

**Summary of  
TACO-Derived Maximum Allowable Concentrations of Chemical  
Constituents in Uncontaminated Soil  
35 Ill. Adm. Code 1100.Subpart F (Proposed)**

Chemical Name	Maximum Allowable Concentration <sup>a</sup>
Acenaphthene	570 <sup>b</sup> mg/kg
Acetone	25 <sup>b</sup> mg/kg
Alachlor	0.04 <sup>b</sup> mg/kg
Aldicarb	0.013 <sup>b</sup> mg/kg
Aldrin	0.94 <sup>c</sup> mg/kg
Anthracene	12,000 <sup>b</sup> mg/kg
Antimony	5 <sup>d</sup> mg/kg
Arsenic	0.4 <sup>l</sup> mg/kg
Atrazine	0.066 <sup>b</sup> mg/kg
Barium	260 <sup>d</sup> mg/kg
Benzene	0.03 <sup>b</sup> mg/kg
Benzo(a)anthracene	0.9 <sup>e</sup> mg/kg
Benzo(b)fluoranthene	0.9 <sup>e</sup> mg/kg
Benzo(k)fluoranthene	9 <sup>e</sup> mg/kg
Benzoic Acid	400 <sup>d</sup> mg/kg
Benzo(a)pyrene (within Chicago corporate limits)	1.3 <sup>f</sup> mg/kg
Benzo(a)pyrene (within populated area in MSA excluding Chicago)	2.1 <sup>f</sup> mg/kg
Benzo(a)pyrene (within populated area not in MSA)	0.98 <sup>f</sup> mg/kg
Benzo(a)pyrene (outside populated area)	0.09 <sup>e</sup> mg/kg
Beryllium	1.1 <sup>d</sup> mg/kg
Bis(2-chloroethyl)ether	0.66 <sup>c</sup> mg/kg
Bis(2-ethylhexyl)phthalate	46 <sup>e</sup> mg/kg
Boron	40 <sup>g</sup> mg/kg
Bromodichloromethane (Dichlorobromomethane)	0.6 <sup>b</sup> mg/kg
Bromoform	0.8 <sup>b</sup> mg/kg
Butanol	17 <sup>b</sup> mg/kg

Chemical Name	Maximum Allowable Concentration <sup>a</sup>
Butyl benzyl phthalate	930 <sup>h</sup> mg/kg
Cadmium	1.0 <sup>d</sup> mg/kg
Calcium	--- <sup>i</sup>
Carbazole	0.6 <sup>b</sup> mg/kg
Carbofuran	0.22 <sup>b</sup> mg/kg
Carbon disulfide	9 <sup>e</sup> mg/kg
Carbon tetrachloride	0.07 <sup>b</sup> mg/kg
Chlordane	1.8 <sup>e</sup> mg/kg
Chloride	4,000 <sup>g</sup> mg/kg
4-Chloroaniline ( <i>p</i> -Chloroaniline)	0.7 <sup>b</sup> mg/kg
Chlorobenzene (Monochlorobenzene)	1 <sup>b</sup> mg/kg
Chlorodibromomethane (Dibromochloromethane)	0.4 <sup>b</sup> mg/kg
Chloroform	0.3 <sup>e</sup> mg/kg
2-Chlorophenol	1.5 <sup>d</sup> mg/kg
Chromium, total	21 <sup>d</sup> mg/kg
Chrysene	88 <sup>e</sup> mg/kg
Cobalt	20 <sup>g</sup> mg/kg
Copper	330 <sup>d</sup> mg/kg
Cyanide	40 <sup>d</sup> mg/kg
2,4-D	1.5 <sup>b</sup> mg/kg
Dalapon	0.85 <sup>b</sup> mg/kg
DDD	3 <sup>e</sup> mg/kg
DDE	2 <sup>e</sup> mg/kg
DDT	2 <sup>e</sup> mg/kg
Dibenzo( <i>a,h</i> )anthracene	0.09 <sup>e</sup> mg/kg
1,2-Dibromo-3-chloropropane	0.002 <sup>b</sup> mg/kg
1,2-Dibromoethane (Ethylene dibromide)	0.005 <sup>c</sup> mg/kg
Di- <i>n</i> -butyl phthalate	2,300 <sup>h</sup> mg/kg
1,2-Dichlorobenzene ( <i>o</i> – Dichlorobenzene)	17 <sup>b</sup> mg/kg
1,4-Dichlorobenzene ( <i>p</i> – Dichlorobenzene)	2 <sup>b</sup> mg/kg
3,3'-Dichlorobenzidine	1.3 <sup>c</sup> mg/kg

Chemical Name	Maximum Allowable Concentration <sup>a</sup>
1,1-Dichloroethane	23 <sup>b</sup> mg/kg
1,2-Dichloroethane (Ethylene dichloride)	0.02 <sup>b</sup> mg/kg
1,1-Dichloroethylene	0.06 <sup>b</sup> mg/kg
<i>cis</i> -1,2-Dichloroethylene	0.4 <sup>b</sup> mg/kg
<i>trans</i> -1,2-Dichloroethylene	0.7 <sup>b</sup> mg/kg
2,4-Dichlorophenol	0.48 <sup>d</sup> mg/kg
1,2-Dichloropropane	0.03 <sup>b</sup> mg/kg
1,3-Dichloropropene (1,3-Dichloropropylene, <i>cis</i> + <i>trans</i> )	0.005 <sup>c</sup> mg/kg
Dieldrin	0.603 <sup>c</sup> mg/kg
Diethyl phthalate	470 <sup>b</sup> mg/kg
2,4-Dimethylphenol	9 <sup>b</sup> mg/kg
2,4-Dinitrophenol	3.3 <sup>e</sup> mg/kg
2,4-Dinitrotoluene	0.25 <sup>c</sup> mg/kg
2,6-Dinitrotoluene	0.26 <sup>c</sup> mg/kg
Dinoseb	0.25 <sup>d</sup> mg/kg
Di- <i>n</i> -octyl phthalate	1,600 <sup>e</sup> mg/kg
Endosulfan	18 <sup>b</sup> mg/kg
Endothall	0.4 <sup>b</sup> mg/kg
Endrin	1 <sup>b</sup> mg/kg
Ethylbenzene	13 <sup>b</sup> mg/kg
Fluoranthene	3,100 <sup>e</sup> mg/kg
Fluorene	560 <sup>b</sup> mg/kg
Fluoride	80 <sup>e</sup> mg/kg
Heptachlor	0.871 <sup>c</sup> mg/kg
Heptachlor epoxide	1.005 <sup>c</sup> mg/kg
Hexachlorobenzene	0.4 <sup>e</sup> mg/kg
<i>Alpha</i> -HCH ( <i>alpha</i> -BHC)	0.0074 <sup>c</sup> mg/kg
<i>Gamma</i> -HCH (Lindane)	0.009 <sup>b</sup> mg/kg
Hexachlorocyclopentadiene	1.1 <sup>e</sup> mg/kg
Hexachloroethane	0.5 <sup>b</sup> mg/kg
Indeno(1,2,3- <i>c,d</i> )pyrene	0.9 <sup>e</sup> mg/kg

Chemical Name	Maximum Allowable Concentration <sup>a</sup>
Iron	15,000 <sup>j</sup> mg/kg
Isophorone	8 <sup>b</sup> mg/kg
Lead	23 <sup>d</sup> mg/kg
Magnesium	325,000 <sup>e</sup> mg/kg
Manganese	630 <sup>j</sup> mg/kg
Mercury	0.05 <sup>j</sup> mg/kg
Methoxychlor	160 <sup>b</sup> mg/kg
Methyl bromide (Bromomethane)	0.2 <sup>b</sup> mg/kg
Methyl tertiary-butyl ether	0.32 <sup>b</sup> mg/kg
Methylene chloride (Dichloromethane)	0.02 <sup>b</sup> mg/kg
2-Methylphenol ( <i>o</i> – Cresol)	15 <sup>b</sup> mg/kg
Naphthalene	1.8 <sup>e</sup> mg/kg
Nickel	20 <sup>d</sup> mg/kg
Nitrate as N	200 <sup>g</sup> mg/kg
Nitrobenzene	0.26 <sup>c</sup> mg/kg
<i>N</i> -Nitrosodiphenylamine	1 <sup>b</sup> mg/kg
<i>N</i> -Nitrosodi- <i>n</i> -propylamine	0.0018 <sup>c</sup> mg/kg
Pentachlorophenol	0.02 <sup>d</sup> mg/kg
Phenol	100 <sup>b</sup> mg/kg
Phosphorus	--- <sup>i</sup>
Picloram	2 <sup>b</sup> mg/kg
Polychlorinated biphenyls (PCBs)	1 <sup>k</sup> mg/kg
Potassium	--- <sup>i</sup>
Pyrene	2,300 <sup>e</sup> mg/kg
Selenium	1.3 <sup>d</sup> mg/kg
Silver	1 <sup>g</sup> mg/kg
Sodium	--- <sup>i</sup>
Simazine	0.04 <sup>b</sup> mg/kg
Sulfate	8,000 <sup>g</sup> mg/kg
Styrene	4 <sup>b</sup> mg/kg
Tetrachloroethylene (Perchloroethylene)	0.06 <sup>b</sup> mg/kg

Chemical Name	Maximum Allowable Concentration <sup>a</sup>
Thallium	1.6 <sup>d</sup> mg/kg
Toluene	12 <sup>b</sup> mg/kg
Toxaphene	0.6 <sup>e</sup> mg/kg
2,4,5-TP (Silvex)	11 <sup>d</sup> mg/kg
1,2,4-Trichlorobenzene	5 <sup>b</sup> mg/kg
1,1,1-Trichloroethane	2 <sup>b</sup> mg/kg
1,1,2-Trichloroethane	0.02 <sup>b</sup> mg/kg
Trichloroethylene	0.06 <sup>b</sup> mg/kg
2,4,5-Trichlorophenol	26 <sup>d</sup> mg/kg
2,4,6-Trichlorophenol	0.66 <sup>c</sup> mg/kg
Vanadium	550 <sup>e</sup> mg/kg
Vinyl acetate	10 <sup>e</sup> mg/kg
Vinyl chloride	0.01 <sup>b</sup> mg/kg
m-Xylene	6.4 <sup>e</sup> mg/kg
o-Xylene	6.5 <sup>e</sup> mg/kg
p-Xylene	5.9 <sup>e</sup> mg/kg
Xylenes (total)	5.6 <sup>e</sup> mg/kg
Zinc	1,000 <sup>d</sup> mg/kg

<sup>a</sup> = Concentrations are the results after using methods described in 35 IAC 1100.Subpart F (Proposed) for determining the Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soils.

<sup>b</sup> = Value is the TACO Class I Soil Component of the Groundwater Ingestion Exposure Route concentration (35 IAC 742.Appendix B, Tables A and B).

<sup>c</sup> = Value is the TACO-defined Acceptable Detection Limit (ADL) for the chemical in soil.

<sup>d</sup> = Value is the lowest TACO Class I concentration from the pH-Specific Soil Remediation Objectives table for Inorganic and Ionizing Organic Chemicals for the Soil Component of the Groundwater Ingestion Route (35 IAC 742.Appendix B, Table C).

<sup>e</sup> = Value is the lowest TACO Soil Remediation Objective by the ingestion or inhalation routes of exposure for the Residential and Construction Worker receptors (35 IAC 742.Appendix B, Tables A and B).

<sup>f</sup> = Four location-specific allowable concentrations for benzo(a)pyrene are available based upon TACO-defined background values (35 IAC 742.Appendix A, Table H). The location of the fill site determines the

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allowable concentration. Three *background* values are presented; one for areas within the corporate limits of the City of Chicago, another for populated areas in counties that are designated as MSAs (see Board Note, 35 IAC 742.Appendix A, Table G) excluding the City of Chicago, and the third for populated areas outside MSAs. The maximum allowable concentration for non-populated areas was determined using 35 IAC 1100.Subpart F (Proposed).

<sup>g</sup> = Value is the TACO Class I Soil Component of the Groundwater Ingestion Exposure Route value multiplied by 20.

<sup>h</sup> = Soil saturation concentration (C<sub>sat</sub>).

<sup>i</sup> = No value could be determined.

<sup>j</sup> = Value is the lower of the TACO Background Concentrations for inorganic chemicals (35 IAC 742.Appendix A, Table G).

<sup>k</sup> = The value for PCBs is the highest allowable concentration requiring no controls based on USEPA TSCA (40 CFR 761) policy.

<sup>l</sup> = TACO provides no soil remediation objectives for arsenic that are less than the location-based background concentrations. Because arsenic is a human carcinogen, the Maximum Allowable Concentration cannot exceed the 10<sup>-6</sup> risk concentration. The listed arsenic value is the lowest 10<sup>-6</sup> remediation objective calculated using the applicable risk-based soil screening equations from 35 IAC 742.Appendix C, Table A. Default exposure durations and contact rates from 35 IAC 742.Appendix C, Table B were used.