



United States Environmental  
Protection Agency

Office of Solid Waste and  
Emergency Response

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## Superfund Post Construction Completion Activities

This Fact Sheet provides an abbreviated, one-page summary of the Superfund Post Construction Completion (PCC) activities. The goal of these activities is to ensure that Superfund response actions provide for the long-term protection of human health and the environment. Readers of this Fact Sheet are encouraged to review "Superfund Post Construction Completion: An Overview" (OSWER 9355.0-79FS) for more detailed information and a list of key references.

**Operation and Maintenance (O&M)** is an important component of a Superfund response to ensure that the remedy performs as intended. Actions range from maintaining engineering containment structures (e.g., landfill covers) to operating ground water remediation systems. Generally, O&M is the responsibility of the PRPs, States, or other Federal agencies. EPA is responsible for ensuring that the work is adequately performed. EPA also retains funding and operating responsibility for Fund-financed ground water restoration systems (called **Long Term Response Actions**) for up to 10 years prior to transferring these systems to the States for O&M. Ground water remedies generally require active management, and site managers should remain involved in overseeing the performance of these projects during LTRA and O&M. Performance and monitoring data should be maintained to support analysis and decision-making.

**Institutional Controls** are used to supplement engineering controls when residual contamination restricts the unimpeded use of a site or a ground water aquifer. Institutional controls are intended to maintain the integrity of remedies and minimize the potential exposure to contamination. Examples include easements, zoning restrictions, and deed notices. Institutional controls are implemented during or immediately following remedy implementation consistent with the requirements of the decision document, and should be maintained as long as needed to prevent exposure or protect the remedy. Site managers should work closely with States, PRPs, other Federal agencies, and local governments, as appropriate, to ensure Institutional controls are implemented, maintained, and enforced.

**Five-year Reviews** generally are required by CERCLA or program policy when hazardous substances remain on sites above levels which allow for unrestricted use and unlimited exposure. Five-year reviews provide an opportunity to evaluate the implementation and performance of a remedy to determine whether it remains protective of human health and the environment. Generally, reviews are performed five years following the initiation of a CERCLA response action, and are repeated every succeeding five years so long as future uses remain restricted. Five-year reviews can be performed by EPA or the lead agency for a site, but EPA retains responsibility for determining the protectiveness of the remedy.

**Optimization** reviews can be performed to improve the performance and/or reduce the annual operating cost of ground water remediation systems. Optimization reviews should be performed by an independent team of experts working with the site manager and operator. Recommendations can address the extraction well network, the treatment system, or the monitoring strategy. Optimization studies can be initiated by EPA at Fund-financed sites, or by States, PRPs, or other Federal agencies for sites under their lead. Recommendations should be reviewed and approved by EPA, in coordination with the State. Optimization reviews should be considered prior to transferring ground water remediation systems to the States for O&M.

**Deletion** of sites from the National Priorities List (NPL) may occur once all response actions are complete and all cleanup goals have been achieved. EPA has the responsibility for processing deletions with concurrence from the State. Deleted sites may still require five-year reviews to assess protectiveness. Also, if future site conditions warrant, additional response actions can be taken, using the Trust Fund or by PRPs. Relisting on the NPL is not necessary; however, sites can be restored to the NPL if extensive response work is required. EPA also has the ability to delete portions of NPL sites. The Agency may use partial deletions to designate uncontaminated areas of a site, or when portions of a site are cleaned up and potentially available for productive use. Requirements for partial deletion are essentially the same as those noted above for a full deletion.