CERCLA Process Overview

Law passed in 1980 to address releases, or potential releases, of hazardous substances into the environment. Provides the federal government authority to respond to sites that exist due to the improper disposal or management of waste. These sites include former military bases, manufacturing facilities, processing plants, landfills, and mining sites. CERCLA is the framework for the federal government to follow in order to assess and clean up contaminated sites.

STAGE I: INVESTIGATION

1 DISCOVERY

(Site identified through the Federal Agency Hazardous Waste Compliance Docket)

Certain sites are identified as requiring evaluation. The evaluation determines if the site poses a risk to public health or the environment under CERCLA, and ensures this information is available to the public.

PRELIMINARY ASSESSMENT / SITE INSPECTION (PA/SI)

(Is there a problem?)

PA/SI involves review of historical records, field visits, possible interviews with current or former employees, and limited sampling of soil and/or water to determine the likelihood of chemicals, and identify possible contamination sources. Some sites, based on results may be placed on the National Priorities List (NPL)* by the United States Environmental Protection Agency (USEPA).

3 REMEDIAL INVESTIGATION (RI) + / RISK ASSESSMENT (RA)

(What are the risks?)

Involves more intensive sampling and analysis of soil and water at the site. Once this data is collected, a Risk Assessment is conducted. These studies determine which wastes are present, where they are, whether they are moving into the groundwater, and whether there is a risk to public health and the environment. Sites that pose an imminent threat to public health are cleaned up immediately with removal actions.

4 FEASIBILITY STUDY

(How can it be cleaned up?)

This study determines the best technology for cleaning up a site. Project managers consider risk, compliance with federal and state regulations, ability to reduce the toxicity, mobility, and volume of the chemical(s), ability to implement a remedial alternative, long-term effectiveness, short-term effectiveness, cost, state acceptance, and community acceptance. Project managers plan strategies to reduce or prevent risk by limiting or stopping exposure to chemicals.

STAGE II: CLEANUP

5 PROPOSED PLAN 🔶

(Comment Period)

Identifies and explains the rationale for the preferred cleanup method. to address any threats to human health and the environment at the site. Describes all remedial alternatives that were evaluated, and the criteria used to conduct the evaluation and comparison. Solicits public review and comment on all alternatives presented. Written expressly for public review.

6 RECORD OF DECISION (ROD) +

(Legal Certification of Final Decision)

Identifies selected cleanup remedy. Provides a plan for site design and remediation, and documents the extent of human health or environmental risks posed by the site.

STAGE III: SITE CLOSURE or LONG-TERM MANAGEMENT

7 REMEDIAL DESIGN/ACTION (RD/RA) +

(Detailed Plan and Cleanup Actions)

The design specifications for the selected cleanup remedy to approved environmental standards. Implementation of the cleanup remedy through construction.

OPERATION AND MAINTENANCE MONITORING

(Cleanup Goals Achieved; May Include Land Use Controls)

Ongoing monitoring requirements for post-remediation are based on the effectiveness of the Remedial Action. Sampling and analysis may be required to confirm the site chemicals are no longer present above acceptable action levels and to begin site closure activities.

Notes:

Each action item (numbers 1–7) can take anywhere from 1 to 5 years to complete, and action item number 8 may occur over an extended period of time.

- Action item where public involvement is key.
- * The NPL, an information management tool, contains a list of the most serious sites identified for long-term cleanup. Sites receiving a Hazard Ranking System (HRS) score of 28.50 or greater are eligible for placement on the NPL. Sites are listed on the NPL only after, completion of the HRS, public solicitation of comments, and after all comments have been addressed.