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October 10, 2017

Mr. Anhtu Nguyen
US Environmental Protection Agency
Region 9
75 Hawthorne Street, SFD-7-2
San Francisco, CA 94105-3901

RE: Indoor Air Sampling, Coca-Cola Property (Property 23)
Soil and NAPL Operable Unit
Del Amo Superfund Site
Del Amo Superfund Site

Dear Mr. Nguyen:

This letter is in response to your September 5, 2017 letter and September 25, 2017 email requesting indoor air sampling at the Coca-Cola property. In these correspondences, USEPA requested sampling before and after shallow soil SVE system installation at the property, with the initial sampling event to occur as soon as possible.

According to USEPA's letter and email, indoor air sampling is necessary based on subsurface PCE concentrations at the property that potentially pose an indoor air health risk. As discussed below, our assessment of the PCE data indicate that vapor intrusion risks are not significant and do not warrant indoor air sampling. AECOM requests that USEPA indicate the specific PCE data used to develop their conclusion.

Existing sub-slab vapor data are the most relevant for evaluating the vapor intrusion potential at the building, and as stated in your email, there are no exceedances of action levels/cleanup goals for PCE or other VOCs in sub-slab samples collected for this property. This includes the five locations where sub-slab vapor sampling was recently completed in the southern portion of the Coca-Cola building (see AECOM's September 8, 2017 Technical Memorandum) and sub-slab vapor data from 2010 for four additional sampling locations distributed throughout the remainder of the building. These findings are especially significant since sub-slab vapor sampling locations SGL0926 and SGL0929 are located near the northwest and southwest portions of the building, adjacent to areas where PCE concentrations were historically reported to be the most elevated in outdoor shallow soil gas samples (SGL0040, -0043, -0045 and -0047 in the northwest; SGL0083 and -0084 in the southwest). Shallow soil gas and sub-slab vapor sampling locations at the property are indicated on Figure 1 and their associated analytical data are presented in Table 1.

USEPA acknowledges that operation of the future outdoor SVE system will reduce the potential for vapor intrusion at the property by reducing VOC concentrations and creating a downward pressure gradient in the subsurface. However, USEPA cites the potential for the system to create vapor migration pathways as an additional rationale for completing indoor air sampling. We are unaware of any data to

develop that conclusion. If available, please forward a copy of the documentation or provide a citation so that we may review it and consider this in the design of the SVE system.

Lastly, long term operation of the outdoor SVE system at the property will not occur until sometime after the Remedial Action Operation and Maintenance Plan is finalized, near the end of 2020. If it is determined that evaluation of indoor air conditions before and after SVE system operation is necessary, it would be better to collect the baseline air samples immediately prior to system startup rather than approximately three years prior to system start up.

In summary, we do not believe there is an adequate scientific basis for the requested air sampling at Property 23.

Please call us if you have any questions or wish to discuss this further.

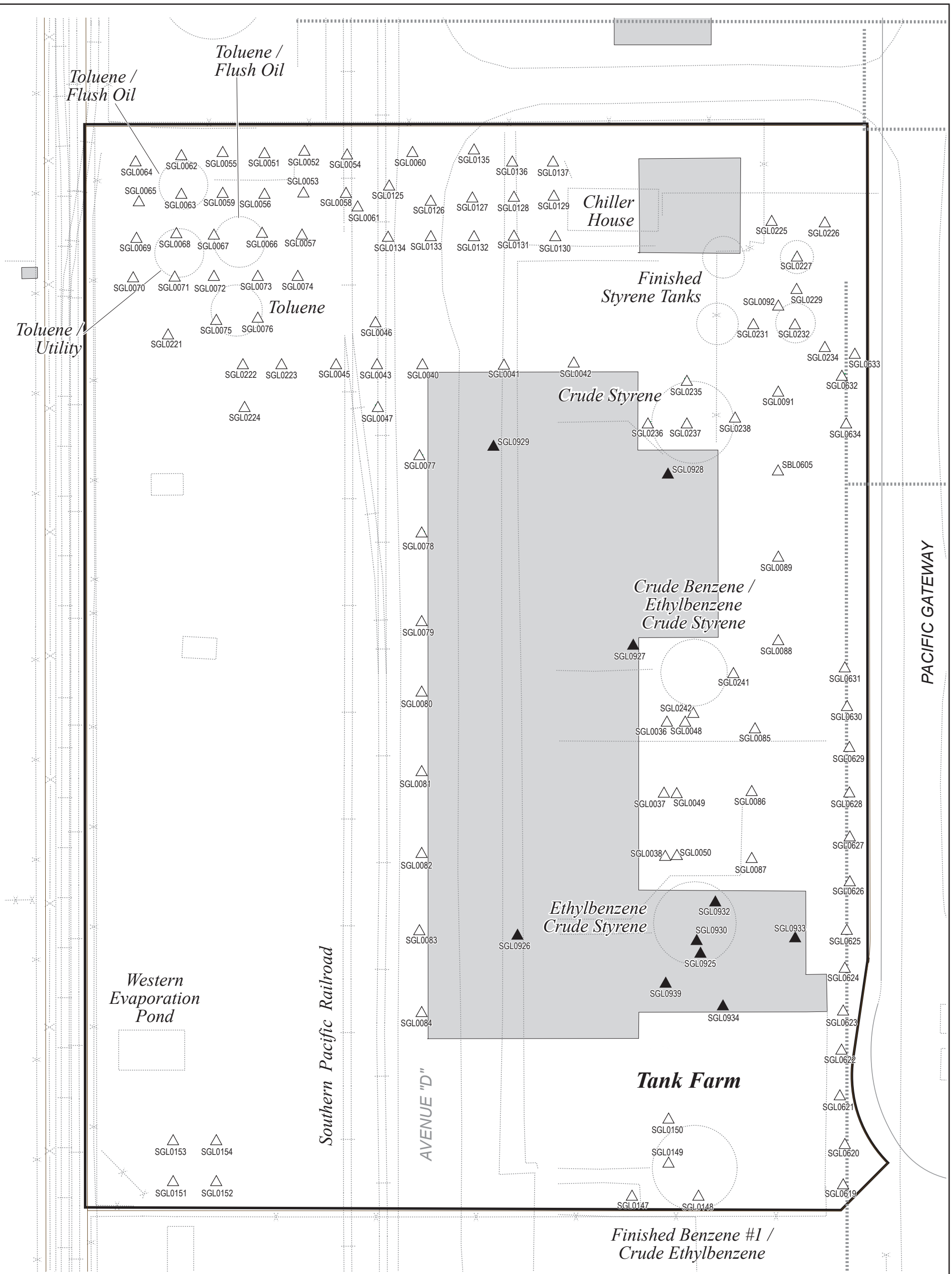
Sincerely,
AECOM Technical Services, Inc.

Julie Doane-Allmon

Julie Doane-Allmon
Project Manager

Attachments: Figure 1
Table 1

cc: Carol Campagna, Shell
Pat Gobb, NewFields
Lora Battaglia, APTIM
Safouh Sayed, DTSC



Legend

- △ Shallow soil gas sampling location
- ▲ Sub-slab vapor sampling location
- Parcel boundary
- Outlines of historical features with use/contents indicated
- Approximate location of former underground pipelines with a potential to have transported VOC-containing fluids

N

0 50 100

Scale in Feet

FIGURE 1

Shallow Soil Gas and Sub-Slab Vapor Sampling Locations Property 23

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SUMMARY OF SHALLOW SOIL GAS AND SUBSLAB VAPOR ANALYTICAL DATA
Property 23 / APN 7351-034-057

Media	Location	Depth (ft. bgs.)	Date	Analyte	Concentration ($\mu g/m^3$)
Shallow Soil Gas (≤15')	SGL0036	3.0	9/30/1992	Benzene	480000
				Ethylbenzene	520000
				Toluene	12000
		6.0	9/30/1992	Benzene	6800000
				Chloroform	120
				Ethylbenzene	42000000
				Styrene	50000
				Toluene	720000
				Trichloroethene	80
	SGL0037	5.0	9/30/1992	Benzene	11000
				Ethylbenzene	47000
	SGL0038	6.0	9/30/1992	Benzene	73000
				Ethylbenzene	83000
				Toluene	1400
	SGL0040	1.0	10/1/1992	Tetrachloroethene	110000
				Trichloroethene	120
		3.0	10/1/1992	Tetrachloroethene	70000
				Trichloroethene	590
		6.0	10/1/1992	Benzene	10000
				Ethylbenzene	19000
				Tetrachloroethene	19000
				Trichloroethene	140
	SGL0041	2.0	10/1/1992		All ND
		5.0	10/1/1992		All ND
	SGL0042	5.0	10/1/1992		All ND
	SGL0043	1.5	10/1/1992	Ethylbenzene	1700
				Tetrachloroethene	36000
		3.0	10/1/1992	Benzene	230000
				Ethylbenzene	110000
				Styrene	19000
				Tetrachloroethene	61000
				Toluene	2800
				Trichloroethene	130
		5.0	10/1/1992	Benzene	400000
				Ethylbenzene	240000
				Styrene	11000
				Tetrachloroethene	34000
				Toluene	5400
				Trichloroethene	230
	SGL0045	1.5	10/2/1992	1,1,1-Trichloroethane	190
				Chloroform	170
				Styrene	720
				Tetrachloroethene	160000
				Trichloroethene	690
		3.0	10/2/1992	1,1,1-Trichloroethane	220
				Chloroform	190
				Tetrachloroethene	170000
				Trichloroethene	1000

	6.0	10/2/1992	1,1,1-Trichloroethane	140
			Tetrachloroethene	130000
			Trichloroethene	900
SGL0046	1.5	10/2/1992	Tetrachloroethene	980
	3.0	10/2/1992	1,1,1-Trichloroethane	170
			Ethylbenzene	390
			Styrene	720
			Tetrachloroethene	810
SGL0047	1.5	10/2/1992	1,1,1-Trichloroethane	82
			Tetrachloroethene	130000
			Trichloroethene	370
	3.0	10/2/1992	Benzene	6100
			Ethylbenzene	7000
			Tetrachloroethene	1600
	6.0	10/2/1992	1,1,1-Trichloroethane	38
			Tetrachloroethene	68
SGL0048	9.8	10/5/1992	1,1,1-Trichloroethane	60
			Benzene	1500000
			Ethylbenzene	6300000
			Styrene	17000
			Toluene	53000
			Trichloroethene	80
SGL0049	5.0	10/5/1992	Benzene	5300000
			Ethylbenzene	2300000
			Styrene	4300
			Tetrachloroethene	160
			Toluene	5400
	10.0	10/5/1992	Ethylbenzene	14000
			Tetrachloroethene	68
SGL0050	5.0	10/5/1992	1,1,1-Trichloroethane	60
			Benzene	100000
			Ethylbenzene	110000
			Tetrachloroethene	1200
			Toluene	1100
SGL0051	10.0	10/6/1992	Benzene	85000
			Ethylbenzene	82000
			Tetrachloroethene	1600
			Toluene	1300
SGL0052	10.0	10/6/1992	Benzene	51000
			Ethylbenzene	27000
			Tetrachloroethene	540
			Toluene	720
SGL0053	10.0	10/6/1992	1,1,1-Trichloroethane	110
			Tetrachloroethene	17000
SGL0054	10.0	10/6/1992	Benzene	74000
			Ethylbenzene	4400
			Tetrachloroethene	2100
			Toluene	910
SGL0055	10.0	10/6/1992	1,1,1-Trichloroethane	87
			Benzene	73000
			Ethylbenzene	48000

			Tetrachloroethene	1600
			Toluene	910
SGL0056	10.0	10/6/1992	1,1,1-Trichloroethane	98
			Benzene	99000
			Ethylbenzene	93000
			Tetrachloroethene	18000
			Toluene	910
SGL0057	10.0	10/6/1992	Benzene	18000
			Ethylbenzene	24000
			Tetrachloroethene	1100
			Toluene	1500
SGL0058	10.0	10/6/1992	Tetrachloroethene	1100
SGL0059	10.0	10/6/1992	Benzene	13000
			Ethylbenzene	25000
			Tetrachloroethene	880
SGL0060	10.0	10/6/1992		All ND
SGL0061	10.0	10/6/1992	Benzene	3700
			Ethylbenzene	8900
			Tetrachloroethene	150
SGL0062	10.0	10/7/1992	Benzene	5000
			Ethylbenzene	4200
SGL0063	10.0	10/7/1992	Benzene	2500
			Ethylbenzene	1400
SGL0064	10.0	10/7/1992	Benzene	3700
			Ethylbenzene	2300
			Tetrachloroethene	830
SGL0065	10.0	10/7/1992	Tetrachloroethene	1100
			Trichloroethene	330
SGL0066	10.0	10/7/1992	Benzene	7000
			Ethylbenzene	4200
			Tetrachloroethene	3200
			Trichloroethene	110
SGL0067	10.0	10/7/1992	Benzene	1800000
			Ethylbenzene	4400000
			Tetrachloroethene	830
SGL0068	10.0	10/7/1992	Benzene	610
			Chloroform	78
			Ethylbenzene	5200
			Tetrachloroethene	88
			Trichloroethene	680
SGL0069	10.0	10/7/1992	Tetrachloroethene	400
SGL0070	10.0	10/7/1992	1,1,1-Trichloroethane	7000
			1,1-Dichloroethene	6100
			Chloroform	110
			Tetrachloroethene	2200
			Trichloroethene	3000
SGL0071	10.0	10/7/1992	Benzene	120000
			Chloroform	100
			Ethylbenzene	64000
			Styrene	34000
			Tetrachloroethene	4300

			Toluene	76000
			Trichloroethene	91
SGL0072	10.0	10/7/1992	Benzene	590000
			Chloroform	140
			Ethylbenzene	4000000
			Styrene	49000
			Tetrachloroethene	1200
			Toluene	1600000
SGL0073	10.0	10/7/1992	Benzene	7100
			Ethylbenzene	39000
			Styrene	770
			Tetrachloroethene	61
			Toluene	16000
SGL0074	10.0	10/7/1992	1,1,1-Trichloroethane	1200
			Ethylbenzene	2100
			Tetrachloroethene	7500
			Toluene	570
			Trichloroethene	110
SGL0075	10.0	10/7/1992	1,1,1-Trichloroethane	71
			Ethylbenzene	950
			Tetrachloroethene	1800
			Toluene	310
			Trichloroethene	91
SGL0076	10.0	10/7/1992	Benzene	3400
			Ethylbenzene	41000
			Styrene	27000
			Tetrachloroethene	4300
			Toluene	5100
SGL0077	6.0	10/8/1992	Tetrachloroethene	84000
			Toluene	1100
SGL0078	6.0	10/8/1992	Tetrachloroethene	31000
SGL0079	6.0	10/8/1992	Ethylbenzene	1100
SGL0080	6.0	10/8/1992	Tetrachloroethene	250
SGL0081	6.0	10/8/1992	Tetrachloroethene	1300
SGL0082	6.0	10/8/1992	Ethylbenzene	4600
			Tetrachloroethene	990
SGL0083	6.0	10/8/1992	Tetrachloroethene	120000
			Trichloroethene	180
SGL0084	6.0	10/8/1992	Tetrachloroethene	90000
			Trichloroethene	260
SGL0085	6.0	10/8/1992		All ND
SGL0086	6.0	10/8/1992		All ND
SGL0087	6.0	10/8/1992		All ND
SGL0088	6.0	10/8/1992	Ethylbenzene	2600
			Tetrachloroethene	3500
SGL0089	6.0	10/8/1992	Benzene	4100
SGL0090	6.0	10/8/1992	Benzene	390000
			Ethylbenzene	7700000
			Tetrachloroethene	68
			Toluene	360000
SGL0091	6.0	10/8/1992	Benzene	11000

			Tetrachloroethene	1600
			Toluene	9900
SGL0092	6.0	10/8/1992	Tetrachloroethene	150
SGL0125	10.0	2/24/1993	Ethylbenzene	1000
SGL0126	10.0	2/24/1993	Benzene	86
			Ethylbenzene	7200
			Styrene	140
			Toluene	76
SGL0127	10.0	2/24/1993		All ND
SGL0128	10.0	2/24/1993	1,1,1-Trichloroethane	100
SGL0129	10.0	2/24/1993	1,1,1-Trichloroethane	87
			Ethylbenzene	2000
			Styrene	85
			Toluene	350
SGL0130	10.0	2/24/1993	1,1,1-Trichloroethane	110
			Ethylbenzene	5300
			Styrene	150
			Toluene	64
SGL0131	10.0	2/24/1993	Ethylbenzene	310
			Tetrachloroethene	320
SGL0132	10.0	2/24/1993	Benzene	61
			Ethylbenzene	6900
			Styrene	180
			Toluene	64
SGL0133	8.0	2/24/1993	1,2,4-Trimethylbenzene	24
			1,3,5-Trimethylbenzene	21
			Ethylbenzene	65
			Tetrachloroethene	1100
			Tetrachloroethene	1700
			Xylenes (Total)	20
SGL0134	10.0	2/24/1993	Ethylbenzene	1300
			Styrene	64
SGL0135	10.0	2/24/1993		All ND
SGL0136	10.0	2/24/1993	Ethylbenzene	4900
			Styrene	140
SGL0137	10.0	2/24/1993	Ethylbenzene	2100
			Styrene	85
SGL0147	6.5	4/21/1993		All ND
SGL0148	6.5	4/21/1993		All ND
SGL0149	6.5	4/21/1993		All ND
SGL0150	6.5	4/22/1993		All ND
SGL0151	6.5	4/23/1993		All ND
SGL0152	6.0	4/23/1993	1,1,1-Trichloroethane	87
			Freon 11 (Trichlorofluoromethane)	18
			Tetrachloroethene	540
			Xylenes (Total)	10.0
SGL0153	6.5	4/23/1993		All ND
SGL0154	6.5	4/23/1993	Benzene	220
			Ethylbenzene	350
			Toluene	450
			Xylenes (Total)	390

SGL0221	6.5	4/21/1993		All ND
SGL0222	6.5	4/21/1993		All ND
SGL0223	6.5	4/21/1993		All ND
SGL0224	6.5	4/22/1993	Cyclohexane	410
SGL0225	6.5	4/21/1993	Toluene	300
			Xylenes (Total)	350
SGL0226	6.5	4/21/1993		All ND
SGL0227	6.5	4/21/1993		All ND
SGL0229	6.5	4/21/1993	Ethylbenzene	350
SGL0231	6.5	4/22/1993	Benzene	450
			Cyclohexane	7100
			Ethylbenzene	1500
SGL0232	6.5	4/21/1993		All ND
SGL0234	6.5	5/6/1993		All ND
SGL0235	6.5	4/21/1993		All ND
SGL0236	6.5	4/21/1993	1,1,1-Trichloroethane	390
			1,2,4-Trimethylbenzene	74
			1,3,5-Trimethylbenzene	16
			2-Butanone	19
			4-Ethyl Toluene	46
			4-Methyl-2-Pentanone	12
			Acetone	86
			Benzene	48
			Ethylbenzene	74
			Tetrachloroethene	3200
			Toluene	72
			Trichloroethene	1400
			Xylenes (Total)	120
SGL0237	6.5	4/21/1993		All ND
SGL0238	6.5	4/21/1993		All ND
SGL0241	6.5	4/21/1993	Toluene	420
			Xylenes (Total)	300
SGL0242	6.0	4/22/1993	1,2-Dibromoethane	22000
			Benzene	5200
			Benzene	7300
			Cyclohexane	5800
			Ethylbenzene	70000
			Ethylbenzene	140000
	6.5	4/22/1993	Benzene	190
			Styrene	260
			Toluene	640
			Xylenes (Total)	910
SGL0619	7.0	3/24/1994		All ND
SGL0620	7.0	3/24/1994		All ND
SGL0621	7.0	3/24/1994		All ND
SGL0622	7.0	3/25/1994		All ND
SGL0623	7.0	3/25/1994		All ND
SGL0624	7.0	3/25/1994	Tetrachloroethene	48
SGL0625	7.0	3/25/1994		All ND
SGL0626	7.0	3/25/1994	1,2,4-Trimethylbenzene	17
			2-Hexanone	22

				4-Ethyl Toluene	19
				Acetone	13
				Benzene	22
				Ethylbenzene	480
				Styrene	240
				Toluene	60
				Trichloroethene	54
				Xylenes (Total)	65
	SGL0627	7.0	3/25/1994		All ND
	SGL0628	7.0	3/25/1994		All ND
	SGL0629	7.0	3/25/1994		All ND
	SGL0630	7.0	3/25/1994		All ND
	SGL0631	7.0	3/25/1994		All ND
	SGL0632	7.0	3/25/1994		All ND
	SGL0633	7.0	3/25/1994		All ND
	SGL0634	7.0	3/25/1994		All ND
Sub-Slab Vapor	SGL0925	NA	2/28/2009	1,1-Dichloroethane	12
				1,2,4-Trimethylbenzene	71
				1,3,5-Trimethylbenzene	22
				2-Butanone	13
				4-Ethyl Toluene	17
				Acetone	89
				Benzene	6.2
				Chloroform	12
				Ethylbenzene	20
				Tetrachloroethene	6500
				Toluene	54
				Trichloroethene	3600
				c-1,2-Dichloroethene	1200
				m,p-Xylene	110
				o-Xylene	40
				t-1,2-Dichloroethene	170
	SGL0926	NA	2/28/2009	1,1,1-Trichloroethane	8.0
				1,2,4-Trimethylbenzene	100
				1,3,5-Trimethylbenzene	36
				2-Butanone	24
				4-Ethyl Toluene	29
				Acetone	160
				Benzene	6.9
				Ethylbenzene	40
				Tetrachloroethene	210
				Toluene	100
				m,p-Xylene	190
				o-Xylene	64
	SGL0927	NA	2/28/2009	1,2,4-Trimethylbenzene	52
				1,3,5-Trimethylbenzene	18
				2-Butanone	15
				4-Ethyl Toluene	15
				Acetone	110
				Benzene	7.8
				Dichlordifluoromethane	3.6

			Ethylbenzene	31
			Tetrachloroethene	12
			Toluene	110
			Trichloroethene	5.4
			m,p-Xylene	150
			o-Xylene	49
SGL0928	NA	2/28/2009	1,2,4-Trimethylbenzene	190
			1,3,5-Trimethylbenzene	53
			2-Butanone	35
			4-Ethyl Toluene	49
			Acetone	260
			Chloroform	8.8
			Ethylbenzene	46
			Tetrachloroethene	10
			Toluene	75
			m,p-Xylene	240
			o-Xylene	88
SGL0929	NA	2/28/2009	1,1,1-Trichloroethane	8.8
			1,2,4-Trimethylbenzene	21
			1,3,5-Trimethylbenzene	5.9
			4-Ethyl Toluene	5.0
			Acetone	30
			Benzene	3.0
			Chloroform	11
			Ethylbenzene	6.4
			Tetrachloroethene	37
			Toluene	22
			m,p-Xylene	33
			o-Xylene	11
SGL0930	0.5	5/9/2017	1,1,1-Trichloroethane	0.92
			2-Butanone	4.1
			Acetone	78
			Benzene	1.1
			Chloroform	5.0
			Dichlorodifluoromethane	2.3
			Isopropanol	20
			Tetrachloroethene	330
			Toluene	2.7
			Trichloroethene	28
SGL0932	0.5	5/9/2017	Acetone	33
			Benzene	0.55
			Chloroform	6.9
			Dichlorodifluoromethane	2.4
			Isopropanol	6.9
			Tetrachloroethene	160
			Toluene	2.5
			Trichloroethene	4.6
SGL0933	0.5	5/9/2017	2-Butanone	5.0
			Acetone	93
			Benzene	2.2
			Carbon Disulfide	3.2

				Chloroform	4.8
				Dichlorodifluoromethane	1.8
				Ethylbenzene	2.3
				Isopropanol	7.9
				Tetrachloroethene	60
				Toluene	16
				Trichloroethene	160
				o-Xylene	2.9
				p/m-Xylene	9.7
	SGL0934	0.5	5/9/2017	2-Butanone	3.5
				Acetone	94
				Benzene	1.2
				Chloroform	12
				Dichlorodifluoromethane	2.3
				Isopropanol	14
				Tetrachloroethene	1400
				Toluene	2.5
				Trichloroethene	310
				c-1,2-Dichloroethene	9.5
	SGL0939	0.5	5/9/2017	1,1,1-Trichloroethane	2.4
				1,1-Dichloroethane	1.4
				Acetone	30
				Benzene	2.0
				Chloroform	5.3
				Dichlorodifluoromethane	2.3
				Isopropanol	5.8
				Tetrachloroethene	390
				Toluene	4.9
				Trichloroethene	58