

**Supplemental**  
**Maximum Allowable Concentrations of Chemical Constituents**  
**In Uncontaminated Soil Used as Fill Material**  
**At Regulated Fill Operations**  
**(35 Ill. Adm. Code 1100.605(e))**

| Chemical Name                    | Supplemental Maximum Allowable Concentration <sup>1</sup> | Date Last Revised |
|----------------------------------|---|-------------------|
| Acenaphthylene                   | 85 <sup>2</sup> mg/kg                                     | 01/15/2013        |
| Aluminum:                        |   | 01/15/2013        |
| within a MSA county              | 9500 <sup>4,10</sup> mg/kg                                | 03/11/2014        |
| within a non-MSA county          | 9200 <sup>4,10</sup> mg/kg                                | 03/11/2014        |
| Benzo(g,h,i)perylene             | 2300 <sup>5</sup> mg/kg                                   | 01/15/2013        |
| 2-Butanone (Methyl ethyl ketone) | 17 <sup>2</sup> mg/kg                                     | 01/15/2013        |
| Phenanthrene                     | 210 <sup>2</sup> mg/kg                                    | 01/15/2013        |
| Strontium                        | 84 <sup>6,10</sup> mg/kg                                  | 03/11/2014        |

<sup>1</sup> = These non-TACO Supplemental Maximum Acceptable Concentration (MAC) values have been determined by the Agency upon request pursuant to 35 Ill. Adm. Code 1100.605(e) in accordance with the methodology adopted by the Illinois Pollution Control Board at 35 Ill. Adm. Code 1100.Subpart F. The array of derived values reviewed to determine each Supplemental MAC concentration can be viewed on the Agency's web site (<http://www.epa.state.il.us/land/taco/chemicals-not-in-taco-tier-1-tables.html>.)

<sup>2</sup> = Value is the derived Class I Soil Component of the Groundwater Ingestion Exposure Route concentration (calculated using 35 IAC 742.Appendix C, Table A, Equation S17 and 35 IAC 620.Subpart F).

<sup>3</sup>= Value is the TACO-defined Acceptable Detection Limit (ADL) for the chemical in soil.

<sup>4</sup> = Value is the location-specific allowable concentration based upon defined background values for inorganic chemicals (*A Summary of Selected Background Conditions for Inorganics in Soil*, IEPA/ENV/94-161, August 1994). Median values from this publication are used. The location of the fill site determines the allowable concentration. Two background locations are defined; one for counties that are designated as Metropolitan Statistical Areas (MSA) (see TACO Board Note, 35 IAC 742.Appendix A, Table G), the other for counties designated as a non-MSA.

<sup>5</sup> = Value is the lowest derived Soil Remediation Objective by the ingestion or inhalation routes of exposure for the Residential and Construction Worker receptors (calculated using 35 IAC 742.Appendix C, Table A, Equations S1-S7).

Revised: March 11, 2014

<sup>6</sup> = Value is the derived Class I Soil Component of the Groundwater Ingestion Exposure Route value (calculated using 35 IAC 620.Subpart F) multiplied by 20.

<sup>7</sup> = Soil saturation concentration (C<sub>sat</sub>) (calculated using 35 IAC 742.Appendix C, Table A, Equation S29).

<sup>8</sup> = This chemical is of no concern for soil ingestion and no data are available to assess other routes of exposure. There is no soil concentration limit established for this constituent.

<sup>9</sup> = SW-846 methods may not support analytical detection at the concentration specified. Modified or alternative methods may be required to achieve the lowest practical detection level possible.

<sup>10</sup> = As an alternative to the subject Supplemental MAC value, compliance verification may be determined by comparing soil sample extraction results (TCLP/SPLP) for this constituent to its respective derived Class I Groundwater Objective (calculated using 35 IAC 620.Subpart F). (See 35 IAC 1100.610(b)(1)(B); 1100.610(b)(3)(C)).