

Capping

Technology which covers contaminated sediment with material to isolate the contaminants from the surrounding environment.

[Remedy Selection for Contaminated Sediments \(CS-2\)](#)

[Section 5.0 \(Conventional and Amended Capping\)](#)

Details the process of placing a clean layer of sand, sediments or other material over contaminated sediments in order to mitigate risk posed by those sediments.

[Mining Waste Treatment Technology Selection \(MW-1\)](#)

[Capping, Covers, and Grading Section](#)

Provides an overview of capping and describes how capping of solid mining waste is an effective and proven treatment technology.

[Sediment Cap Isolation Guidance \(SD-1\)](#)

[Capping Overview \(Section 2\)](#)

This section describes the different capping objectives, with a focus on the chemical isolation function of the cap, as well as general cap types and configurations. A recommended framework for cap chemical isolation design is also presented in this section.

[Sediment Cap Isolation Guidance \(SD-1\)](#)

[Migration Pathways \(Section 3.3.1\)](#)

The design of a cap to chemically isolate underlying sediment contamination relies on an understanding of contaminant fate and transport processes and methods to attenuate the transport of those contaminants. This section includes an explanation of the processes that control the fate and transport of chemicals and how these processes affect the design of the sediment cap. Strategies to achieve effective cap chemical isolation are also discussed.

[Sediment Cap Isolation Guidance \(SD-1\)](#)

[NAPL Considerations \(Section 3.4.3\)](#)

Where NAPL is present in the sediment, additional characterization is warranted to evaluate whether and where it may impact the chemical isolation design. NAPL mobility and its ability to migrate must be evaluated and quantified (ASTM International's [ASTM] Standard E3282; ASTM 2022) to determine the magnitude of NAPL that may impact a cap.