

Soil

Soil is the upper surficial layer of earth in which plants grow, consisting of organic matter, clay, and disintegrated rock particles that can be impacted by contamination.

[1,4 Dioxane \(14DX-1\)](#)

Section 3 (Fate and Transport)

Describes 1,4-dioxane fate and transport in soil and investigative strategies for characterization.

[1,4 Dioxane \(14DX-1\)](#)

Table 3-2

Considerations for evaluating media potentially impacted by 1,4-dioxane.

[Accelerated Site Characterization \(ASCT-1\)](#)

[Section 3:](#) Describes the applicability and use of direct sensing for soil characterization.

[Section 4:](#) Describes borehole geophysics and its applicability for site characterization.

[Section 5:](#) Describes surface geophysical tools and their use to evaluate subsurface conditions.

[Geospatial Analysis for Optimization \(GRO-1\)](#)

[Case Studies: Lead contamination in Soil](#)

Case study of removal of lead contamination from soil of a former industrial property.

[Incremental Sampling Methodology \(ISM-1\)](#)

Section 2 (Nature of Soil Sampling), pages 10-37

Describes use of incremental sampling in soil sampling.

[Incremental Sampling Methodology \(ISM-2\)](#)

Section 2 (Nature of Soil Sampling)

A broad overview of soil sampling.

[Integrated DNAPL Site Characterization \(ISC-1\)](#)

[**Table D-4:**](#) Comparison of solid media sampling methods.

[**Table D-8:**](#) Comparison of chemical screening tools, including ones that can be used for soil analysis.

[**Section E.5.1:**](#) A short description of soil gas chemistry and their use in DNAPL CSMs.

[**Appendix I:**](#) Reference table of representative natural fraction of organic carbon values for soils, sediments, and rocks.

[**Integrated DNAPL Site Strategy \(IDSS-1\)**](#)

[**Section 2.2:**](#) Outlines the transport of DNAPL through soil.

[**Section 4.4.1:**](#) Treatment of DNAPL in unsaturated zone soils.

[**Section 4.1.3:**](#) Describes use of chemical and biological remediation technologies for DNAPL in soil and other media.

[**Per- and Polyfluoroalkyl Substances \(PFAS-1\)**](#)

[**Figure 5-1:**](#) Fate and transport processes for PFAS, including through soil.

[**Section 5.3.1:**](#) Describes diffusion of PFAS in and out of lower permeability materials.

[**Section 5.3.3:**](#) Describes leaching of PFAS from soil into groundwater.

[**Section 6.2:**](#) Media-specific occurrence of PFAS in soil and sediment.

[**Fact sheet: Site Characterization and Media-Specific Occurrence, page 4**](#)

Discusses occurrence of PFAS contamination in soil.