**Section 742.510 Tier 1 Remediation Objectives Tables** **for the Ingestion, Outdoor Inhalation and Soil Component of the Groundwater Ingestion Exposure Routes**

a) Soil remediation objectives are listed in Appendix B, Tables A, B, C and D.

1) Appendix B, Table A is based upon residential property use.

A) The first column to the right of the chemical name lists soil remediation objectives for the soil ingestion exposure route.

B) The second column lists the soil remediation objectives for the outdoor inhalation exposure route.

C) The third and fourth columns list soil remediation objectives for the soil component of the groundwater ingestion exposure route for the respective classes of groundwater:

i) Class I groundwater; and

ii) Class II groundwater.

D) The final column lists the Acceptable Detection Limit (ADL), only when applicable.

2) Appendix B, Table B is based upon industrial/commercial property use.

A) The first and third columns to the right of the chemical name list the soil remediation objectives for the soil ingestion exposure route based on two receptor populations:

i) Industrial/commercial; and

ii) Construction worker.

B) The second and fourth columns to the right of the chemical name list the soil remediation objectives for the outdoor inhalation exposure route based on two receptor populations:

i) Industrial/commercial; and

ii) Construction worker.

C) The fifth and sixth columns to the right of the chemical name list the soil remediation objectives for the soil component of the groundwater ingestion exposure route for two classes of groundwater:

i) Class I groundwater; and

ii) Class II groundwater.

D) The final column lists the acceptable detection limit (ADL), only when applicable.

3) Appendix B, Tables C and D set forth pH specific soil remediation objectives for inorganic and ionizing organic chemicals for the soil component of the groundwater ingestion route.

A) Table C sets forth remediation objectives based on Class I groundwater and Table D sets forth remediation objectives based on Class II groundwater.

B) The first column in Tables C and D lists the chemical names.

C) The second through ninth columns to the right of the chemical names list the pH based soil remediation objectives.

4) For the inorganic chemicals listed in Appendix B, Tables A and B, the soil component of the groundwater ingestion exposure route shall be evaluated using TCLP (SW-846 Method 1311) or SPLP (SW-846 Method 1312), incorporated by reference at Section 742.210 unless a person chooses to evaluate the soil component on the basis of the total amount of contaminant in a soil sample result in accordance with subsection (a)(5) of this Section.

5) For those inorganic and ionizing organic chemicals listed in Appendix B, Tables C and D, if a person elects to evaluate the soil component of the groundwater ingestion exposure route based on the total amount of contaminant in a soil sample result (rather than TCLP or SPLP analysis), the person shall determine the soil pH at the site and then select the appropriate soil remediation objectives based on Class I and Class II groundwaters from Tables C and D, respectively. If the soil pH is less than 4.5 or greater than 9.0, then Tables C and D cannot be used.

6) Unless one or more exposure routes are excluded from consideration under Subpart C, the most stringent soil remediation objective of the exposure routes (i.e., soil ingestion exposure route, outdoor inhalation exposure route, and soil component of the groundwater ingestion exposure route) shall be compared to the concentrations of soil contaminants of concern measured at the site. When using Appendix B, Table B to select soil remediation objectives for the ingestion exposure route and outdoor inhalation exposure routes, the remediation objective shall be the more stringent soil remediation objective of the industrial/commercial populations and construction worker populations.

7) Confirmation sample results may be averaged or soil samples may be composited in accordance with Section 742.225.

8) If a soil remediation objective for a chemical is less than the ADL, the ADL shall serve as the soil remediation objective.

b) Groundwater remediation objectives for the groundwater component of the groundwater ingestion exposure route are listed in Appendix B, Table E. However, Appendix B, Table E must be corrected for cumulative effect of mixtures of similar-acting noncarcinogenic chemicals as set forth in Section 742.505(c)(3) and (c)(4).

1) The first column to the right of the chemical name lists groundwater remediation objectives for Class I groundwater, and the second column lists the groundwater remediation objectives for Class II groundwater.

2) To use Appendix B, Table E of this Part, the 35 Ill. Adm. Code 620 classification for groundwater at the site shall be determined. The concentrations of groundwater contaminants of concern at the site are compared to the applicable Tier 1 groundwater remediation objectives for the groundwater component of the groundwater ingestion exposure route in Appendix B, Table E.

c) Soil gas remediation objectives for the outdoor inhalation exposure route are listed in Appendix B, Table G.

1) The first column to the right of the chemical name lists the soil gas remediation objectives for residential populations.

2) The second and third columns to the right of the chemical names list the soil gas remediation objectives for the outdoor inhalation exposure route based on two receptor populations:

A) Industrial/commercial; and

B) Construction worker.

d) For contaminants of concern not listed in Appendix B, Tables A, B, E, and G, a person may request site-specific remediation objectives from the Agency or propose site-specific remediation objectives in accordance with 35 Ill. Adm. Code 620, Subpart I of this Part, or both.

(Source: Amended at 37 Ill. Reg. 7506, effective May 15, 2013)