**Section 742.600 Tier 2 Evaluation Overview**

a) Tier 2 remediation objectives are developed through the use of equations which allow site-specific data to be used. (See Appendix C, Illustrations A and B.) The equations, identified in Appendix C, Tables A, C, and L may be used to develop Tier 2 remediation objectives.

b) Tier 2 evaluation is only required for contaminants of concern and corresponding exposure routes (except where excluded from further consideration under Subpart C) exceeding the Tier 1 remediation objectives. When conducting Tier 2 evaluations, the values used in the calculations must have the appropriate units of measure as identified in Appendix C, Tables B, D, and M.

c) Any development of remediation objectives using site-specific information or equations outside the Tier 2 framework shall be evaluated under Tier 3.

d) Any development of a remediation objective under Tier 2 shall not use a target hazard quotient greater than one at the point of human exposure or a target cancer risk greater than 1 in 1,000,000 at the point of human exposure.

e) In conducting a Tier 2 evaluation, the following conditions shall be met:

1) For each discrete sample, the total soil contaminant concentration of either a single contaminant or multiple contaminants of concern shall not exceed the attenuation capacity of the soil as provided in Section 742.215.

2) Remediation objectives for noncarcinogenic compounds which affect the same target organ, organ system or similar mode of action shall meet the requirements of Section 742.720.

3) The soil remediation objectives based on the outdoor inhalation exposure route and the soil component of the groundwater ingestion exposure routes shall not exceed the soil saturation limit as provided in Section 742.220.

4) The soil gas remediation objectives based on the indoor and outdoor inhalation exposure routes shall not exceed the soil vapor saturation limit provided pursuant to Section 742.222.

f) Tier 2 remediation objectives for the indoor inhalation exposure route shall be calculated for either soil gas or groundwater if a Qsoil value of 83.33 cm3/sec is used.

g) Tier 2 remediation objectives for the indoor inhalation exposure route shall be calculated for both soil gas and groundwater if a Qsoil value of 0.0 cm3/sec is used.

h) If the calculated Tier 2 soil remediation objective for an applicable exposure route is more stringent than the corresponding Tier 1 remediation objective, then the Tier 1 remediation objective applies.

i) If the calculated Tier 2 soil remediation objective for an exposure route is more stringent than the Tier 1 soil remediation objectives for the other exposure routes, then the Tier 2 calculated soil remediation objective applies and Tier 2 soil remediation objectives for the other exposure routes are not required.

j) If the calculated Tier 2 soil remediation objective is less stringent than one or more of the soil remediation objectives for the remaining exposure routes, then the Tier 2 values are calculated for the remaining exposure routes and the most stringent Tier 2 calculated value applies.

k) If a contaminant has both carcinogenic and noncarcinogenic effects for any applicable exposure route or receptor, remediation objectives shall be calculated for each effect and the more stringent remediation objective shall apply. The toxicological-specific information is described in Section 742.705(d).

l) For the indoor inhalation exposure route:

1) Appendix C, Table L applies only when the existing or potential building has a full concrete slab-on-grade or a full concrete basement floor and walls; and

2) Institutional controls under Subpart J are required to develop remediation objectives pursuant to Appendix C, Table L.

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