

**DRAFT**  
3/20/03  
as revised August 2015

Proposed  
Revisions

Connecticut's  
Remediation Standard Regulations  
Volatilization Criteria

Appendix C

Comparison to  
1996 Volatilization Criteria

**Table C2**

**Comparison of Ground Water Volatilization Criteria**

<b>Compound</b>	<b>CAS Number</b>	<b>Residential GWVC (ug/L)</b>	<b>1996 Residential GWVC (ug/L)</b>	<b>Ind/Com GWVC (ug/L)</b>	<b>1996 Ind/Com GWVC (ug/L)</b>
Acetone	67641	▶ 50000	50000	▶ 50000	50000
Acrylonitrile	107131	NA	NA	NA	NA
Benzene	71432	▼ 130	215	▼ 310	3491
Bromoform	75252	▼ 75	920	▼ 2300	3800
2-Butanone (MEK)	78933	▶ 50000	50000	▶ 50000	50000
Carbon tetrachloride	56235	▼ 5.3	16	▼ 14	40
Chlorobenzene	108907	▶ 1800	1800	▲ 23000	6150
Chloroform	67663	▼ 26	287	▼ 62	710
Dibromochloromethane	124481	NA	NA	NA	NA
1,2-Dichlorobenzene	95501	▼ 5100	30500	▶ 50000	50000
1,3-Dichlorobenzene	541731	▼ 4300	24200	▶ 50000	50000
1,4-Dichlorobenzene	106467	▼ 1400	50000	▼ 3400	50000
1,1-Dichloroethane	75343	▼ 3000	34600	▼ 41000	50000
1,2-Dichloroethane	107062	▼ 6.5	21	▼ 68	90
1,1-Dichloroethylene	75354	▲ 190	1	▲ 920	6
<del>cis-1,2-Dichloroethylene</del>	<del>456592</del>	See New Criteria below	NA	See New Criteria below	NA
<del>trans-1,2-Dichloroethylene</del>	<del>456605</del>	See New Criteria below	NA	See New Criteria below	NA
1,2-Dichloropropane	78875	▼ 7.4	14	▶ 58	60
1,3-Dichloropropene	542756	▲ 11	6	▲ 360	25
Ethyl benzene	100414	▼ 2700	50000	▼ 36000	50000
Ethylene dibromide (EDB)	106934	▼ 0.3	4	▼ 11	16
Methyl-tert-butyl-ether	1634044	▼ 21000	50000	▶ 50000	50000
Methyl isobutyl ketone	108101	▼ 13000	50000	▶ 50000	50000
Methylene chloride	75092	▼ 160	4512	▼ 2200	11117
Styrene	100425	▲ 3100	580	▲ 42000	2065

**Table C2**  
(Continued)

**Comparison of Ground Water Volatilization Criteria**

Compound	CAS Number	Residential GWVC (ug/L)	1996 Residential GWVC (ug/L)	Ind/Com GWVC (ug/L)	1996 Ind/Com GWVC (ug/L)
1,1,1,2-Tetrachloroethane	630206	▼2	12	▲64	50
1,1,2,2-Tetrachloroethane	79345	▼1.8	23	▼54	100
Tetrachloroethylene	127184	▼340	1500	▼810	3820
Toluene	108883	▼7100	23500	▼41000	50000
1,1,1-Trichloroethane	71556	▼6500	20400	▼16000	50000
1,1,2-Trichloroethane	79005	▼220	8000	▼2900	19600
Trichloroethylene	79016	▼27	219	▼67	540
Vinyl chloride	75014	►1.6	2	▲52	2
Xylenes	1330207	▼8700	21300	▼48000	50000
<b>New Criteria</b>					
<del>Trichlorofluoromethane</del>	<del>75694</del>	<del>1300</del>	<del>NA</del>	<del>4200</del>	<del>NA</del>
<del>Chloroethane</del>	<del>75003</del>	<del>12000</del>	<del>NA</del>	<del>29000</del>	<del>NA</del>
<del>Chloromethane</del>	<del>74873</del>	<del>399</del>	<del>NA</del>	<del>5500</del>	<del>NA</del>
<del>Dichlorodifluoromethane</del>	<del>75718</del>	<del>93</del>	<del>NA</del>	<del>4299</del>	<del>NA</del>
<del>Isopropylbenzene (Cumene)</del>	<del>98828</del>	<del>2800</del>	<del>NA</del>	<del>6800</del>	<del>NA</del>
<del>Cis-1,2-dichloroethene</del>	<del>456592</del>	<del>839</del>	<del>NA</del>	<del>11000</del>	<del>NA</del>
<del>trans-1,2-dichloroethene</del>	<del>456605</del>	<del>4000</del>	<del>NA</del>	<del>13000</del>	<del>NA</del>
<del>Bromodichloromethane</del>	<del>75274</del>	<del>2.3</del>	<del>NA</del>	<del>73</del>	<del>NA</del>
<del>N-butylbenzene</del>	<del>104518</del>	<del>1500</del>	<del>NA</del>	<del>21000</del>	<del>NA</del>
<del>Sec-butylbenzene</del>	<del>135988</del>	<del>1500</del>	<del>NA</del>	<del>20000</del>	<del>NA</del>
<del>1,2,4-trimethylbenzene</del>	<del>95636</del>	<del>369</del>	<del>NA</del>	<del>4800</del>	<del>NA</del>
<del>1,3,5-trimethylbenzene</del>	<del>108678</del>	<del>289</del>	<del>NA</del>	<del>3900</del>	<del>NA</del>
<del>4-isopropyltoluene (4-cymene)</del>	<del>99876</del>	<del>1600</del>	<del>NA</del>	<del>22000</del>	<del>NA</del>
▲ GWVC increased. ▼ GWVC decreased. ► GWVC stayed the same.					

**Table C3**

**Comparison of Soil Vapor Volatilization Criteria**

<b>Compound</b>	<b>CAS Number</b>	<b>Residential SVVC (ppm)</b>	<b>1996 Residential SVVC (ppm)</b>	<b>Ind/Com SVVC (ppm)</b>	<b>1996 Ind/Com SVVC (ppm)</b>
Acetone	67641	▼57	2400	▼290	8250
Acrylonitrile	107131	NA	NA	NA	NA
Benzene	71432	▼0.78	1	▼1.4	113
Bromoform	75252	▼0.04	1.5	▼0.98	6
2-Butanone (MEK)	78933	▼130	2400	▼230	8285
Carbon tetrachloride	56235	▼0.06	1	▼0.12	2.7
Chlorobenzene	108907	▼6.1	31	▼60	106
Chloroform	67663	▼0.078	4.5	▼0.14	10.4
Dibromochloromethane	124481	NA	NA	NA	NA
1,2-Dichlorobenzene	95501	▼9.2	240	▼95	818
1,3-Dichlorobenzene	541731	▼9.2	240	▼95	818
1,4-Dichlorobenzene	106467	▼3	950	▼5.5	3270
1,1-Dichloroethane	75343	▼14	850	▼150	3037
1,2-Dichloroethane	107062	▼0.013	1	▼0.11	1
1,1-Dichloroethylene	75354	▲1.9	1	▲7	1
<del>cis-1,2-Dichloroethylene</del>	<del>456592</del>	<del>See New Criteria below</del>	<del>NA</del>	<del>See New Criteria below</del>	<del>NA</del>
<del>trans-1,2-Dichloroethylene</del>	<del>456605</del>	<del>See New Criteria below</del>	<del>NA</del>	<del>See New Criteria below</del>	<del>NA</del>
1,2-Dichloropropane	78875	▼0.021	1	▼0.13	1
1,3-Dichloropropene	542756	▼0.035	1	▼0.89	1
Ethyl benzene	100414	▼9.3	1650	▼93	5672
Ethylene dibromide (EDB)	106934	▼0.0005	1	▼0.007	1
Methyl-tert-butyl-ether	1634044	▼34	1000	▼73	3415
Methyl isobutyl ketone	108101	▼6.8	140	▼68	480
Methylene chloride	75092	▼0.65	89	▼6.8	218
Styrene	100425	▲9.3	8	▲95	28

**Table C3**  
(Continued)

**Comparison of Soil Vapor Volatilization Criteria**

Compound	CAS Number	Residential SVVC (ppm)	1996 Residential SVVC (ppm)	Ind/Com SVVC (ppm)	1996 Ind/Com SVVC (ppm)
1,1,1,2-Tetrachloroethane	630206	▼0.009	1	▼0.22	1.5
1,1,2,2-Tetrachloroethane	79345	▼0.0012	1	▼0.028	1
Tetrachloroethylene	127184	▼0.56	11	▼1	27
Toluene	108883	▼42	760	▼180	2615
1,1,1 Trichloroethane	71556	▼70	1310	▼130	4520
1,1,2-Trichloroethane	79005	▼0.31	40	▼3.1	93
Trichloroethylene	79016	▼0.14	7	▼0.26	16
Vinyl chloride	75014	▼0.041	1	►1	1
Xylenes	1330207	▼38	500	▼160	1702
<b>New Criteria</b>					
<del>Trichlorofluoromethane</del>	<del>75694</del>	<del>50</del>	<del>NA</del>	<del>120</del>	<del>NA</del>
<del>Chloroethane</del>	<del>75003</del>	<del>140</del>	<del>NA</del>	<del>260</del>	<del>NA</del>
<del>Chloromethane</del>	<del>74873</del>	<del>5.4</del>	<del>NA</del>	<del>53</del>	<del>NA</del>
<del>Dichlorodifluoromethane</del>	<del>75718</del>	<del>14</del>	<del>NA</del>	<del>140</del>	<del>NA</del>
<del>Isopropylbenzene (Cumene)</del>	<del>98828</del>	<del>19</del>	<del>NA</del>	<del>34</del>	<del>NA</del>
<del>Cis-1,2-dichloroethene</del>	<del>156592</del>	<del>3.4</del>	<del>NA</del>	<del>35</del>	<del>NA</del>
<del>trans-1,2-dichloroethene</del>	<del>156605</del>	<del>7.4</del>	<del>NA</del>	<del>70</del>	<del>NA</del>
<del>Bromodichloromethane</del>	<del>75274</del>	<del>0.0038</del>	<del>NA</del>	<del>0.005</del>	<del>NA</del>
<del>N-butylbenzene</del>	<del>104518</del>	<del>10</del>	<del>NA</del>	<del>100</del>	<del>NA</del>
<del>Sec-butylbenzene</del>	<del>135988</del>	<del>10</del>	<del>NA</del>	<del>100</del>	<del>NA</del>
<del>1,2,4-trimethylbenzene</del>	<del>95636</del>	<del>1.4</del>	<del>NA</del>	<del>15</del>	<del>NA</del>
<del>1,3,5-trimethylbenzene</del>	<del>108678</del>	<del>1.4</del>	<del>NA</del>	<del>15</del>	<del>NA</del>
<del>4-isopropyltoluene (4-cymene)</del>	<del>90876</del>	<del>9.3</del>	<del>NA</del>	<del>94</del>	<del>NA</del>
▲ SVVC increased. ▼ SVVC decreased. ► SVVC stayed the same.					