54**	**59**	**67**	10,000	750	61,000
Beryllium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	75	4.0	180
Cadmium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	100	12	110
Chromium	mg/kg	--	**60**	**61**	**56**	**43**	**35**	--	**54**	**52**	**40**	**50**	**67**	**29**	2,500#	750#	460,000†
Soluble Chromium (WET)	mg/L	--	<1.0	<1.0	<1.0	--	--	--	<1.0	<1.0	--	<1.0	<1.0	--	5.0 (STLC)	NE	NE
Soluble Chromium (TCLP)	mg/L	--	<0.050	<0.050	<0.050	--	--	--	<0.050	<0.050	--	<0.050	<0.050	--	5.0 (TCLP)	NE	NE
Cobalt	mg/kg	--	**12**	**12**	**10**	**7.5**	**6.7**	--	**11**	**10**	**8.2**	**6.2**	**9.7**	**4.9**	8,000	23	49
Copper	mg/kg	--	**28**	**28**	**23**	**16**	**19**	--	**26**	**22**	**22**	**15**	**19**	**15**	2,500	230	12,000
Lead	mg/kg	--	**7.4**	**7.0**	**5.8**	**4.0**	**3.7**	--	**6.7**	**5.8**	**4.8**	**3.7**	**4.0**	**4.6**	1,000	80	320
Mercury	mg/kg	--	<0.10	<0.10	<0.10	<0.10	<0.10	--	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	20	6.7	27
Molybdenum	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3,500	40	1,500
Nickel	mg/kg	--	**76**	**75**	**74**	**56**	**54**	--	**70**	**70**	**53**	**47**	**96**	**33**	2,000	150	6,100
Selenium	mg/kg	--	**1.0**	**1.1**	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	100	10	1,500
Silver	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	500	20	1,500
Thallium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	700	0.78	3.1
Vanadium	mg/kg	--	**33**	**32**	**27**	**23**	**19**	--	**30**	**27**	**22**	**20**	**23**	**33**	2,400	200	1,500
Zinc	mg/kg	--	**48**	**46**	**44**	**36**	**32**	--	**43**	**43**	**36**	**31**	**35**	**40**	5,000	600	93,000

Notes:
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHmo = Total Petroleum Hydrocarbons as motor oil
mg/kg = Milligrams per kilogram
µg/kg = Micrograms per kilogram
mg/L = Milligrams per liter
< = Not detected at or above laboratory detection limit
ND = Not Detected
-- = Not Analyzed
NE = Not Established
† = Assumes Chromium III
# = Total Chromium
* = Cummulative TTLC threshold of 1,000 µg/kg for DDD, DDE, and DDT

TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
TCLP = Toxcity Characteristic Leaching Procedure
ESL = Environmental Screening Levels, RWQCB Screening for Environmental Concerns at Sites with Contaminated Soil and Goundwater -- Revised May 2013. Table K-3: ESL for Direct Exposure Soil Screening Levels Construction/Trench Worker Exposure Scenario
** Background Arsenic Concentration in San Francisco Bay Region soils. Master's Thesis "Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region", dated December 2011. http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/ESL/2011_Arsenic_Background_Duverge.pdf

Exceeds 10x STLC

Table 1
Summary of Analytical Results - Soil
Washington Hospital
Fremont, California

Analyte	Units	SAMPLE ID											Screening Criteria		
		B-5@0.5	B-5@1.5	B-5@4	B-5@14	B-5@24	B-5@34	B-6@1	B-6@2	B-6@7	B-6@16-20	B-6@27	TTLC	ESLs	
Sample Depth	feet	0.5	1.5	4.0	14	24	34	1.0	2.0	7.0	16-20	27		Tier 1	Construction Worker
Sample Date		9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/13/2013	9/13/2013	9/13/2013	9/13/2013	9/13/2013			
Hydrocarbons															
TPHg	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	NE	100	1,800
TPHd	mg/kg	--	**8.9**	**4.7**	**3.4**	**5.0**	**3.9**	--	**7.3**	**5.5**	**25**	**5.2**	NE	100	900
TPHmo	mg/kg	--	**12**	**4.1**	**3.6**	**5.5**	**4.3**	--	**18**	**5.1**	**50**	**5.0**	NE	500	28,000
Volatile Organic Compounds															
Benzene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NE	44	71,000
Toluene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NE	2,900	4,300,000
Ethylbenzene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NE	3,300	490,000
Total Xylenes	µg/kg	--	<15	<15	<15	<15	<15	--	<15	<15	<15	<15	NE	2,300	2,500,000
Organochlorine Pesticides															
DDD	µg/kg	<2.0	<2.0	--	--	--	--	<2.0	**25**	--	--	--	1,000*	2,400	70,000
DDE	µg/kg	**13**	**6.2**	--	--	--	--	<2.0	**150**	--	--	--	1,000*	1,700	50,000
DDT	µg/kg	<2.0	<2.0	--	--	--	--	<2.0	**2.3**	--	--	--	1,000*	1,700	50,000
alpha-Chlordane	µg/kg	**5.1**	<1.0	--	--	--	--	<1.0	<1.0	--	--	--	NE	NE	NE
Chlordane	µg/kg	**88**	<8.5	--	--	--	--	<8.5	<8.5	--	--	--	2,500	440	12,000
gamma-Chlordane	µg/kg	**8.9**	<1.0	--	--	--	--	<1.0	<1.0	--	--	--	NE	NE	NE
Remaining Pesticides	µg/kg	ND	ND	--	--	--	--	ND	ND	--	--	--	varies	varies	varies
Metals															
Antimony	mg/kg	--	<2.0	<2.0	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	500	20	120
Arsenic	mg/kg	--	**6.1**	**5.8**	**4.8**	**2.2**	**4.7**	--	**6.2**	**6.4**	**3.2**	**4.2**	500	0.39/11**	10
Barium	mg/kg	--	**180**	**110**	**79**	**51**	**52**	--	**130**	**110**	**70**	**58**	10,000	750	61,000
Beryllium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	75	4.0	180
Cadmium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	100	12	110
Chromium	mg/kg	--	**55**	**49**	**52**	**17**	**24**	--	**54**	**54**	**34**	**75**	2,500#	750#	460,000†
Soluble Chromium (WET)	mg/L	--	<1.0	--	<1.0	--	--	--	<1.0	<1.0	--	<1.0	5.0 (STLC)	NE	NE
Soluble Chromium (TCLP)	mg/L	--	**0.053**	--	<0.050	--	--	--	<0.050	<0.050	--	<0.050	5.0 (TCLP)	NE	NE
Cobalt	mg/kg	--	**11**	**10**	**7.9**	**4.6**	**5.8**	--	**12**	**11**	**5.3**	**7.3**	8,000	23	49
Copper	mg/kg	--	**26**	**23**	**16**	**14**	**18**	--	**30**	**26**	**15**	**19**	2,500	230	12,000
Lead	mg/kg	--	**7.1**	**6.1**	**4.3**	**2.7**	**3.7**	--	**12**	**6.6**	**3.6**	**4.9**	1,000	80	320
Mercury	mg/kg	--	<0.10	<0.10	<0.10	<0.10	<0.10	--	<0.10	<0.10	<0.10	<0.10	20	6.7	27
Molybdenum	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	**1.7**	<1.0	3,500	40	1,500
Nickel	mg/kg	--	**69**	**67**	**56**	**29**	**43**	--	**63**	**70**	**39**	**61**	2,000	150	6,100
Selenium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	100	10	1,500
Silver	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	500	20	1,500
Thallium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	700	0.78	3.1
Vanadium	mg/kg	--	**31**	**27**	**25**	**14**	**21**	--	**42**	**31**	**20**	**23**	2,400	200	1,500
Zinc	mg/kg	--	**44**	**41**	**37**	**24**	**31**	--	**52**	**45**	**31**	**37**	5,000	600	93,000

Notes:
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHmo = Total Petroleum Hydrocarbons as motor oil
mg/kg = Milligrams per kilogram
µg/kg = Micrograms per kilogram
mg/L = Milligrams per liter
< = Not detected at or above laboratory detection limit
ND = Not Detected
-- = Not Analyzed
NE = Not Established
† = Assumes Chromium III
# = Total Chromium
* = Cummulative TTLC threshold of 1,000 µg/kg for DDD, DDE, and DDT

TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
TCLP = Toxcity Characteristic Leaching Procedure
ESL = Environmental Screening Levels, RWQCB Screening for Environmental Concerns at Sites with Contaminated Soil and Goundwater -- Revised May 2013. Table K-3: ESL for Direct Exposure Soil Screening Levels Construction/Trench Worker Exposure Scenario
** Background Arsenic Concentration in San Francisco Bay Region soils. Master's Thesis "Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region", dated December 2011. http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/ESL/2011_Arsenic_Background_Duverge.pdf

Exceeds 10x STLC

Table 1
Summary of Analytical Results - Soil
Washington Hospital
Fremont, California

Analyte	Units	SAMPLE ID												Screening Criteria		
		B-7@0.5	B-7@1.5	B-7@4	B-7@9	B-7@19	B-7@24	B-7@29	B-8@1	B-8@2	B-8@7	B-8@12	B-8@22	TTLC	ESLs	
Sample Depth	feet	0.5	1.5	4.0	9.0	19	24	29	1.0	2.0	7.0	12	22		Tier 1	Construction Worker
Sample Date		9/13/2013	9/13/2013	9/13/2013	9/13/2013	9/13/2013	9/13/2013	9/13/2013	9/13/2013	9/13/2013	9/13/2013	9/13/2013	9/13/2013			
Hydrocarbons																
TPHg	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	NE	100	1,800
TPHd	mg/kg	--	**8.3**	**3.8**	**5.5**	**3.9**	**4.5**	**5.1**	--	**4.5**	**3.5**	**7.4**	**4.6**	NE	100	900
TPHmo	mg/kg	--	**7.1**	**3.8**	**5.0**	**3.9**	**4.3**	**6.1**	--	**4.7**	**3.3**	**6.7**	**4.9**	NE	500	28,000
Volatile Organic Compounds																
Benzene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NE	44	71,000
Toluene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NE	2,900	4,300,000
Ethylbenzene	µg/kg	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NE	3,300	490,000
Total Xylenes	µg/kg	--	<15	<15	<15	<15	<15	<15	--	<15	<15	<15	<15	NE	2,300	2,500,000
Organochlorine Pesticides																
DDD	µg/kg	<2.0	<2.0	--	--	--	--	--	<2.0	<2.0	--	--	--	1,000*	2,400	70,000
DDE	µg/kg	<2.0	<2.0	--	--	--	--	--	**15**	<2.0	--	--	--	1,000*	1,700	50,000
DDT	µg/kg	<2.0	<2.0	--	--	--	--	--	**12**	<2.0	--	--	--	1,000*	1,700	50,000
alpha-Chlordane	µg/kg	<1.0	<1.0	--	--	--	--	--	<1.0	<1.0	--	--	--	NE	NE	NE
Chlordane	µg/kg	<8.5	<8.5	--	--	--	--	--	<8.5	<8.5	--	--	--	2,500	440	12,000
gamma-Chlordane	µg/kg	<1.0	<1.0	--	--	--	--	--	<1.0	<1.0	--	--	--	NE	NE	NE
Remaining Pesticides	µg/kg	ND	ND	--	--	--	--	--	ND	ND	--	--	--	NE	varies	varies
Metals																
Antimony	mg/kg	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	500	20	120
Arsenic	mg/kg	--	**6.4**	**6.0**	**5.9**	**3.5**	**4.3**	**4.5**	--	**6.2**	**6.1**	**5.4**	**4.6**	500	0.39/11**	10
Barium	mg/kg	--	**160**	**190**	**95**	**92**	**67**	**56**	--	**170**	**150**	**110**	**94**	10,000	750	61,000
Beryllium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.99	--	<0.99	<1.0	<1.0	<1.0	75	4.0	180
Cadmium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.99	--	<0.99	<1.0	<1.0	<1.0	100	12	110
Chromium	mg/kg	--	**59**	**55**	**49**	**40**	**37**	**41**	--	**57**	**58**	**53**	**42**	2,500#	750#	460,000†
Soluble Chromium (WET)	mg/L	--	<1.0	<1.0	--	--	--	--	--	<1.0	<1.0	<1.0	--	5.0 (STLC)	NE	NE
Soluble Chromium (TCLP)	mg/L	--	<0.050	<0.050	--	--	--	--	--	<0.050	<0.050	<0.050	--	5.0 (TCLP)	NE	NE
Cobalt	mg/kg	--	**12**	**11**	**9.7**	**4.3**	**6.4**	**7.2**	--	**12**	**12**	**9.3**	**6.3**	8,000	23	49
Copper	mg/kg	--	**27**	**25**	**22**	**12**	**15**	**19**	--	**28**	**27**	**20**	**18**	2,500	230	12,000
Lead	mg/kg	--	**7.1**	**6.8**	**5.7**	**2.1**	**4.3**	**4.5**	--	**7.1**	**6.8**	**5.3**	**4.5**	1,000	80	320
Mercury	mg/kg	--	<0.10	**0.29**	<0.10	<0.10	<0.10	<0.10	--	<0.10	<0.10	<0.10	<0.10	20	6.7	27
Molybdenum	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.99	--	<0.99	<1.0	<1.0	**3.8**	3,500	40	1,500
Nickel	mg/kg	--	**75**	**69**	**64**	**32**	**52**	**59**	--	**74**	**77**	**68**	**48**	2,000	150	6,100
Selenium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.99	--	<0.99	<1.0	<1.0	<1.0	100	10	1,500
Silver	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.99	--	<0.99	<1.0	<1.0	<1.0	500	20	1,500
Thallium	mg/kg	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.99	--	<0.99	<1.0	<1.0	<1.0	700	0.78	3.1
Vanadium	mg/kg	--	**32**	**30**	**27**	**41**	**19**	**20**	--	**31**	**30**	**26**	**22**	2,400	200	1,500
Zinc	mg/kg	--	**44**	**41**	**42**	**28**	**29**	**34**	--	**45**	**47**	**42**	**35**	5,000	600	93,000

Notes:
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHmo = Total Petroleum Hydrocarbons as motor oil
mg/kg = Milligrams per kilogram
µg/kg = Micrograms per kilogram
mg/L = Milligrams per liter
< = Not detected at or above laboratory detection limit
ND = Not Detected
-- = Not Analyzed
NE = Not Established
† = Assumes Chromium III
# = Total Chromium
* = Cummulative TTLC threshold of 1,000 µg/kg for DDD, DDE, and DDT

TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
TCLP = Toxcity Characteristic Leaching Procedure
ESL = Environmental Screening Levels, RWQCB Screening for Environmental Concerns at Sites with Contaminated Soil and Goundwater -- Revised May 2013. Table K-3: ESL for Direct Exposure Soil Screening Levels Construction/Trench Worker Exposure Scenario
** Background Arsenic Concentration in San Francisco Bay Region soils. Master's Thesis "Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region", dated December 2011. http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/ESL/2011_Arsenic_Background_Duverge.pdf

Exceeds 10x STLC

PS-4-1' -Sample ID, Approximate Depth & Sample Location

-Approximate Excavation Area

Approx. 55,000cy

Sample Map
3/23/15
PS-1 - PS-4

Fremont, Washington Hospital

Image by: Google Earth

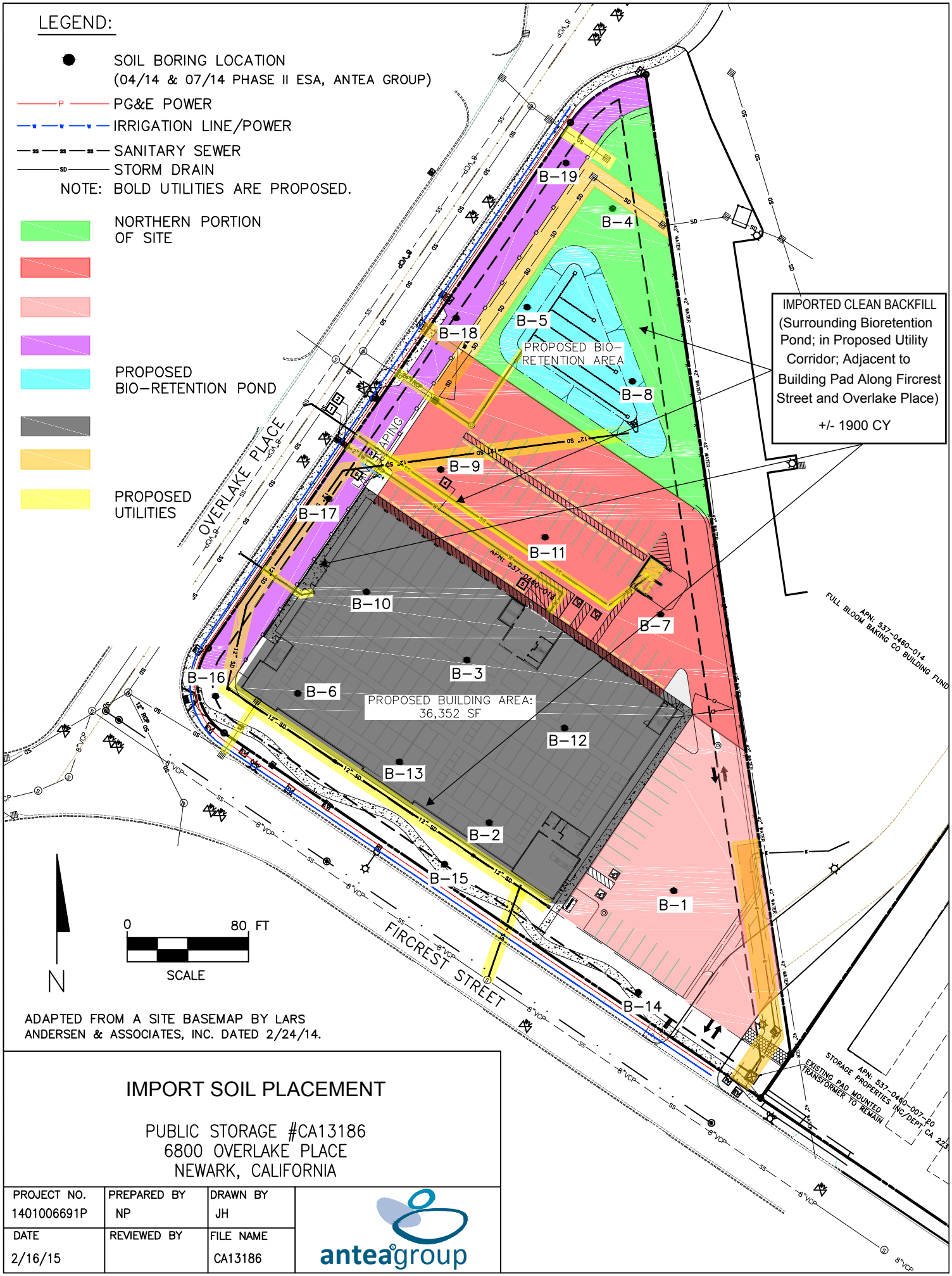
Map by: Bryan Brasesco

Pacific States
ENVIRONMENTAL CONTRACTORS, INC.

Soil Sample Data Summary

4/22/2015

Project Location / Name			Fremont, Washington Hospital																					
Sample Date			3/23/2015																					
Sample ID/Location			PS-1-2'		PS-1-5'		PS-1-10'		PS-2-1'		PS-2-8'		PS-2-12'		PS-3-2'		PS-3-8'		PS-3-15'		PS-4-2'		PS-4-6'	
	Tier 1 2013 ESL	Landfill STLC Triggers	Value	RL	Value	RL	Value	RL	Value	RL	Value	RL	Value	RL	Value	RL	Value	RL	Value	RL	Value	RL	Value	RL
SVOC's (8270C)	ug/kg	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
Acenaphthene	16000	--	ND	5			ND	4.9	ND	4.9	ND	5			ND	5			ND	5	ND	4.9	ND	4.9
Acenaphthylene	13000	--	ND	5			ND	4.9	ND	4.9	ND	5			12	5			ND	5	ND	4.9	ND	4.9
Anthracene	2800	--	ND	5			ND	4.9	ND	4.9	ND	5			7.2	5			ND	5	ND	4.9	7.3	4.9
Benzo[a]anthracene	380	--	ND	5			ND	4.9	ND	4.9	ND	5			21	5			ND	5	ND	4.9	72	4.9
Benzo[a]pyrene	38	--	ND	5			ND	4.9	ND	4.9	ND	5			24	5			ND	5	ND	4.9	100	4.9
Benzo[b]fluoranthene	380	--	ND	5			ND	4.9	ND	4.9	ND	5			31	5			ND	5	6	4.9	140	4.9
Benzo[g,h,i]perylene	27000	--	ND	5			ND	4.9	ND	4.9	ND	5			16	5			ND	5	ND	4.9	110	4.9
Benzo[k]fluoranthene	380	--	ND	5			ND	4.9	ND	4.9	ND	5			11	5			ND	5	ND	4.9	56	4.9
Chrysene	3800	--	ND	5			ND	4.9	ND	4.9	ND	5			38	5			ND	5	ND	4.9	95	4.9
Dibenz(a,h)anthracene	110	--	ND	5			ND	4.9	ND	4.9	ND	5			ND	5			ND	5	ND	4.9	28	4.9
Fluoranthene	40000	--	ND	5			ND	4.9	ND	4.9	ND	5			47	5			ND	5	ND	4.9	97	4.9
Fluorene	8900	--	ND	5			ND	4.9	ND	4.9	ND	5			ND	5			ND	5	ND	4.9	ND	4.9
Indeno[1,2,3-cd]pyrene	380	--	ND	5			ND	4.9	ND	4.9	ND	5			12	5			ND	5	ND	4.9	93	4.9
Naphthalene	1200	--	ND	9.1			ND	9.9	ND	10	ND	9.2			ND	9.7			ND	9.6	ND	9.6	ND	10
Phenanthrene	11000	--	ND	5			ND	4.9	ND	4.9	ND	5			32	5			ND	5	ND	4.9	36	4.9
Pyrene	85000	--	ND	5			ND	4.9	ND	4.9	ND	5			86	5			ND	5	ND	4.9	110	4.9
	--	--																						
VOC's (8260B)	ug/kg	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
VOC Total Remaining	--	--																						
Acetone	500	500	ND	46			ND	49	ND	50	ND	46			ND	48			ND	48	ND	48	ND	50
Chlorobenzene	1500	1500	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
Chloroethane	1100	850	ND	9.1			ND	9.9	ND	10	ND	9.2			ND	9.7			ND	9.6	ND	9.6	ND	10
Chloromethane	20000	6400	ND	9.1			ND	9.9	ND	10	ND	9.2			ND	9.7			ND	9.6	ND	9.6	ND	10
Dibromoethane, 1,2-	0.33	0.33																						
1,2-Dichlorobenzene	1100	1100	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
1,4-Dichlorobenzene	590	590	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
1,1-Dichloroethane	200	200	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
cis-1,2-Dichloroethene	190	190	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
trans-1,2-Dichloroethene	670	670	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
Ethylbenzene	3300	3300	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
Methylene Chloride	77	77	ND	9.1			ND	9.9	ND	10	ND	9.2			ND	9.7			ND	9.6	ND	9.6	ND	10
Methyl ethyl ketone	4500	3900																						
Methyl tert-butyl ether	23	23	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
1,1,1,2-Tetrachloroethane	9.1	24	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
1,1,2,2-Tetrachloroethane	18	18	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
Tetrachloroethene	550	700	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
Trichloroethene	460	460	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
Vinyl chloride	32	85	ND	4.6			ND	4.9	ND	5	ND	4.6			ND	4.8			ND	4.8	ND	4.8	ND	5
Xylenes, Total	2300	2300	ND	9.1			ND	9.9	ND	10	ND	9.2			ND	9.7			ND	9.6	ND	9.6	ND	10
	--	--																						
PCB's (8082)	ug/kg	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg	
PCB-1016	220	50000	ND	49			ND	49	ND	50	ND	49			ND	49			ND	49	ND	48	ND	48
PCB-1221	220	50000	ND	49			ND	49	ND	50	ND	49			ND	49			ND	49	ND	48	ND	48
PCB-1232	220	50000	ND	49			ND	49	ND	50	ND	49			ND	49			ND	49	ND	48	ND	48
PCB-1242	220	50000	ND	49			ND	49	ND	50	ND	49			ND	49			ND	49	ND	48	ND	48
PCB-1248	220	50000	ND	49			ND	49	ND	50	ND	49			ND	49			ND	49	ND	48	ND	48
PCB-1254	220	50000	ND	49			ND	49	ND	50	ND	49			ND	49			ND	49	ND	48	ND	48
PCB-1260	220	50000	ND	49			ND	49	ND	50	ND	49			ND	49			ND	49	ND	48	ND	48
Asbestos (TEM)	%	%	%		%		%		%		%		%		%		%		%		%		%	
Asbestos %	--	1			ND	0.25	ND	0.25					ND	0.25	ND	0.25	ND	0.25			ND	0.25		



ADAPTED FROM A SITE BASEMAP BY LARS ANDERSEN & ASSOCIATES, INC. DATED 2/24/14.

IMPORT SOIL PLACEMENT

PUBLIC STORAGE #CA13186
6800 OVERLAKE PLACE
NEWARK, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
1401006691P	NP	JH
DATE	REVIEWED BY	FILE NAME
2/16/15		CA13186

anteagroup