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Soil Screening Guidance: Technical Background Document

Second Edition

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U.S. Environmental Protection Agency
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DISCLAIMER

Notice: The Soil Screening Guidance is based on policies set out in the Preamble to the Final Rule of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which was published on March 8, 1990 (55 *Federal Register* 8666).

This guidance document sets forth recommended approaches based on EPA's best thinking to date with respect to soil screening. Alternative approaches for screening may be found to be more appropriate at specific sites (e.g., where site circumstances do not match the underlying assumptions, conditions, and models of the guidance). The decision whether to use an alternative approach and a description of any such approach should be placed in the Administrative Record for the site.

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PREFACE

This document provides the technical background for the development of methodologies described in the *Soil Screening Guidance: User's Guide* (EPA/540/R-96/018), along with additional information useful for soil screening. Together, these documents define the framework and methodology for developing Soil Screening Levels (SSLs) for chemicals commonly found at Superfund sites. This document is an updated version of the background document developed in support of the December 30, 1994, draft Soil Screening Guidance. The methodologies described in this document and the guidance have been revised in response to public comment and extensive peer review. The revisions, along with other technical analyses conducted to address the comments, are described herein.

This background document is presented in five parts. Part 1 describes the soil screening process and its application and implementation at Superfund sites. Part 2 describes the methodology used to develop SSLs, including the assumptions and theories used. Part 3 provides information on more detailed models that may be used to develop site-specific SSLs. Part 4 addresses sampling schemes for measuring soil contaminant levels during the soil screening process. Part 5 provides technical background on the determination of chemical-specific properties for calculating SSLs.

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