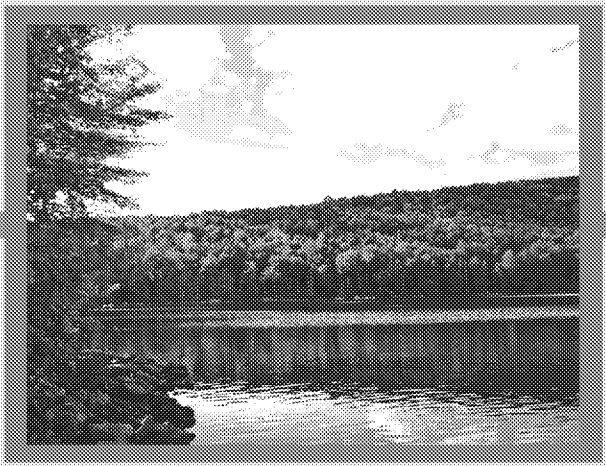
# This is Superfund

## A Community Guide to EPA's Superfund Program



EPA
United States
Environmental Protection
Agency

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IF THERE IS A SUPERFUND SITE in your neighborhood, you are probably wondering, "what will happen?" and, "what can I do?"

This brochure will give you a better understanding of the Superfund process and ways you and your community can be involved, including important topics such as:

- What is Superfund?
- Discovering Superfund Sites
- Taking Action to Clean Up Polluted Sites
- Responsibility for Superfund Site Cleanup
- Getting Involved: You and Your Community
- The Superfund Process
- Making each Superfund Cleanup "Greener"
- Maintaining the Site Cleanup Over the Long-Term
- Deleting a Site from the National Priorities List

Valley of the Drums, KY 1979

Love Canal, NY 1978



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# What is Superfund?

For a variety of reasons, hazardous commercial and industrial wastes have been mismanaged and may pose unacceptable risks to human health and the environment. This waste was dumped on the ground or in waterways, left out in the open, or otherwise improperly managed. As a result, thousands of hazardous waste sites were created throughout the United States. These hazardous waste sites commonly include manufacturing facilities, processing plants, landfills and mining sites.

In 1980, Congress established the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, in response to growing concerns over the health and environmental risks posed by hazardous waste sites. This law was enacted in the wake of the discovery of toxic waste dumps such as Love Canal and Valley of the Drums in the 1970s.

CERCLA is informally called *Superfund*. The Superfund program is administered by EPA in cooperation with state and tribal governments. It allows EPA to clean up hazardous waste sites and to force responsible parties to perform cleanups or reimburse the government for cleanups led by EPA.

Superfund was established in 1980 by an act of Congress, giving EPA the funds and authority to clean up polluted sites

Goals of Superfund:

- Protect human health and the environment by cleaning up polluted sites
- Involve communities in the Superfund process
- Make responsible parties pay for work performed at Superfund sites



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## Discovering Superfund Sites

Superfund sites are "discovered" when the presence of hazardous waste is made known to EPA. The presence of contaminants is often reported by residents, local, state, tribal or federal agencies, or businesses. Sometimes these hazardous wastes are found by EPA during inspections or investigations into complaints.

### National Response Center (NRC)

You can call NRC toll-free at *800-424-8802* to report potential releases of hazardous substances and oil 24-hours a day, seven days a week. You can report potential releases of hazardous substances and oil to the NRC as well as to your state, tribal and local authorities.

The NRC is the national point of contact for reporting all oil, chemical, radiological, and biological releases into the environment anywhere in the United States and its territories.

## Taking Action to Clean Up Polluted Sites

There are two basic types of responses that EPA uses to manage polluted sites:

**Removal Actions: Used to handle emergency oil spills or chemical releases and short-term responses.**

Emergency actions are taken to eliminate *immediate* risks and ensure public safety. Examples of such emergencies are chemical releases at a fixed location or during transportation. EPA may respond to help state and local authorities deal with these emergencies quickly.

**Remedial Actions: Used to handle complex sites needing a long-term response. Remedial actions manage releases that do not pose an urgent threat to public health or the environment and do not require immediate action.**

Remedial actions involve complex and highly contaminated sites that often require several years to study the problem, develop a permanent solution, and clean up the hazardous waste. These are the sites that most people think of when they hear about the Superfund program.



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## Responsibility for Superfund Site Cleanup

• **Potentially Responsible Party (PRP):** From the time the site is discovered, EPA tries to identify the generators and transporters of the hazardous waste and the owners and operators of a site. These people/companies/municipalities are considered PRP(s) under Superfund and are asked to conduct and/or pay for cleanup studies and activities. If the PRP(s) refuses to participate, EPA will clean up the site and sue the party or parties to recover costs.

• **State/Tribal Government Involvement:** Their involvement in Superfund has grown over the years, and states and tribes are now involved in virtually every phase of cleanups. Superfund requires EPA to coordinate with states and tribes when the federal government leads cleanup operations, and allows states, tribes, and local governments to lead cleanup efforts using Superfund money if they have the necessary technical and management expertise.

## Getting Involved: You and Your Community

EPA's Superfund Community Involvement Program provides individuals affected by hazardous waste sites with information and opportunities to participate as active partners in the decisions that affect the Superfund sites in their community. The community has a voice during all phases of the Superfund process, and plays an important role in assisting EPA with gathering information about the site.

*Your involvement is very important. You have the opportunity and the right to be engaged in, and to comment on the work being done at sites in your community.*

**Superfund Community Involvement staff strive to:**

• Keep the community well-informed of ongoing and planned activities
• Encourage and enable community members to get involved
• Listen carefully to what the community is saying
• Collaborate with the community to address concerns
• Incorporate community input into planned actions
• Explain to the community what EPA has done and why

**Ways YOU Can Get Involved**

• Attend public meetings
• Review/comment on site decision documents (where applicable)
• Participate at information sessions
• Join/form a Community Advisory Group (CAG)
• Contact the site's Community Involvement Coordinator (CIC)



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# The Superfund Process

EPA encourages and engages in community involvement throughout the Superfund process. Look for the throughout this brochure for ways you and your community can be involved in the Superfund process at your site.

## *Preliminary Assessment/Site Inspection (PA/SI)*

Once a site is identified, EPA looks at existing information, inspects the site, and may interview nearby residents to find out the history of the site and its effects on the population and the environment. EPA also normally tests the soil, water and air to determine what hazardous substances were left at the site and how serious the risks may be to human health and the environment.

EPA may take *early action* at a site if there is a need for quick risk reduction, and enough site information and data available to take action. Early actions are taken before the site has been characterized fully, and usually address a portion of a site, often as a removal action. For example, EPA may take early action to provide an alternative water supply to residents who are affected by contaminated drinking water, while the PA/SI process continues throughout the site. Additionally, these sites often require *long-term actions* such as restoring contaminated ground water or taking measures to protect wetlands, animals, and other ecological resources. In contrast to early actions, long-term cleanups are complex and may take many years to complete.

Depending on the situation, EPA may conduct various community involvement activities during the PA/SI phase. These activities may include meeting with local officials and opinion leaders, conducting community interviews or planning an informal community meeting. EPA may also prepare fact sheets, contact local media, establish an information repository and designate an EPA *Community Involvement Coordinator (CIC)*. In addition, the community may provide any information it has about the site to EPA.

The *Technical Assistance Services for Communities (TASC)* program helps communities understand the technical issues related to site activities, hazardous substances, and sampling results. This technical assistance is available to help you understand and review the information gathered at the site throughout the Superfund process, beginning with PA/SI.



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## *The National Priorities List*

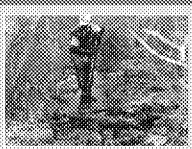
The *National Priorities List (NPL)* is a published list of hazardous waste sites in the country that are eligible for federal funding to pay for extensive, long-term cleanup actions under the Superfund remedial program.

## How Do Sites Get On the NPL?

To evaluate the dangers posed by hazardous waste sites, EPA developed a scoring system called the *Hazard Ranking System (HRS)*. EPA uses the information collected during the assessment phase of the Superfund process to score sites according to the danger they may pose to human health and the environment.

Many of the sites that are reviewed do not meet the criteria for federal Superfund cleanup action. Some sites do not require any action, while others are referred to the states, other programs, other agencies, or individuals for cleanup or other action.

- If a site has a high enough score on the HRS and meets all other criteria, EPA may propose that it be put on the NPL. The proposal is published in the *Federal Register,* the official publication of the U.S. government, and the public has an opportunity to comment on whether the site should be included on the NPL. EPA responds to comments and if applicable, announces the decision in the *Federal Register.*
- After a site is added to the NPL, EPA is required to conduct community interviews and to develop a *Community Involvement Plan (CIP)*. EPA must also establish and maintain an information repository and administrative record and inform the public of the availability of these document archives.
- *Technical Assistance Grants (TAG)* provide money for activities that help community groups participate in decision making at eligible Superfund sites. TAGs are available at Superfund sites that are on the NPL or proposed for the NPL, and for which a response action has begun. EPA must notify the public when a site in their community qualifies for a TAG.





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## *Remedial Investigation/Feasibility Study (RI/FS)*

Once a site is placed on the NPL, further investigation into the problems at the site and the best way to address them is required. This is called a Remedial Investigation (RI) and the Feasibility Study (FS). The RI usually involves gathering and analyzing numerous samples of soil, surface water, ground water, and waste from locations throughout the site and near the site borders. The RI also involves assessing risks posed by the site.

The analysis of potential treatment methods or "cleanup alternatives" is called a FS. During the FS, the advantages and disadvantages of each cleanup method are explored.

## Choosing a Cleanup Plan

After all of the cleanup alternatives are developed, EPA recommends the option it considers best for the site and offers it to the community for evaluation and comment in a *Proposed Plan*.

A Proposed Plan does the following:

- Summarizes cleanup alternatives studied in the FS
- Includes information on the site history, community participation, the nature and extent of the contamination, and the reasonably anticipated future land uses at the site
- Highlights EPA's recommended cleanup method

EPA provides the public with an opportunity to comment on the Proposed Plan in writing or in person, and hosts a public meeting to discuss the recommended cleanup method. EPA prefers cleanups that will allow for reuse of the site if possible. Community input at this phase is critical to making good choices.

EPA provides a "responsiveness summary" of the written and oral comments the public has made and the Agency's responses to those comments.



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## Record of Decision (ROD)

The cleanup method ultimately chosen for the site, and the reasons for the selection, are set forth in the ROD. The ROD is a document that is available to the public and explains all the activities that occurred prior to selection of a cleanup method, and describes how the cleanup method will be protective of human health and the environment. It also contains the responsiveness summary and shows how those comments were factored into the final decision.

## Remedial Design (RD)

The RD is the phase during which the plans for the cleanup method are carefully designed. The RD is based on the cleanup method described in the ROD. As the plans for constructing the cleanup are developed and reviewed, more sampling may be needed to further define the location and amount of contamination.

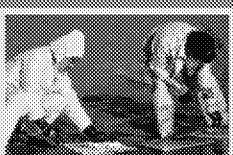
EPA may provide the public a fact sheet and hold a briefing describing the final remedial design.

## Remedial Action (RA)

The RA starts the actual cleanup at a site. For example, the cleanup method may involve building wells to inject chemicals or organisms into the soil that will break down the contamination.

The RA phase is similar to building a house. Those responsible for the cleanup obtain all the materials needed and follow the plans that were developed during the RD phase. During the RA phase, construction equipment will be operating on site to conduct the cleanup.

During the RA phase, the community should be informed about the work to be done including planned work hours, truck traffic, and health and safety precautions.



RI/FS: Data collection & analysis

ROD: Cleanup method selection and specification

RD/RA: Cleanup planned and conducted



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## Making each Superfund Cleanup "Greener"

The process of cleaning up a hazardous waste site uses energy, water, and other natural or materials resources, thereby creating an environmental "footprint" of its own. EPA strives to conserve natural resources, minimize waste generation, and reduce energy consumption to improve the environmental performance of Superfund activities while protecting human health and the environment.

Opportunities to decrease the environmental footprint and maximize the environmental outcome of a cleanup exist throughout a project life, and can include actions such as utilizing renewable energy to power site operations and reducing total air emissions by discouraging construction truck engine idling.

## Returning Sites to Productive Use

As early in the process as possible, EPA works with communities through an array of communication techniques and partnerships to help to return sites to productive uses.

These uses can be industrial or commercial, such as factories and shopping malls. Some sites can be used for housing, public works or healthcare facilities, transportation, and other community infrastructure. Sites could also be redeveloped as recreational facilities such as golf courses, parks and ball fields; or for ecological resources, such as wildlife preserves and wetlands. Sites could even be used for generating energy from renewable sources such as wind turbines or solar panels.

No matter what use is appropriate for a site, the community benefits from restoring the site to productivity, because the property can once again add to the economic, social, and ecological value of the community.

Work with EPA, your local government, and your community to plan the redevelopment of the site. Explore the redevelopment ideas and resources provided by EPA.



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# Maintaining the Site Cleanup Over the Long-Term

After EPA determines that the physical construction at a site is complete, activities are put in place to ensure that the cleanup actions will protect human health and the environment over the long-term. For example, these activities may include routine maintenance at the site such as making sure signs and fences are intact or soil treatment systems are running smoothly.

EPA is also required to conduct a review of the site cleanup every five years. This *Five-Year Review* may include examining site data, inspecting the site, taking new samples, and talking with affected residents about site conditions, problems or concerns.

EPA is required to notify the community and other interested parties when a Five-Year Review will be conducted at the site.

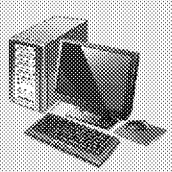
# Deleting a Site from the NPL

EPA may delete a site or portion of a site (sometimes called an operable unit) from the NPL if all cleanup goals have been met and no further cleanup action is required to protect human health and the environment.

EPA publishes a notice of its intention to delete the site, or portion of the site, from the NPL in the *Federal Register*, and notifies the community of the opportunity for comment. EPA then accepts comments from the public and formally responds to public comments received. If, after the formal comment period, the site or portion of the site still qualifies for deletion, EPA publishes a formal deletion notice in the *Federal Register* and places a final deletion report in the administrative record for the site.

**Learn More on the Web!**

**EPA Superfund homepage**: www.epa.gov/superfund/
**TAG**: www.epa.gov/superfund/community/tag/
**TASC**: www.epa.gov/superfund/community/tasc/
**Superfund Job Training Initiative (SuperJTI)**: www.epa.gov/superfund/community/sfjti/
**Superfund Redevelopment:** www.epa.gov/superfund/programs/recycle/index.html
**Superfund & Green Remediation:** www.epa.gov/superfund/greenremediation/





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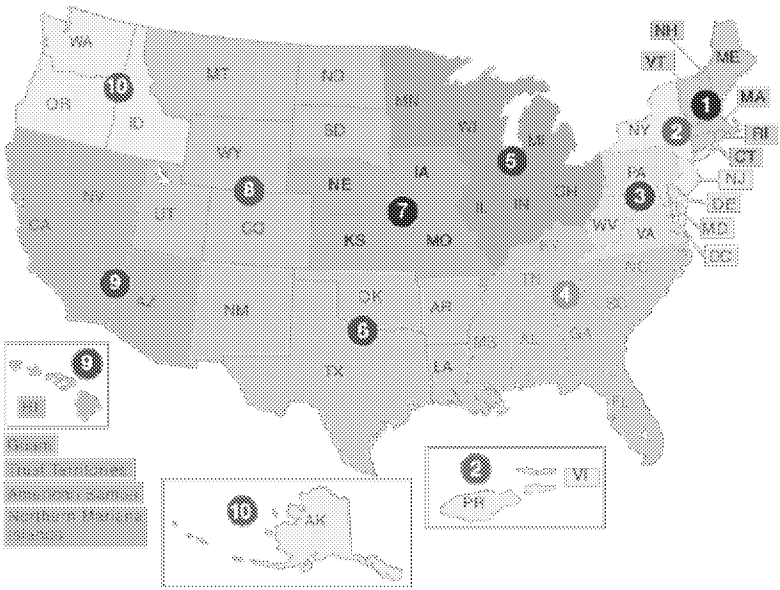
# EPA Regional Superfund Community Involvement Offices

*EPA wants to remain accessible and responsive to your concerns.*

Our community involvement staff is available to answer any questions regarding a Superfund site or an area you think may be a site.

Here is a list of EPA's Regional Superfund Community Involvement Offices.

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| Region 1 | 888-372-7341 | Region 6 | 800-533-3508 |
| Region 2 | 800-346-5009 | Region 7 | 800-223-0425 |
| Region 3 | 800-553-2509 | Region 8 | 800-227-8917 |
| Region 4 | 877-718-3752 | Region 9 | 800-231-3075 |
| Region 5 | 800-621-8431 | Region 10 | 800-424-4372 |

www.epa.gov/superfund/community

United States Environmental Protection Agency

Office of Solid Waste and Emergency Response

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