

**APPENDIX A**

**Table 7**

**DEFAULT VALUES FOR CALCULATING MEDIUM-SPECIFIC CONCENTRATIONS FOR LEAD**

<b>[Input Values Used in UBK Model for Lead]</b> <b>[(for residential exposure scenario)]</b>			
<b>[Geometric Standard Deviation]</b> <b>[(GSD)]</b>	<b>[1.42]</b> <b>[(default)]</b>	<b>[Drinking water intake]</b>	<b>[Model default]</b>
<b>[Outdoor air lead concentration]</b>	<b>[0.2 µg/m<sup>3</sup>]</b> <b>[(default)]</b>	<b>[Soil lead level]</b>	<b>[495 µg/g]</b>
<b>[Indoor air lead concentration]</b> <b>[(% of outdoor)]</b>	<b>[30]</b>	<b>[Indoor dust lead level]</b>	<b>[495 µg/g]</b>
<b>[Time spent outdoors]</b>	<b>[Model default]</b>	<b>[Soil/dust ingestion weighting factor]</b> <b>[(%)]</b>	<b>[45]</b>
<b>[Ventilation rate]</b>	<b>[Model default]</b>	<b>[Paint lead intake]</b>	<b>[Model default]</b>
<b>[Lung absorption]</b>	<b>[Model default]</b>	<b>[Maternal contribution method]</b>	<b>[Infant model]</b>
<b>[Dietary lead intake]</b>	<b>[Model default]</b>	<b>[Mother's blood lead at birth]</b>	<b>[7.5 µg/dL blood]</b> <b>[(model default)]</b>
<b>[GI method/bioavailability]</b>	<b>[Non-linear]</b>	<b>[Target blood lead level]</b>	<b>[10 µg/dL blood]</b>
<b>[Lead concentration in drinking water]</b>	<b>[4.00 µg/L]</b> <b>[(default)]</b>		

<b>[Input Values Used in SEGH Equation]</b> <b>[(for nonresidential exposure scenario)]</b>	
<b>[Concentration of lead in soil (S)]</b>	<b>[987 µg/g]</b>
<b>[Target blood lead level in adults (T)]</b>	<b>[20 µg/dL blood]</b>
<b>[Geometric standard deviation of blood lead distribution (G)]</b>	<b>[1.4]</b>
<b>[Baseline blood lead level in target population (B)]</b>	<b>[4 µg/dL blood]</b>
<b>[Number of standard deviations corresponding to degree of protection required for the target population (n)]</b>	<b>[1.645 (for 95% of population)]</b>
<b>[Slope of blood lead to soil lead relationship (δ)]</b>	<b>[7.5 µg/dL blood per µg/g soil]</b>

**[REFERENCE]**

*[WIXSON, B.G. (1991). The Society for Environmental Geochemistry and Health (SEGH) Task Force Approach to the Assessment of Lead in Soil. Trace Substances in Environmental Health . 11-20.]*

<b><u>Input Values Used in IEUBK Model for Lead</u></b> <b><u>(for residential exposure scenario)</u></b>		
<b><u>Parameter</u></b>	<b><u>Value</u></b>	
<b><u>Outdoor Air Pb Concentration (<math>\mu\text{g}/\text{m}^3</math>)</u></b>	<b><u>Constant Value: 0.1</u></b>	
<b><u>Dietary Lead Intake (<math>\mu\text{g}/\text{day}</math>)</u></b>	<b><u>Age (Years)</u></b>	<b><u>Input</u></b>
	<b><u>0-1</u></b>	<b><u>2.26</u></b>
	<b><u>1-2</u></b>	<b><u>1.96</u></b>
	<b><u>2-3</u></b>	<b><u>2.13</u></b>
	<b><u>3-4</u></b>	<b><u>2.04</u></b>
	<b><u>4-5</u></b>	<b><u>1.95</u></b>
	<b><u>5-6</u></b>	<b><u>2.05</u></b>
	<b><u>6-7</u></b>	<b><u>2.22</u></b>
<b><u>Water Consumption (L/day)</u></b>	<b><u>Age (Years)</u></b>	<b><u>Input</u></b>
	<b><u>0-1</u></b>	<b><u>0.2</u></b>
	<b><u>1-2</u></b>	<b><u>0.5</u></b>
	<b><u>2-3</u></b>	<b><u>0.52</u></b>
	<b><u>3-4</u></b>	<b><u>0.53</u></b>
	<b><u>4-5</u></b>	<b><u>0.55</u></b>
	<b><u>5-6</u></b>	<b><u>0.58</u></b>
	<b><u>6-7</u></b>	<b><u>0.59</u></b>
<b><u>Use Alternate Water Value?</u></b>	<b><u>NO</u></b>	
<b><u>Lead concentration in drinking water (<math>\mu\text{g}/\text{L}</math>)</u></b>	<b><u>4</u></b>	
<b><u>MEDIA</u></b>	<b><u>ABSORPTION FRACTION</u></b> <b><u>PERCENT</u></b>	
<b><u>Soil</u></b>	<b><u>30</u></b>	
<b><u>Dust</u></b>	<b><u>30</u></b>	
<b><u>Water</u></b>	<b><u>50</u></b>	
<b><u>Diet</u></b>	<b><u>50</u></b>	
<b><u>Alternate</u></b>	<b><u>0</u></b>	
<b><u>Calculate PRG</u></b>		
<b><u>Select Age Group for Graph</u></b>	<b><u>0 to 84 months</u></b>	
<b><u>Change Cutoff</u></b>	<b><u>TBD</u></b>	
<b><u>Change GSD</u></b>	<b><u>1.6</u></b>	
<b><u>Probability of Exceeding the Cutoff</u></b>	<b><u>5</u></b>	

<b><u>Input Values Used in the Adult Lead Model (ALM)</u></b> <b><u>(for non-residential exposure scenario)</u></b>			
<b><u>Variable</u></b>	<b><u>Description of Variable</u></b>	<b><u>Units</u></b>	<b><u>Value</u></b>
<b><u>PbB<sub>fetal, 0.95</sub></u></b>	<b><u>Target PbB in fetus</u></b>	<b><u><math>\mu\text{g}/\text{dL}</math></u></b>	<b><u>TBD</u></b>
<b><u>R<sub>fetal/maternal</sub></u></b>	<b><u>Fetal/maternal PbB ratio</u></b>	<b><u>--</u></b>	<b><u>0.9</u></b>
<b><u>BKSF</u></b>	<b><u>Biokinetic Slope Factor</u></b>	<b><u><math>\mu\text{g}/\text{dL}</math> per <math>\mu\text{g}/\text{day}</math></u></b>	<b><u>0.4</u></b>
<b><u>GSD<sub>i</sub></u></b>	<b><u>Geometric standard deviation PbB</u></b>	<b><u>--</u></b>	<b><u>1.8</u></b>
<b><u>PbB<sub>0</sub></u></b>	<b><u>Baseline PbB</u></b>	<b><u><math>\mu\text{g}/\text{dL}</math></u></b>	<b><u>0.6</u></b>

<b><u>IRs</u></b>	<b><u>Soil ingestion rate</u></b>	<b><u>g/day</u></b>	<b><u>0.050</u></b>
<b><u>AFs, D</u></b>	<b><u>Absorption fraction</u></b>	<b><u>--</u></b>	<b><u>0.12</u></b>
<b><u>EFs, D</u></b>	<b><u>Exposure frequency</u></b>	<b><u>days/yr</u></b>	<b><u>219</u></b>
<b><u>ATs, D</u></b>	<b><u>Averaging time</u></b>	<b><u>days/yr</u></b>	<b><u>365</u></b>