

Residential Soil Screening Levels (RSSLs) Industrial Soil Screening Levels (ISSLs)

What are they?

Screening is a first pass at soil testing. Investigators try to locate contamination at a site, and to see how much there is. In EPA language, this is “Phase II” or “site characterization.” Investigators compare test results to EPA Region III Soil Screening Levels to determine how concerned they should be about the contamination. SSLs are measured in milligram of the toxin per kilogram of soil (mg/kg) which is the same as parts per million (ppm). Smaller amounts are measured in micrograms per kilogram (µg/kg), the same as parts per billion (ppb).

How are they used?

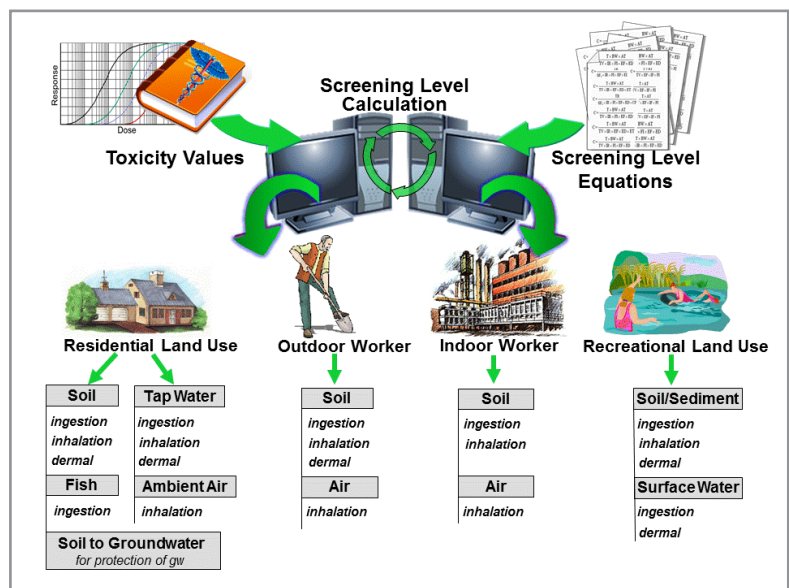
Screening levels are widely used as a point of reference for various contaminants. There are different screening levels for residential and industrial use. If contamination in a sample exceeds a screening level, it is cause for concern, but it does not automatically mean that people are in danger or that a cleanup is legally required. It usually means there should be more testing in that area, to get details about the contamination, and about current and planned uses for the site.

How are they determined?

SSLs are based on two factors: the relative toxicity of the contaminant, and on “typical” human exposure to soil. Residential levels (RSSLs) are set lower than Industrial levels (ISSLs), because people spend more time at home than at work, and because the most vulnerable populations (children and the elderly) are not often exposed to industrial settings. Workers in industrial settings can also be required to wear protective clothing if there is contamination.

How are they related to human health?

Screening levels are based on “typical” exposures, but in reality, people have a wide range of contact with soil. If test results are above screening levels, a risk assessor should study how people might come into contact with that soil, and assess risk of exposure.



For more:

epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables
Or check your state’s environmental agency website.