WATERSTONE ENVIRONMENTAL, INC.

2936 East Coronado Street * Anaheim, CA 92806
714-414-1122 * Fax: 714-414-1166

July 13, 2021

Mr. Forrest Wylder
Birtcher Development
450 Newport Center Drive, Ste. 220
Newport Beach, CA 92660

RE: Soil Vapor Sampling at 350 W. Valley Boulevard and 1444 S. Willow Avenue in Rialto, California

Dear Mr. Wylder:

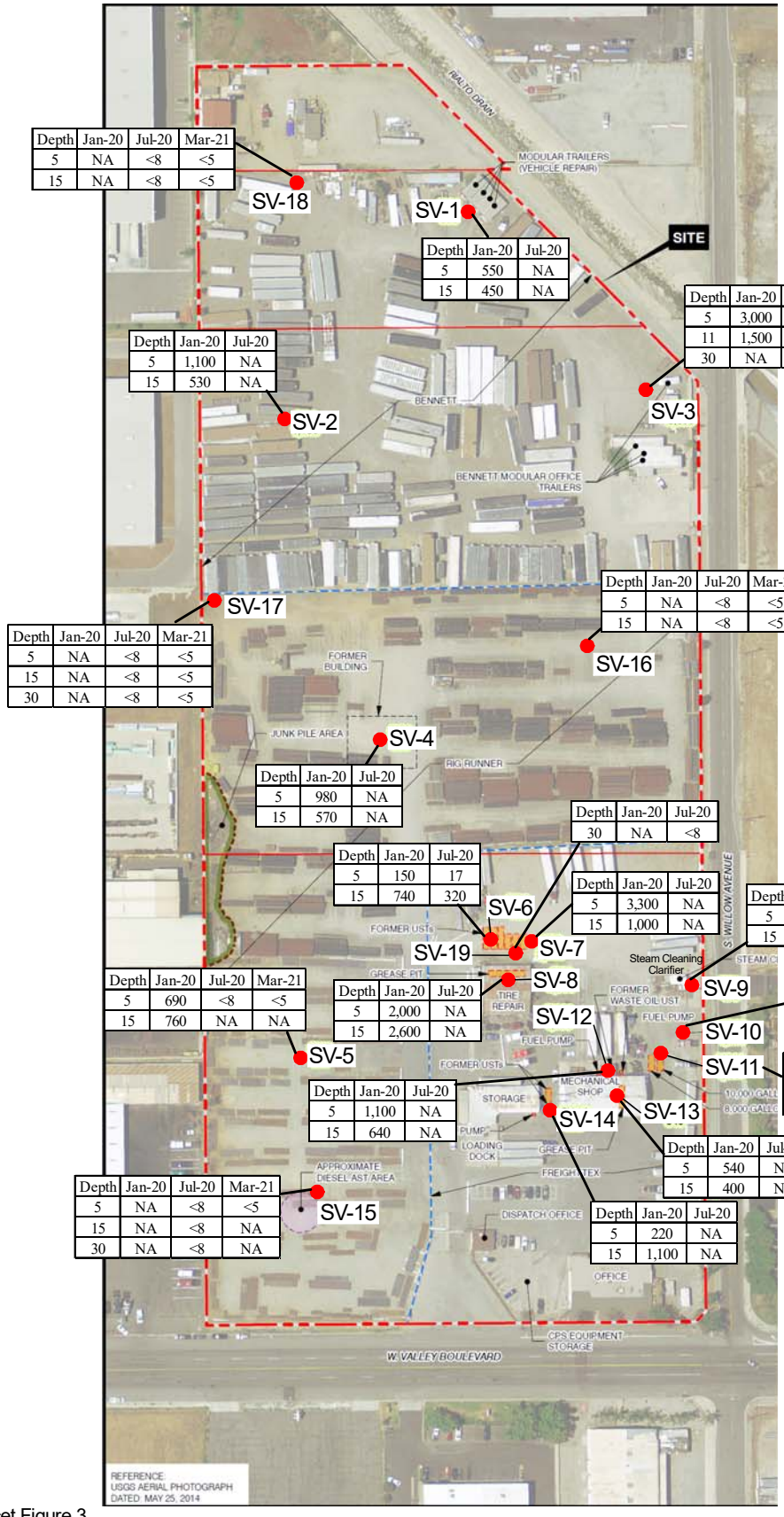
Waterstone Environmental, Inc. (Waterstone) has prepared this memo to provide a summary of soil vapor sampling performed in March 2021 at the above-referenced Subject Property.

Purpose: The purpose of the testing was to further evaluate soil vapor beneath the Site for concentrations of tetrachloroethene (PCE) that had been previously detected during sampling performed in 2020. The March 2021 sampling was performed to evaluate temporal variations for comparison to previous sampling events, to further evaluate the risk of vapor intrusion, as well as the need for mitigation measures. Samples were collected for analysis from seven available locations at multiple depths for a total of 14 samples.

Results: During March 2021, PCE was detected in four of the 14 samples ranging from 11 to 35 micrograms per cubic meter ($\mu g/m^3$). The March 2021 and previous sampling locations are shown on the attached Figure. The results from March as well as from previous sampling events are summarized in the attached Table. The March 2021 concentrations were well below published screening levels for commercial land use. There were several locations with previous PCE detections that were not resampled because the probes had been abandoned or were damaged.

Conclusions: Mitigation measures for vapor intrusion are not likely to be needed at the Site based on: (i) the decreasing trend in PCE concentrations; (ii) the latest PCE results were well below applicable screening levels; and (iii) the Site will undergo extensive grading during redevelopment.

The Site is being enrolled into a voluntary oversight agreement with a State regulatory agency for concurrence with these conclusions.



Depth	Jan-20	Jul-20	Mar-21
5	NA	<8	<5
15	NA	<8	<5

Depth	Jan-20	Jul-20
5	550	NA
15	450	NA

Depth	Jan-20	Jul-20	Mar-21
5	3,000	33	<5
11	1,500	73	<5
30	NA	<8	11

Depth	Jan-20	Jul-20
5	1,100	NA
15	530	NA

Depth	Jan-20	Jul-20	Mar-21
5	NA	<8	<5
15	NA	<8	<5

Depth	Jan-20	Jul-20	Mar-21
5	NA	<8	<5
15	NA	<8	<5
30	NA	<8	<5

Depth	Jan-20	Jul-20
5	980	NA
15	570	NA

Depth	Jan-20	Jul-20
30	NA	<8

Depth	Jan-20	Jul-20
5	150	17
15	740	320

Depth	Jan-20	Jul-20
5	3,300	NA
15	1,000	NA

Depth	Jan-20	Jul-20
5	470	NA
15	420	NA

Depth	Jan-20	Jul-20	Mar-21
5	690	<8	<5
15	760	NA	NA

Depth	Jan-20	Jul-20
5	2,000	NA
15	2,600	NA

Depth	Jan-20	Jul-20
5	1,500	NA
15	350	NA

Depth	Jan-20	Jul-20	Mar-21
5	1,400	275	35
15	210	144	19

Depth	Jan-20	Jul-20
5	1,100	NA
15	640	NA

Depth	Jan-20	Jul-20
5	540	NA
15	400	NA

Depth	Jan-20	Jul-20	Mar-21
5	NA	<8	<5
15	NA	<8	NA
30	NA	<8	NA

Depth	Jan-20	Jul-20
5	220	NA
15	1,100	NA

Basemap adapted from Avocet Figure 3

Figure 3
Results of PCE in Soil Vapor

Willow and Valley
Rialto, CA

Legend

Subject Property Boundary

PCE - Tetrachloroethylene
NA - Not Analyzed
Results in micrograms per cubic meter (ug/m3)

NORTH

Approximate Scale

0' 100' 200'

Waterstone Environmental, Inc.
2936 East Coronado Street
Anaheim, California 92806

Drafted By: HLF	Project No.: 20-137
Approved By: MS	Date: 7-18-2020

Table 1
VOCs in Soil Vapor Samples
350 W. Valley Blvd. 1444 S. Willow Ave.
Rialto, California

Boring ID	Sample Depth (feet bgs)	Sample Date	Consultant	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	Acetone	Benzene	Carbon disulfide	cis-1,2-Dichloroethene	Dichlorodifluoromethane	Ethanol	Ethylbenzene	Isopropanol	Isopropylbenzene	m,p-Xylene	Naphthalene	n-Butylbenzene	n-Propylbenzne	sec-Butylbenzene	Tetrachloroethene	Toluene	Trichloroethene	All Other VOCs
SV-1	5	1/20/2020	Avocet	<8.3	<2.8	<5	--	<5.4	**19**	<7	<2.2	<2.8	**29**	<2.5	**27**	--	<9.8	--	<9.3	--	<9.3	**550**	**45**	<3	ND
	15	1/20/2020	Avocet	<7.4	<2.5	<4.4	--	<4.8	<1.6	<6.2	<2	<2.5	**14**	<2.2	**13**	--	<8.7	--	<8.2	--	<8.2	**450**	**15**	<2.7	ND
	Probes previously abandoned																								
SV-2	5	1/20/2020	Avocet	<7.4	<2.5	<4.4	--	**14**	<1.6	<6.2	<2	<2.5	**13**	<2.2	**13**	--	<8.7	--	<8.2	--	<8.2	**1,100**	**13**	<2.7	ND
	15	1/20/2020	Avocet	<7.6	<2.5	**10**	--	**21**	<1.6	<6.4	<2	**2.5**	**18**	<2.2	**38**	--	<8.9	--	<8.5	--	<8.5	**530**	**18**	**4**	ND
	Probes previously abandoned																								
SV-3	5	1/20/2020	Avocet	<7.4	<2.5	<4.4	--	**28**	**2**	<6.2	<2	<2.5	**16**	**4**	**27**	--	<8.7	--	<8.2	--	<8.2	**3,000**	**19**	<2.7	ND
		7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	**33**	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
	11	1/20/2020	Avocet	<7.4	<2.5	<4.4	--	**16**	<1.6	<6.2	<2	**2.5**	**15**	**2**	**14**	--	<8.7	--	<8.2	--	<8.2	**1,500**	**14**	**3**	ND
		7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	**73**	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
	30	7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	**11**	<5	<5	ND
SV-4	5	1/20/2020	Avocet	<7.4	<2.5	<4.4	--	**15**	<1.6	<6.2	<2	<2.5	**14**	<2.2	**12**	--	<8.7	--	<8.2	--	<8.2	**980**	**14**	<2.7	ND
	15	1/20/2020	Avocet	<7.4	<2.5	**11**	--	**22**	<1.6	<6.2	<2	**2.5**	**16**	<2.2	**15**	--	<8.7	--	<8.2	--	<8.2	**570**	**11**	<2.7	ND
	Unable to locate probes																								
SV-5	5	1/20/2020	Avocet	<7.4	<2.5	<4.4	--	**20**	<1.6	<6.2	<2	<2.5	**18**	<2.2	**16**	--	<8.7	--	<8.2	--	<8.2	**690**	**12**	<2.7	ND
		7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
	15	1/20/2020	Avocet	<7.4	<2.5	**7**	--	**20**	<1.6	<6.2	<2	<2.5	**14**	<2.2	**13**	--	<8.7	--	<8.2	--	<8.2	**760**	**13**	<2.7	ND
SV-6	5	1/20/2020	Avocet	<7.4	<2.5	<4.4	--	**29**	**2.9**	**32**	<2	<2.5	<9.4	<2.2	**140**	--	<8.7	--	<8.2	--	<8.2	**150**	<1.9	<2.7	ND
		7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	**17**	<8	<8	ND
	15	1/20/2020	Avocet	<15	<4.9	<8.8	--	**16**	<3.2	<12	<4	<4.9	<19	<4.3	<25	--	<17	--	<16	--	<16	**740**	**5**	<5.4	ND
		7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	**321**	<8	<8	ND
	Probes damaged, unable to sample																								
SV-7	5	1/20/2020	Avocet	<84	<28	<50	--	<54	<18	<71	<23	<28	<110	<25	<140	--	<99	--	<94	--	<94	**3,300**	<21	<31	ND
	15	1/20/2020	Avocet	<20	<6.7	<12	--	**14**	<4.3	<17	<5.4	<6.7	<26	<5.9	<33	--	<24	--	<22	--	<22	**1,000**	**6**	<7.3	ND
	Probes damaged, unable to sample																								
SV-8	5	1/20/2020	Avocet	<46	<15	<27	--	**39**	<9.9	<39	<12	<15	<58	<13	<76	--	<54	--	<51	--	<51	**2,000**	<12	<17	ND
	15	1/20/2020	Avocet	<45	<15	<27	--	<29	<9.8	<38	<12	<15	<58	<13	<75	--	<53	--	<50	--	<50	**2,600**	<12	<16	ND
	Probes previously abandoned																								
SV-9	5	1/20/2020	Avocet	<21	<7.1	<13	--	**20**	<4.6	<18	<5.7	<7.1	<27	<6.3	**48**	--	<25	--	<24	--	<24	**470**	<5.4	<7.7	ND
	15	1/20/2020	Avocet	<21	<7	<13	--	**16**	<4.5	<18	<5.6	<7	<27	<6.2	<35	--	<25	--	<23	--	<23	**420**	<5.4	**15**	ND
	Probes previously abandoned																								
SV-10	5	1/20/2020	Avocet	<32	<11	<19	--	**<21**	<7	<27	<8.7	<11	<41	<9.5	<54	--	<38	--	<36	--	<36	**1,500**	<8.3	<12	ND
	15	1/20/2020	Avocet	<25	<8.3	<15	--	**22**	<5.4	<21	<6.7	<8.3	<32	<7.3	<41	--	<29	--	<28	--	<28	**350**	<6.3	<9	ND
	Probes previously abandoned																								
SV-11	5	1/20/2020	Avocet	<29	<9.8	<18	--	**22**	<6.4	<25	<7.9	<9.9	<38	<8.7	<49	--	<35	--	<33	--	<33	**1,400**	<7.5	<11	ND
		7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	**275**	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	**35**	<5	<5	ND
	15	1/20/2020	Avocet	<19	<6.4	<12	--	**26**	<4.2	<16	<5.2	<6.5	<25	<5.7	<32	--	<23	--	<21	--	<21	**210**	<4.9	<7	ND
		7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	**144**	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	**19**	<5	<5	ND
SV-12	5	1/20/2020	Avocet	<23	<7.5	<14	--	**22**	<4.9	<19	<6.1	<7.6	<29	<6.6	<38	--	<27	--	<25	--	<25	**1,100**	<5.8	<8.2	ND
	15	1/20/2020	Avocet	<7.4	<2.5	**7**	--	**35**	<1.6	<6.2	**3**	<2.5	**27**	<2.2	**23**	--	<8.7	--	<8.2	--	<8.2	**610**	**5**	**170**	ND
	Probes previously abandoned																								
SV-13	5	1/20/2020	Avocet	<7.4	<2.5	<4.4	--	**24**	<1.6	<6.2	<2	<2.5	**18**	<2.2	**14**	--	<8.7	--	<8.2	--	<8.2	**540**	**4**	**4**	ND
	15	1/20/2020	Avocet	<15	<5	<9.1	--	**23**	<3.3	<13	<4.1	<5.1	<19	<4.5	<25	--	<18	--	<17	--	<17	**400**	<3.9	<5.5	ND
	Probes previously abandoned																								
SV-14	5	1/20/2020	Avocet	<18	<6	<11	--	**28**	<3.9	<15	<4.9	<6.1	<23	<5.3	<30	--	<21	--	<20	--	<20	**220**	**8**	<6.6	ND
	15	1/20/2020	Avocet	<17	<5.8	<10	--	**19**	<3.8	<15	<4.7	<5.9	<22	<5.1	<29	--	<21	--	<20	--	<20	**1,100**	<4.5	**45**	ND
	Probes previously abandoned																								

Table 1
VOCs in Soil Vapor Samples
350 W. Valley Blvd. 1444 S. Willow Ave.
Rialto, California

Boring ID	Sample Depth (feet bgs)	Sample Date	Consultant	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	Acetone	Benzene	Carbon disulfide	cis-1,2-Dichloroethene	Dichlorodifluoromethane	Ethanol	Ethylbenzene	Isopropanol	Isopropylbenzene	m,p-Xylene	Naphthalene	n-Butylbenzene	n-Propylbenzne	sec-Butylbenzene	Tetrachloroethene	Toluene	Trichloroethene	All Other VOCs
SV-15	5	7/17/2020	Waterstone	**166**	**31**	--	**13**	--	<8	--	<8	<16	--	**17**	--	<8	**40**	**181**	**35**	**16**	<12	<8	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
	15	7/17/2020	Waterstone	**12**	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	<8	<8	ND
	30	7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	<8	<8	ND
	Probes at 15 and 30 feet damaged, unable to sample																								
SV-16	5	7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	**13**	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
	15	7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
SV-17	5	7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
	15	7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	**14**	<5	<5	ND
	30	7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
SV-18	5	7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
	15	7/17/2020	Waterstone	<8	<8	--	<8	--	<8	--	<8	<16	--	<8	--	<8	<16	<40	<12	<8	<12	<8	<8	<8	ND
		3/8/2021	Waterstone	<5	<5	--	--	--	<5	<5	<10	<5	--	<10	--	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
SV-19	30	7/17/2020	Waterstone	**15,900**	**7,430**	--	<8	--	<8	--	<8	<16	--	**14,000**	--	**2,930**	**11,100**	**2,280**	**2,210**	**5,870**	**2,890**	<8	<8	<8	ND
		Probe damaged, unable to sample																							
DTSC/EPA Commercial Indoor Air Screening Level				260	260	22,000	--	140,000	0.42	3,100	35	440	--	5	880	1,800	4,400	0.36	880	4,400	1,800	2	1,300	3	--
Commercial Soil Vapor Screening Level (0.03 AF)				8,667	8,667	733,333	--	4,666,667	14	103,333	1,167	14,667	--	163	29,333	60,000	146,667	12	29,333	146,667	60,000	67	43,333	100	--
Commercial Soil Vapor Screening Level (0.0005 AF)				288,889	288,889	4.40E+07	--	2.80E+08	840	6.20E+06	70,000	880,000	--	9,800	1.76E+06	3.60E+06	8.80E+06	720	1.76E+06	8.80E+06	3.60E+06	4,000	2.60E+06	6,000	--

Notes:
Samples from 1/20/2020 analyzed using EPA TO-15
Samples from 7/17/2020 and 3/8/2021 analyzed using EPA 8260B
Units are micrograms per cubic meter (µg/m3)

bgs = below ground surface
< Denotes not detected above the Reporting Limit (RL) indicated
-- Denotes not available

Bold type indicates reported at detectable concentration
Concentration exceeds commercial screening level with 0.03 AF
Concentration exceeds commercial screening level with 0.0005 AF

Indoor Air Screening Values from Department of Toxic Substances Control (DTSC) - June 2020 and Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) - May
AF - Attenuation Factor