Superfund 101 Fact Sheet

What is Superfund?
Superfund is the environmental program established to address abandoned hazardous waste sites. It is also the name of the fund established by the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

CERCLA was enacted in the wake of the discovery of toxic waste dumps such as Love Canal and Times Beach in the 1970s. It allows the EPA to clean up such sites and to compel responsible parties to perform cleanups or reimburse the government for EPA-lead cleanups.

Steps in the Superfund Process
1. Preliminary Assessment/Site Investigation
2. Listing on the National Priority List
3. Remedial Investigation/Feasibility Study
   - Scoping
   - Site Characterization
   - Development and Screening of Alternatives
   - Treatability Investigations
   - Detailed Analysis
4. Record of Decision
5. Remedial Design/Remedial Action
   - Construction Completion
6. Post Construction Completion
7. Deletion of Site from National Priority List
8. Reuse of the site

The Superfund Process
1. The Preliminary Assessment/Site Investigation (PA/SI) determines the source of the contamination, the make-up of the waste itself (through soil and water sampling), and the potentially responsible parties. If the hazardous substances pose an urgent risk, cleanup is conducted immediately under the Emergency Response program of Superfund. If no threat to human or environmental health is found, the site is classified as No Further Action and eliminated from consideration.
2. If the contamination poses a threat, then the site may be put on the National Priorities List, which tracks the most serious sites needing long-term cleanup.
3. The Remedial Investigation (RI) involves more extensive environmental testing and includes human health and ecological risk assessments to determine the severity of the risk posed by the contaminants at the site. If these risks are found to be above...
the EPA target range, a **Feasibility Study** is conducted to identify the most effective cleanup technologies suitable for the site. At this point in the process, the document examines the environmental and economical implications of each alternative. An alternative is based on nine criteria: protection of human health and the environment; compliance with applicable or relevant and appropriate requirements; short-term effectiveness; long-term effectiveness; permanent solutions (e.g. toxicity/mobility/volume reduction); implementability; whether community concerns are addressed; and the cost. The preferred alternative is described in detail in a Proposed Remedial Action Plan (PRAP) that also goes out for public comment.

4. After the comment period, the agencies issue the **Record of Decision (ROD)**, outlining the selected alternative.

5. Next, the **Remedial Design** is developed, approved (or denied and then reformulated), and implemented in the **Remedial Action** phase, which is the physical cleanup process. Throughout the cleanup, the site is monitored to ensure containment and efficacy; the party responsible for the cleanup periodically submits progress reports. Once physical cleanup is completed, the site is placed into the **Construction Completion** category, although final cleanup levels may not necessarily have been achieved.

6. When sampling shows that the contaminants are below risk levels, closure activities begin, and the site moves into the **Post Construction Completion** category when long-term protection is assured through Long-Term Response Actions, Operation and Maintenance, Institutional Controls and a 5-Year Review.

7. When all response actions are complete and cleanup goals have been achieved, the site may be removed from the National Priorities List and site reuse or redevelopment may begin.

8. The site is returned to some productive use based on industrial, commercial or residential zoning.

### References

Visit the following websites for further information about the Superfund Process:

**US EPA: The Superfund Process**
http://www.epa.gov/superfund/community/process.htm

**U.S. Environmental Protection Agency (US EPA): Ecological Risk Assessment**
http://www.epa.gov/superfund/programs/nrd/era.htm

**US EPA: Human Health Risk Assessment**
http://www.epa.gov/risk_assessment/health-risk.htm

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