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ATTENTION

The following document contains information that may not provide current best practices for evaluating or implementing the specified technology or may no longer be supported by current regulations. Therefore, access to the document has been removed from the ITRC website. If you are interested in reviewing the following archived document, please email ITRC at itrc@itrcweb.org

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Emerging Technologies for the Remediation of Metals in Soils In Situ Stabalization / Inplace Inactivation (MIS-3)

EXECUTIVE SUMMARY

Inplace inactivation is a site stabilization technique in which amendments are applied to soils to alter the soil contaminant chemistry, making contaminants less soluble, less mobile, and less bioavailable. Inplace inactivation does not affect the total contaminant concentration, but reduces the risk of harm to a target organism (humans, animals, etc.) by reducing biological activity. The ITRC Metals in Soils Team identified these techniques as being applicable to some sites with soils contaminated with metals. This technology overview provides an introduction to inplace inactivation / insitu stabilization techniques and discusses several current approaches to implementation. The document outlines several case studies and identifies future research and development needs, as well as potential stakeholder and regulatory concerns. A preliminary cost discussion is included, as is an outline for a potential project workplan.

Membership on this work team was open to all ITRC members. Participants with expertise or interest in metals treatment technologies in their states elected to join the team and contributed consistently to the development of this work product. Members of the RTDF (Remediation Technologies Development Forum) IINERT technology team (In-Place Inactivation and Natural Ecological Restoration Technologies) also participated in this team and helped to provide an industry perspective. A representative from the U.S. Army Corps of Engineers and the Department of Energy actively participated on the team. Support was also provided by the United States Environmental Protection Agency and the Department of Defense. Input regarding public and community concerns for these technologies was provided by ITRC public stakeholder representatives.