

Appendix B: Superfund Process

What is Superfund?

In 1980, the United States Congress passed the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** in response to growing concern about health and environmental threats posed by **hazardous waste** sites. CERCLA, also known as the **Superfund** law, was created to fund the cleanup of hazardous waste sites. Since 1980, CERCLA has been further strengthened through multiple revisions and amendments by lawmakers.

In the late 1970s, lawmakers noticed that determining responsibility and liability for environmental disasters often takes years in courts of law. However, to protect public health, the need to respond to such environmental problems is often immediate. CERCLA created a "Superfund" of money to be used in emergency situations. The "Superfund" is managed by EPA to help clean up the most hazardous sites before liability is determined. In addition, the fund is used to help identify and prosecute **potentially responsible parties (PRPs)**, i.e., the companies responsible for hazardous waste contamination.

The procedures EPA follows under CERCLA are outlined in the **National Contingency Plan (NCP)** 40 Code of Federal Regulations Part 300. If you are interested in learning more about this process, contact the librarian in the West Oakland Branch of the Oakland Public Library (see *Appendix G - Community Resources*), or contact the Community Involvement Coordinator, Wenona Wilson. The activities proposed in this **Community Involvement Plan (CIP)** for the AMCO Chemical Site include, among other things, public involvement requirements that have been established by law or regulation for all Superfund sites.

The Superfund Process

The following sections summarize the required components of the Superfund process. EPA heard repeatedly during interviews that the community would like more interaction and involvement with EPA than is required under CERCLA. Steps that we are taking to encourage community involvement, including those above and beyond the requirements, are provided in the *EPA Commitments* section on page 30. Below is a summary of required actions EPA must take in the Superfund process.

The law that governs Superfund is Title 42, Chapter 103 of the U.S. Code. Title 42 in its entirety can be found on the U.S. House of Representatives website at http://uscode.house.gov/title_42.htm. Scroll down the list to Chapter 103 - Comprehensive Environmental Response, Compensation, and Liability.



Installing the groundwater extraction trench at the Former AMCO Chemical Facility

Site Discovery

It may sound obvious, but the first step in the Superfund process is discovery of the site. Someone has to report evidence of potential contamination to EPA. This "someone" could be any person, organization, agency, business, etc. Once a site is discovered, it is entered into the **Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)**, and the Superfund process begins.

Preliminary Assessment/ Site Investigation

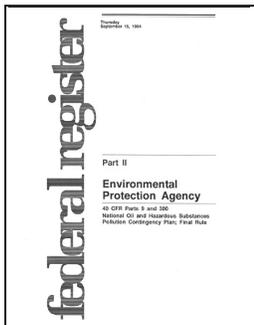
After a site is reported to EPA, we begin a **Preliminary Assessment/Site Investigation (PA/SI)**. This involves reviewing readily available reports and documentation about the site, determining whether hazardous substances are involved, and identifying people and sensitive environments potentially affected by the site. The PA/SI helps EPA to distinguish between sites that may have little or no threat to human health and the environment and sites that may pose a threat and require further investigation. The PA/SI can also identify sites that need emergency response actions.



Soil gas sampling

National Priorities List

If EPA determines that further investigation of the site is necessary to more completely evaluate the site, EPA uses **Hazard Ranking System (HRS)** criteria to determine how serious a danger the hazard(s) at the site might pose. The HRS assesses the relative threat associated with actual or potential releases of hazardous substances at the site. Depending on the number a site scores on the HRS, EPA may compile a report recommending the site be added to the **National Priorities List (NPL)**. The report includes information gathered during the PA/SI, as well as letters of recommendation from the community, local government, and state government. EPA headquarters reviews the report, and decides whether to propose that the site be added to the NPL. Sites proposed



EPA's Decision-Making Process

At various stages in the Superfund process, we have to make decisions on how to proceed, what alternatives to consider, the best option for the environment and community, and the best use of federal funding, etc. Decisions are made in many different ways, depending on the implications.

Day-to-day decisions are made by the project team (project manager, community involvement coordinator, toxicologist, site attorney, etc.). Day-to-day decisions include activities like community outreach, scoping the Remedial Investigation, and coordinating with local agencies.

Longer-term decisions or decisions with broader impact may require approval of several levels of management, or even our national headquarters in Washington, DC. These broader decisions might include listing of the site, the Proposed Plan, Record of Decision, and other funding decisions or major milestones.

The community has opportunities for involvement throughout the Superfund process. For a list of required community involvement activities, *see the list at the end of this appendix*. We have also committed to a number of activities above and beyond what is legally required by Superfund law. *For a list of all our commitments to the community, see page 30.*

for listing to the NPL are published in the **Federal Register** (the official daily publication for rules, proposed rules and notices from federal agencies and organizations). The public then has 60 days to comment on the proposal. NPL listing makes the Site eligible for federal funds. These funds allow EPA to conduct additional investigations to better characterize the nature and extent of the contamination, and will make the community eligible for \$50,000 in federal assistance under a **Technical Assistance Grant (TAG)**.

Remedial Investigation/Feasibility Study and Proposed Plan

Once a site is placed on the NPL, EPA conducts a detailed study to pinpoint the nature and extent of contamination, as well as the risks posed to the public and the environment. This detailed study, which includes a **risk evaluation**, is called a **Remedial Investigation (RI)**. During the RI, EPA starts identifying different ways to manage the site contamination. Prior to the start of the RI, a CIP must be prepared, an information repository must be established, and the community must be informed of the availability of **Technical Assistance Grants (TAG)**.

After the RI is completed, EPA performs a formal evaluation of alternative methods for managing the contamination. If it appears that conditions at the site present an unacceptable risk to human health and/or the environment, EPA will identify a cleanup approach as the preferred



Former AMCO Chemical Facility field investigation activities

How is a Remedy Selected as the Proposed Plan?

EPA uses nine criteria during the NPL and remedy selection processes. These criteria are grouped into three categories, in order of criteria importance.

Threshold

A site must meet the threshold criteria to be selected. These requirements are taken directly from CERCLA and cannot be compromised.

- Overall protection of human health and the environment
- Compliance with applicable/relevant and appropriate requirements

Balancing

These criteria encompass other CERCLA requirements, but are based on site conditions and technological constraints.

- Long-term effectiveness and permanence
- Reduction of toxicity, mobility, or volume through treatment
- Short-term effectiveness (e.g., the environmental impacts of the cleanup)
- Implementability (e.g., whether technology being considered is available within the necessary time frame)
- Cost

Modifying

These criteria are used to decide between similar remedy approaches, rather than deciding between two very different approaches.

- State acceptance
- Community acceptance

alternative. However, in some cases, site conditions may not warrant cleanup and EPA would propose no action.

The alternative methods considered, as well as the preferred alternative, are reported in a **Feasibility Study (FS)**. The RI and FS are often combined into a single document.

Once the preferred alternative is identified, a **Proposed Plan** is prepared. The Proposed Plan includes a detailed description of the preferred alternative, including preliminary engineering design.

Public Comment Period

CERCLA requires that EPA accept public comment on the Proposed Plan and supporting documentation, including the RI/FS. Superfund law requires that these documents be made available to the public in the local repository. The public has 30 days to comment on these documents. EPA will provide the opportunity for a public meeting regarding the RI/FS and Proposed Plan. If there are changes to the Proposed Plan as a result of public comment, EPA will include a response to comments, criticisms, and new data in the final Record of Decision.

Record of Decision

After EPA considers the public's concerns and determines the final Proposed Plan, a **Record of Decision (ROD)**, which describes how we intend to manage the site contamination, is published. EPA will place the ROD in the repository and will notify the community of the ROD's availability.

Remedial Design/Remedial Action

The **Remedial Design (RD)** is a final engineering design based on the ROD. During this phase, the detailed engineering design is developed for the selected

site remedy. After the RD is finished, EPA will notify the community and the **Remedial Action (RA)** phase can begin. This phase involves the actual construction or implementation phase of the site remedy.

Five Year Review

EPA will perform an in-depth review of the site every five years after the RA is started, to make sure that the site remedy is effective. If no remedial action is taken, EPA will still perform a five-year review to ensure that the decision for no action is still appropriate. The five-year review is usually in addition to ongoing site monitoring.

NPL De-listing

EPA may delete an NPL site if it determines that no further response is required to protect human health or the environment. After EPA publishes a notice of intent to delete the site from the NPL in the Federal Register, the public will have at least 30 days to comment on the de-listing of the site. EPA will respond to significant comments and/or new data, if any. EPA will place the final deletion package in the repository after publication in the Federal Register.



Excavation for the treatment system at the Former AMCO Chemical Facility

Superfund Community Involvement Requirements

- Designate an EPA spokesperson to the community
- Inform the public of the availability of Technical Assistance Grants
- Conduct community interviews
- Prepare a Community Involvement Plan
- Establish a repository in the community and notify the public
- Publish notice of availability of RI/FS, Proposed Plan, and Administrative Record File
- Provide a minimum of 30 days for public comment on the Proposed Plan RI/FS and Administrative Record File
- Provide an opportunity for a public meeting regarding the Proposed Plan and supporting documents. Prepare a meeting transcript through a court reporter and place in repository
- Consider significant comments, criticisms and new data submitted on the Proposed Plan and RI/FS
- Publish Record of Decision (ROD) and issue a public notice of ROD availability in the repository
 - Revise the CIP, **if** necessary, prior to remedial design
 - **If** the remedial action differs from the remedy selected in the ROD, either publish a notice to summarize differences or propose an amendment to the ROD, depending on the significance

- **If** there is a ROD amendment, provide a public comment period, public meeting, meeting transcript, responsiveness summary, and notice of ROD amendment availability in the repository
- Issue a fact sheet and hold public briefing of final engineering design and its implementation, or remedial action
- Publish a notice of intent to delete the site from the NPL in the Federal Register
- Provide a minimum of 30 days to receive public comment on Site de-listing
- Place information supporting NPL de-listing in the repository
- Respond to significant comment and new data, if any
- Place final deletion package in repository after publication in the Federal Register

Note: Some activities are required only under certain circumstances. These activities are denoted by "IF" statements and are designated by a hyphen (-) in the list provided above.

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