

Recent Trends in the Selection of Remedies for Groundwater, Soil, and Sediment at Superfund Sites

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Background/Objectives. In order to evaluate remedy selection trends, EPA compiles data on remedies selected in decision documents for contaminated sites on the National Priorities List (NPL). EPA reviews all records of decision (RODs), amended RODs, and explanations of significant difference (ESDs) that document remedies, and any subsequent changes to those remedies that will be implemented at NPL sites. The Agency extracts specific information related to the approach to cleanup. Data related to remedies and target media to be addressed are reported every three to four years in the *Superfund Remedies Report*, which has been updated since 1991. This poster will summarize the findings of the latest remedy analysis. EPA plans to publish the Superfund Remedies Report, 15th edition, in late 2016.

Approach/Activities. EPA evaluated remedies selected in over 300 Superfund decision documents signed from October 2012 to September 2014. As in past reports, remedies were counted by specific technology or approach, and also grouped into categories, primarily onsite treatment, onsite containment, or offsite disposal. EPA also documented other types of remedies, such as monitored natural attenuation and institutional controls. The analysis analyzed remedies by the media most frequently addressed (i.e., soil, sediment and groundwater). The evaluation also includes vapor intrusion mitigation remedies. In addition EPA conducted a more specific evaluation of how in situ bioremediation of soil or groundwater was being used in combination with other remedial approaches, and the types of contaminants being addressed.

Results/Lessons Learned. The analysis of the most recent decision documents show continued selection of a full range of treatment, containment, and disposal technologies and approaches for both groundwater and source material. In recent remedy decisions, remedial approaches, including in situ bioremediation, are often combined in time or space to address different areas of the site or applied sequentially. The review of amended RODs and ESDs indicates that remedy optimization and re-evaluation has resulted in changes to previously selected or implemented cleanup approaches. The poster will include specific remedy trends and site examples.