Phytoremediation on Federal Facilities - Working With the System. (S11-newman102658-Oral)

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Abstract:

Phytoremediation of groundwater contaminated with chlorinated solvents is a promising new technology. Laboratory studies have shown that many solvents are degraded to non-toxic metabolites in the plant tissue, with only small amounts volatilized. However, the ultimate goal of any remediation technology research is the successful application of that technology. This presentation will cover the application on three sites on two federal facilities, and the problems associated with both the application and the sometimes competing goals of the scientists and the sites. The Undersea Naval Warfare Center at Keyport has a landfill with chlorinated compounds leaching into a protected wetland area. The application of the technology, testing that was performed on the site, and the results will be discussed. The Department of Energy site at Savannah River was one of the two sites in the US that developed weapons-grade plutonium. Standard operating procedures left the site contaminated with a variety of chemicals. The two field sites that will be discussed at SRS are being tested for the remediation of chlorinated solvents in groundwater, and the science as well as the application will be covered.

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