AECS
American Environmental & Construction Services, Inc.
1170 Tidwell Road
Alpharetta, Georgia 30004

September 26, 2017

Ms. Carolyn Daniels, P.G
Georgia Environmental Protection Division
Response and Remediation Program
Floyd Towers East, Suite #1054
2 Martin Luther King Jr. Drive, S.E.
Atlanta, Georgia 30334-9000

Re: Updated Type 2 and Type 4 Groundwater Risk Reduction Standards
Silverstein Dry Cleaners VRP Site, HSI No. 10517

Dear Ms. Daniels,

Based on recent correspondence with the Georgia Environmental Protection Division (EPD) Risk Assessment Program Manager (Ms. Shanna Alexander), it is our understanding that EPD will consider updated Type 2 and Type 4 groundwater RRS for the Site that have been recalculated to reflect the use of updated standard Default Exposure Factors as outlined in the United States Environmental Protection Agency (EPA) Office of Solid Waste and Emergency Response (OSWER) Directive 9200.1-120 dated February 6, 2014. The groundwater values provided in this letter are intended to supersede and replace the groundwater RRS values presented in Voluntary Investigation and Remediation Plan (VIRP) for the Site dated December 2015, as amended November 28, 2016 and approved on March 1, 2016.

As suggested by Ms. Alexander, the groundwater RRS values provided in this submittal were calculated using EPA's web-based Regional Screening Level (RSL) calculator. A table summarizing the Type 1 through Type 4 RRS is provided in **Table 1**. The supporting "output" data files generated by the RSL calculator are provided in **Appendix A**.

If you have any questions regarding the updated groundwater RRS, please do not hesitate to call me at 404.803.2093 or by e-mail at clwilli@gmail.com.

Sincerely,

Carrie Williams

Carrie L. Williams, P.G.

Enclosures:
Table 1. Updated Groundwater Risk Reduction Standards
Appendix A. Residential and Non-Residential RSL Calculator Output

Table 1.
Updated Groundwater Risk Reduction Standards
(Update of Standard Default Exposure Parameters - OSWER Directive 9200.1-120)
Silverstein's Cleaner Site - HSI No. 10517
VRP Program - September 26, 2017

REGULATED SUBSTANCE	July 2017 Maximum Concentration[(1)]	RESIDENTIAL		NON-RESIDENTIAL	
		Type 1 (Default)	Type 2 (Site-specific)	Type 3 (Default)	Type 4 (Site-specific)
	µg/L (ppb)				
Acetone	<PQL	4,000	**14,100**	4,000	**75,600**
Bromoform	<PQL	**80**	32.9	80	**144**
Bromomethane	<PQL	**10**	7.55	10	**34.5**
Chloroform	<PQL	**80**	2.21	**80**	9.66
Chloromethane	<PQL	3	**188**	3	**788**
Dichloroethylene, 1,1-	<PQL	7	**285**	7	**1,330**
Dichloroethylene, 1,2-cis-	11	**70**	36.1	70	**223**
Dichloroethylene, 1,2-trans-	<PQL	100	**361**	100	**2,230**
Methyl Ethyl Ketone	<PQL	2,000	**5,570**	2,000	**26,900**
Tetrachloroethylene (PCE)	510	5	**40.6**	5	**217**
Trichloroethylene (TCE)	7.4	**5**	2.83	5	**13.3**
Trichlorofluoromethane	<PQL	2,000	**5,160**	2,000	**32,700**
Vinyl Chloride	<PQL	**2**	0.188	2	**2.15**

Notes:
Target Risk Level - 1E-05
Target Hazard Quotient - 1
Standard default exposure parameters updated in accordance with OSWER Directive 9200.1-120 (EPA, 2014)

(1) - Maximum concentration detected in VRP Performance monitoirng wells measured in July 2017.

APPENDIX A

EPA RSL CALCULATOR
INPUT AND OUTPUT

Site-specific

Resident Equation Inputs for Tap Water

Variable	Value
THQ (target hazard quotient) unitless	1
TR (target risk) unitless	1.0E-5
LT (lifetime) years	70
K (volatilization factor of Andelman) L/m^3	0.5
l_{sc} (apparent thickness of stratum corneum) cm	0.001
ED_{res} (exposure duration - resident) years	26
ED_{res-c} (exposure duration - child) years	6
ED_{res-a} (exposure duration - adult) years	20
ED_{0-2} (mutagenic exposure duration first phase) years	2
ED_{2-6} (mutagenic exposure duration second phase) years	4
ED_{6-16} (mutagenic exposure duration third phase) years	10
ED_{16-26} (mutagenic exposure duration fourth phase) years	10
EF_{res} (exposure frequency) days/year	350
EF_{res-c} (exposure frequency - child) days/year	350
EF_{res-a} (exposure frequency - adult) days/year	350
EF_{0-2} (mutagenic exposure frequency first phase) days/year	350
EF_{2-6} (mutagenic exposure frequency second phase) days/year	350
EF_{6-16} (mutagenic exposure frequency third phase) days/year	350
EF_{16-26} (mutagenic exposure frequency fourth phase) days/year	350
$ET_{event\ res-adj}$ (age-adjusted exposure time) hours/event	0.67077
$ET_{res-madj}$ (mutagenic age-adjusted exposure time) hours/event	0.67077
ET_{res} (exposure time) hours/day	24
ET_{res-c} (dermal exposure time - child) hours/event	0.54
ET_{res-a} (dermal exposure time - adult) hours/event	0.71
ET_{res-c} (inhalation exposure time - child) hours/day	24
ET_{res-a} (inhalation exposure time - adult) hours/day	24
ET_{0-2} (mutagenic inhalation exposure time first phase) hours/day	24
ET_{2-6} (mutagenic inhalation exposure time second phase) hours/day	24
ET_{6-16} (mutagenic inhalation exposure time third phase) hours/day	24
ET_{16-26} (mutagenic inhalation exposure time fourth phase) hours/day	24
ET_{0-2} (mutagenic dermal exposure time first phase) hours/event	0.54
ET_{2-6} (mutagenic dermal exposure time second phase) hours/event	0.54
ET_{6-16} (mutagenic dermal exposure time third phase) hours/event	0.71
ET_{16-26} (mutagenic dermal exposure time fourth phase) hours/event	0.71

Output generated 07SEP2017:12:27:46

Site-specific

Resident Equation Inputs for Tap Water

Variable	Value
BW_{res-a} (body weight - adult) kg	80
BW_{res-c} (body weight - child) kg	15
BW_{0-2} (mutagenic body weight) kg	15
BW_{2-6} (mutagenic body weight) kg	15
BW_{6-16} (mutagenic body weight) kg	80
BW_{16-26} (mutagenic body weight) kg	80
$IFW_{res-adj}$ (adjusted intake factor) L/kg	327.95
$IFW_{res-adj}$ (adjusted intake factor) L/kg	327.95
$IFWM_{res-adj}$ (mutagenic adjusted intake factor) L/kg	1019.9
$IFWM_{res-adj}$ (mutagenic adjusted intake factor) L/kg	1019.9
IRW_{res-c} (water intake rate - child) L/day	0.78
IRW_{res-a} (water intake rate - adult) L/day	2.5
IRW_{0-2} (mutagenic water intake rate) L/day	0.78
IRW_{2-6} (mutagenic water intake rate) L/day	0.78
IRW_{6-16} (mutagenic water intake rate) L/day	2.5
IRW_{16-26} (mutagenic water intake rate) L/day	2.5
EV_{res-a} (events - adult) per day	1
EV_{res-c} (events - child) per day	1
EV_{0-2} (mutagenic events) per day	1
EV_{2-6} (mutagenic events) per day	1
EV_{6-16} (mutagenic events) per day	1
EV_{16-26} (mutagenic events) per day	1
$DFW_{res-adj}$ (age-adjusted dermal factor) cm^2-event/kg	2610650
$DFWM_{res-adj}$ (mutagenic age-adjusted dermal factor) cm^2-event/kg	8191633
$DFW_{res-adj}$ (age-adjusted dermal factor) cm^2-event/kg	2610650
$DFWM_{res-adj}$ (mutagenic age-adjusted dermal factor) cm^2-event/kg	8191633
SA_{res-c} (skin surface area - child) cm^2	6365
SA_{res-a} (skin surface area - adult) cm^2	19652
SA_{0-2} (mutagenic skin surface area) cm^2	6365
SA_{2-6} (mutagenic skin surface area) cm^2	6365
SA_{6-16} (mutagenic skin surface area) cm^2	19652
SA_{16-26} (mutagenic skin surface area) cm^2	19652

Site-specific

Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

Chemical	CAS Number	Mutagen?	VOC?	Chemical Type	Ingestion SF (mg/kg-day) $^{-1}$	SFO Ref	Inhalation Unit Risk (ug/m ^{3}) $^{-1}$	IUR Ref	Chronic RfD (mg/kg-day)	Chronic RfD Ref	Chronic RfC (mg/m ^{3})	Chronic RfC Ref	GIABS	K_p (cm/hr)
Acetone	67-64-1	No	Yes	Organics	-		-		9.00E-01	U	3.09E+01	U	1	0.000512
Bromoform	75-25-2	No	Yes	Organics	7.90E-03	U	1.10E-06	U	2.00E-02	U	-		1	0.00235
Bromomethane	74-83-9	No	Yes	Organics	-		-		1.40E-03	U	5.00E-03	U	1	0.00284
Chloroform	67-66-3	No	Yes	Organics	3.10E-02	U	2.30E-05	U	1.00E-02	U	9.77E-02	U	1	0.00683
Chloromethane	74-87-3	No	Yes	Organics	-		-		-		9.00E-02	U	1	0.00328
Dichloroethylene, 1,1-	75-35-4	No	Yes	Organics	-		-		5.00E-02	U	2.00E-01	U	1	0.0117
Dichloroethylene, 1,2-cis-	156-59-2	No	Yes	Organics	-		-		2.00E-03	U	-		1	0.011
Dichloroethylene, 1,2-trans-	156-60-5	No	Yes	Organics	-		-		2.00E-02	U	-		1	0.011
Methyl Ethyl Ketone (2-Butanone)	78-93-3	No	Yes	Organics	-		-		6.00E-01	U	5.00E+00	U	1	0.000962
Tetrachloroethylene	127-18-4	No	Yes	Organics	2.10E-03	U	2.60E-07	U	6.00E-03	U	4.00E-02	U	1	0.0334
Trichloroethylene	79-01-6	Yes	Yes	Organics	4.60E-02	U	4.10E-06	U	5.00E-04	U	2.00E-03	U	1	0.0116
Trichlorofluoromethane	75-69-4	No	Yes	Organics	-		-		3.00E-01	U	-		1	0.0127
Vinyl Chloride	75-01-4	Yes	Yes	Organics	7.20E-01	U	4.40E-06	U	3.00E-03	U	1.00E-01	U	1	0.00838

Site-specific

Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

Chemical	MW	B (unitless)	tSUP (hr)	τ $_{event}$ (hr/event)	FA (unitless)	In EPD?	$DA_{event\ (ca)}$	$DA_{event\ (nc\ child)}$	$DA_{event\ (nc\ adult)}$	MCL ug/L	Ingestion SL TR=1.0E-5 (ug/L)	Dermal SL TR=1.0E-5 (ug/L)	Inhalation SL TR=1.0E-5 (ug/L)
Acetone	58.1	0.001501	0.5338509	0.2224379	1	Yes	-	2.211873	3.8207671	-	-	-	-
Bromoform	253	0.0143766	6.5896142	2.7456726	1	Yes	0.0123884	0.0491527	0.0849059	8.00E+01	9.86E+01	1.41E+03	5.10E+01
Bromomethane	94.9	0.0106409	0.8580251	0.3575105	1	Yes	-	0.0034407	0.0059434	-	-	-	-
Chloroform	119	0.0286563	1.1707387	0.4878078	1	Yes	0.003157	0.0245764	0.042453	8.00E+01	2.51E+01	2.92E+02	2.44E+00
Chloromethane	50.5	0.0089649	0.4840163	0.2016735	1	Yes	-	-	-	-	-	-	-
Dichloroethylene, 1,1-	96.9	0.044297	0.8804405	0.3668502	1	Yes	-	0.1228818	0.2122648	7.00E+00	-	-	-
Dichloroethylene, 1,2-cis-	96.9	0.0416468	0.8804405	0.3668502	1	Yes	-	0.0049153	0.0084906	7.00E+01	-	-	-
Dichloroethylene, 1,2-trans-	96.9	0.0416468	0.8804405	0.3668502	1	Yes	-	0.0491527	0.0849059	1.00E+02	-	-	-
Methyl Ethyl Ketone (2-Butanone)	72.1	0.0031417	0.6394697	0.2664457	1	Yes	-	1.474582	2.547178	-	-	-	-
Tetrachloroethylene	166	0.1655111	2.1461496	0.894229	1	Yes	0.046604	0.0147458	0.0254718	5.00E+00	3.71E+02	6.52E+02	2.16E+02
Trichloroethylene	131	0.0510646	1.3666585	0.569441	1	Yes	0.0014797	0.0012288	0.0021226	5.00E+00	1.18E+01	7.47E+01	9.57E+00
Trichlorofluoromethane	137	0.057173	1.4765902	0.6152459	1	Yes	-	0.737291	1.273589	-	-	-	-
Vinyl Chloride	62.5	0.0254807	0.565015	0.2354229	1	Yes	0.0000264	0.0073729	0.0127359	2.00E+00	2.14E-01	2.77E+00	3.35E+00

Site-specific

Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

Chemical	Carcinogenic SL TR=1.0E-5 (ug/L)	Ingestion SL Child THQ=1 (ug/L)	Dermal SL Child THQ=1 (ug/L)	Inhalation SL Child THQ=1 (ug/L)	Noncarcinogenic SL Child THI=1 (ug/L)	Ingestion SL Adult THQ=1 (ug/L)	Dermal SL Adult THQ=1 (ug/L)	Inhalation SL Adult THQ=1 (ug/L)	Noncarcinogenic SL Adult THI=1 (ug/L)	Screening Level (ug/L)
Acetone	-	1.80E+04	4.39E+06	6.44E+04	1.41E+04	3.00E+04	6.46E+06	6.44E+04	2.04E+04	1.41E+04 nc
Bromoform	3.29E+01	4.01E+02	6.21E+03	-	3.77E+02	6.67E+02	9.36E+03	-	6.23E+02	3.29E+01 ca*
Bromomethane	-	2.81E+01	9.98E+02	1.04E+01	7.55E+00	4.67E+01	1.50E+03	1.04E+01	8.48E+00	7.55E+00 nc
Chloroform	2.21E+00	2.01E+02	2.54E+03	2.04E+02	9.72E+01	3.34E+02	3.82E+03	2.04E+02	1.22E+02	2.21E+00 ca*
Chloromethane	-	-	-	1.88E+02	1.88E+02	-	-	1.88E+02	1.88E+02	1.88E+02 nc
Dichloroethylene, 1,1-	-	1.00E+03	8.54E+03	4.17E+02	2.85E+02	1.67E+03	1.29E+04	4.17E+02	3.25E+02	2.85E+02 nc
Dichloroethylene, 1,2-cis-	-	4.01E+01	3.63E+02	-	3.61E+01	6.67E+01	5.47E+02	-	5.95E+01	3.61E+01 nc
Dichloroethylene, 1,2-trans-	-	4.01E+02	3.63E+03	-	3.61E+02	6.67E+02	5.47E+03	-	5.95E+02	3.61E+02 nc
Methyl Ethyl Ketone (2-Butanone)	-	1.20E+04	1.46E+06	1.04E+04	5.57E+03	2.00E+04	2.13E+06	1.04E+04	6.84E+03	5.57E+03 nc
Tetrachloroethylene	1.13E+02	1.20E+02	2.30E+02	8.34E+01	4.06E+01	2.00E+02	3.46E+02	8.34E+01	5.03E+01	4.06E+01 nc
Trichloroethylene	4.94E+00	1.00E+01	6.91E+01	4.17E+00	2.83E+00	1.67E+01	1.04E+02	4.17E+00	3.23E+00	2.83E+00 nc
Trichlorofluoromethane	-	6.02E+03	3.64E+04	-	5.16E+03	1.00E+04	5.49E+04	-	8.47E+03	5.16E+03 nc
Vinyl Chloride	1.88E-01	6.02E+01	8.93E+02	2.09E+02	4.44E+01	1.00E+02	1.29E+03	2.09E+02	6.43E+01	1.88E-01 ca

Site-specific

Resident Equation Inputs for Tap Water

Variable	Value
THQ (target hazard quotient) unitless	1
TR (target risk) unitless	1.0E-5
LT (lifetime) years	70
K (volatilization factor of Andelman) L/m^3	0.5
l_{sc} (apparent thickness of stratum corneum) cm	0.001
ED_{res} (exposure duration - resident) years	25
ED_{res-c} (exposure duration - child) years	0
ED_{res-a} (exposure duration - adult) years	25
ED_{0-2} (mutagenic exposure duration first phase) years	0
ED_{2-6} (mutagenic exposure duration second phase) years	0
ED_{6-16} (mutagenic exposure duration third phase) years	0
ED_{16-26} (mutagenic exposure duration fourth phase) years	25
EF_{res} (exposure frequency) days/year	250
EF_{res-c} (exposure frequency - child) days/year	0
EF_{res-a} (exposure frequency - adult) days/year	250
EF_{0-2} (mutagenic exposure frequency first phase) days/year	0
EF_{2-6} (mutagenic exposure frequency second phase) days/year	0
EF_{6-16} (mutagenic exposure frequency third phase) days/year	0
EF_{16-26} (mutagenic exposure frequency fourth phase) days/year	250
$ET_{event\ res-adj}$ (age-adjusted exposure time) hours/event	0.54
$ET_{res-madj}$ (mutagenic age-adjusted exposure time) hours/event	0.54
ET_{res} (exposure time) hours/day	8
ET_{res-c} (dermal exposure time - child) hours/event	0
ET_{res-a} (dermal exposure time - adult) hours/event	0.54
ET_{res-c} (inhalation exposure time - child) hours/day	0
ET_{res-a} (inhalation exposure time - adult) hours/day	8
ET_{0-2} (mutagenic inhalation exposure time first phase) hours/day	0
ET_{2-6} (mutagenic inhalation exposure time second phase) hours/day	0
ET_{6-16} (mutagenic inhalation exposure time third phase) hours/day	0
ET_{16-26} (mutagenic inhalation exposure time fourth phase) hours/day	8
ET_{0-2} (mutagenic dermal exposure time first phase) hours/event	0
ET_{2-6} (mutagenic dermal exposure time second phase) hours/event	0
ET_{6-16} (mutagenic dermal exposure time third phase) hours/event	0
ET_{16-26} (mutagenic dermal exposure time fourth phase) hours/event	0.54

Output generated 07SEP2017:12:38:37

Site-specific

Resident Equation Inputs for Tap Water

Variable	Value
BW_{res-a} (body weight - adult) kg	80
BW_{res-c} (body weight - child) kg	0
BW_{0-2} (mutagenic body weight) kg	0
BW_{2-6} (mutagenic body weight) kg	0
BW_{6-16} (mutagenic body weight) kg	0
BW_{16-26} (mutagenic body weight) kg	80
$IFW_{res-adj}$ (adjusted intake factor) L/kg	78.125
$IFW_{res-adj}$ (adjusted intake factor) L/kg	78.125
$IFWM_{res-adj}$ (mutagenic adjusted intake factor) L/kg	78.125
$IFWM_{res-adj}$ (mutagenic adjusted intake factor) L/kg	78.125
IRW_{res-c} (water intake rate - child) L/day	0
IRW_{res-a} (water intake rate - adult) L/day	1
IRW_{0-2} (mutagenic water intake rate) L/day	0
IRW_{2-6} (mutagenic water intake rate) L/day	0
IRW_{6-16} (mutagenic water intake rate) L/day	0
IRW_{16-26} (mutagenic water intake rate) L/day	1
EV_{res-a} (events - adult) per day	1
EV_{res-c} (events - child) per day	0
EV_{0-2} (mutagenic events) per day	0
EV_{2-6} (mutagenic events) per day	0
EV_{6-16} (mutagenic events) per day	0
EV_{16-26} (mutagenic events) per day	1
$DFW_{res-adj}$ (age-adjusted dermal factor) cm^2-event/kg	275546.875
$DFWM_{res-adj}$ (mutagenic age-adjusted dermal factor) cm^2-event/kg	275546.875
$DFW_{res-adj}$ (age-adjusted dermal factor) cm^2-event/kg	275546.875
$DFWM_{res-adj}$ (mutagenic age-adjusted dermal factor) cm^2-event/kg	275546.875
SA_{res-c} (skin surface area - child) cm^2	0
SA_{res-a} (skin surface area - adult) cm^2	3527
SA_{0-2} (mutagenic skin surface area) cm^2	0
SA_{2-6} (mutagenic skin surface area) cm^2	0
SA_{6-16} (mutagenic skin surface area) cm^2	0
SA_{16-26} (mutagenic skin surface area) cm^2	3527

Site-specific

Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

Chemical	CAS Number	Mutagen?	VOC?	Chemical Type	Ingestion SF (mg/kg-day) $^{-1}$	SFO Ref	Inhalation Unit Risk (ug/m ^{3}) $^{-1}$	IUR Ref	Chronic RfD (mg/kg-day)	Chronic RfD Ref	Chronic RfC (mg/m ^{3})	Chronic RfC Ref	GIABS	K_p (cm/hr)
Acetone	67-64-1	No	Yes	Organics	-		-		9.00E-01	U	3.09E+01	U	1	0.000512
Bromoform	75-25-2	No	Yes	Organics	7.90E-03	U	1.10E-06	U	2.00E-02	U	-		1	0.00235
Bromomethane	74-83-9	No	Yes	Organics	-		-		1.40E-03	U	5.00E-03	U	1	0.00284
Chloroform	67-66-3	No	Yes	Organics	3.10E-02	U	2.30E-05	U	1.00E-02	U	9.77E-02	U	1	0.00683
Chloromethane	74-87-3	No	Yes	Organics	-		-		-		9.00E-02	U	1	0.00328
Dichloroethylene, 1,1-	75-35-4	No	Yes	Organics	-		-		5.00E-02	U	2.00E-01	U	1	0.0117
Dichloroethylene, 1,2-cis-	156-59-2	No	Yes	Organics	-		-		2.00E-03	U	-		1	0.011
Dichloroethylene, 1,2-trans-	156-60-5	No	Yes	Organics	-		-		2.00E-02	U	-		1	0.011
Methyl Ethyl Ketone (2-Butanone)	78-93-3	No	Yes	Organics	-		-		6.00E-01	U	5.00E+00	U	1	0.000962
Tetrachloroethylene	127-18-4	No	Yes	Organics	2.10E-03	U	2.60E-07	U	6.00E-03	U	4.00E-02	U	1	0.0334
Trichloroethylene	79-01-6	Yes	Yes	Organics	4.60E-02	U	4.10E-06	U	5.00E-04	U	2.00E-03	U	1	0.0116
Trichlorofluoromethane	75-69-4	No	Yes	Organics	-		-		3.00E-01	U	-		1	0.0127
Vinyl Chloride	75-01-4	Yes	Yes	Organics	7.20E-01	U	4.40E-06	U	3.00E-03	U	1.00E-01	U	1	0.00838

Site-specific

Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

Chemical	MW	B (unitless)	tSUP (hr)	τ$_{event}$ (hr/event)	FA (unitless)	In EPD?	DA$_{event\ (ca)}$	DA$_{event\ (nc\ child)}$	DA$_{event\ (nc\ adult)}$	MCL ug/L	Ingestion SL TR=1.0E-5 (ug/L)	Dermal SL TR=1.0E-5 (ug/L)	Inhalation SL TR=1.0E-5 (ug/L)
Acetone	58.1	0.001501	0.5338509	0.2224379	1	Yes	-	-	29.804366	-	-	-	-
Bromoform	253	0.0143766	6.5896142	2.7456726	1	Yes	0.117373	-	0.6623193	8.00E+01	4.14E+02	1.48E+04	2.23E+02
Bromomethane	94.9	0.0106409	0.8580251	0.3575105	1	Yes	-	-	0.0463623	-	-	-	-
Chloroform	119	0.0286563	1.1707387	0.4878078	1	Yes	0.0299112	-	0.3311596	8.00E+01	1.05E+02	3.09E+03	1.07E+01
Chloromethane	50.5	0.0089649	0.4840163	0.2016735	1	Yes	-	-	-	-	-	-	-
Dichloroethylene, 1,1-	96.9	0.044297	0.8804405	0.3668502	1	Yes	-	-	1.6557981	7.00E+00	-	-	-
Dichloroethylene, 1,2-cis-	96.9	0.0416468	0.8804405	0.3668502	1	Yes	-	-	0.0662319	7.00E+01	-	-	-
Dichloroethylene, 1,2-trans-	96.9	0.0416468	0.8804405	0.3668502	1	Yes	-	-	0.6623193	1.00E+02	-	-	-
Methyl Ethyl Ketone (2-Butanone)	72.1	0.0031417	0.6394697	0.2664457	1	Yes	-	-	19.869578	-	-	-	-
Tetrachloroethylene	166	0.1655111	2.1461496	0.894229	1	Yes	0.4415462	-	0.1986958	5.00E+00	1.56E+03	6.88E+03	9.43E+02
Trichloroethylene	131	0.0510646	1.3666585	0.569441	1	Yes	0.0200373	-	0.016558	5.00E+00	7.07E+01	1.13E+03	5.98E+01
Trichlorofluoromethane	137	0.057173	1.4765902	0.6152459	1	Yes	-	-	9.9347888	-	-	-	-
Vinyl Chloride	62.5	0.0254807	0.565015	0.2354229	1	Yes	0.0012878	-	0.0993479	2.00E+00	4.54E+00	1.56E+02	4.20E+00

Site-specific

Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

Chemical	Carcinogenic SL TR=1.0E-5 (ug/L)	Ingestion SL Child THQ=1 (ug/L)	Dermal SL Child THQ=1 (ug/L)	Inhalation SL Child THQ=1 (ug/L)	Noncarcinogenic SL Child THI=1 (ug/L)	Ingestion SL Adult THQ=1 (ug/L)	Dermal SL Adult THQ=1 (ug/L)	Inhalation SL Adult THQ=1 (ug/L)	Noncarcinogenic SL Adult THI=1 (ug/L)	Screening Level (ug/L)
Acetone	-	-	-	-	-	1.05E+05	5.91E+07	2.71E+05	7.56E+04	7.56E+04 nc
Bromoform	1.44E+02	-	-	-	-	2.34E+03	8.37E+04	-	2.27E+03	1.44E+02 ca*
Bromomethane	-	-	-	-	-	1.64E+02	1.34E+04	4.38E+01	3.45E+01	3.45E+01 nc
Chloroform	9.66E+00	-	-	-	-	1.17E+03	3.42E+04	8.56E+02	4.87E+02	9.66E+00 ca*
Chloromethane	-	-	-	-	-	-	-	7.88E+02	7.88E+02	7.88E+02 nc
Dichloroethylene, 1,1-	-	-	-	-	-	5.84E+03	1.15E+05	1.75E+03	1.33E+03	1.33E+03 nc
Dichloroethylene, 1,2-cis-	-	-	-	-	-	2.34E+02	4.89E+03	-	2.23E+02	2.23E+02 nc
Dichloroethylene, 1,2-trans-	-	-	-	-	-	2.34E+03	4.89E+04	-	2.23E+03	2.23E+03 nc
Methyl Ethyl Ketone (2-Butanone)	-	-	-	-	-	7.01E+04	1.97E+07	4.38E+04	2.69E+04	2.69E+04 nc
Tetrachloroethylene	5.41E+02	-	-	-	-	7.01E+02	3.10E+03	3.50E+02	2.17E+02	2.17E+02 nc
Trichloroethylene	3.15E+01	-	-	-	-	5.84E+01	9.31E+02	1.75E+01	1.33E+01	1.33E+01 nc
Trichlorofluoromethane	-	-	-	-	-	3.50E+04	4.91E+05	-	3.27E+04	3.27E+04 nc
Vinyl Chloride	2.15E+00	-	-	-	-	3.50E+02	1.20E+04	8.76E+02	2.45E+02	2.15E+00 ca