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# Superfund Fact Sheet: Identifying Sites

Office of Emergency and Remedial Response Hazardous Site Control Division (5203G)

Quick Reference Fact Sheet

The National Priorities List (NPL) and the Hazard Ranking System (HRS) are key elements in the U.S. Environmental Protection Agency's (EPA) Superfund program. The NPL is EPA's list of uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under Superfund. The HRS, by ranking the relative risks posed by different sites, helps EPA determine which sites should be placed on the NPL.

#### How does Superfund work?

The first step in the Superfund process is to identify abandoned or uncontrolled hazardous waste sites and take any immediate, short-term actions necessary under its Removal Program. EPA discovers these sites through a variety of methods, including reviewing records, reports, receipts, and letters provided by States, handlers of hazardous substances, and concerned citizens. EPA also learns about potential Superfund sites from concerned citizens who call the National Response Center's 24-hour hotline (1-800-424-8802).

Preliminary site information is incorporated into a national computerized database that contains information on potential hazardous waste sites as well as ongoing Superfund removal, remedial, and enforcement activities. This database, known as the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), contains information on more than 33,000 sites nationwide. Approximately 1,200 of these sites are on, or proposed for, the NPL.

Next, EPA or the State conducts a *preliminary assessment* to decide if the site poses a potential hazard. A preliminary assessment is a low-cost, off-site review of existing reports and documentation to determine whether a site threatens human health or the environment. It identifies hazardous substances at the site, and the populations and sensitive environments likely to be affected by their release.

Citizens may petition EPA to conduct a preliminary assessment for a particular site. The process of petitioning is described in the National Contingency Plan (NCP), the regulation which outlines how Superfund works..

If a preliminary assessment shows that a site does not present a potential hazard, no further action may be taken. But if the preliminary assessment reveals a contamination problem, EPA will perform a more extensive study called the *site inspection*.

In a typical site inspection, an EPA staff person collects information about the soil types, the streams or rivers flowing through or near the site, the area's population, weather, and the site's owner(s). Air, soil, and water samples from nearby areas help EPA determine if hazardous substances have migrated from the site.

Since Superfund began, preliminary assessments have been completed at approximately 33,000 sites nationwide. At over 13,000 of these sites EPA has determined that

no further action is needed. Site inspections have been completed at nearly 16,000 of the remaining sites.

After the preliminary assessment and site inspection, EPA can conduct an emergency removal action without any further wait. For a long-term remedial action to be conducted at a site, however, the site first must be placed on the National Priorities List (NPL).

## What is the purpose of the National Priorities List (NPL)?

The NPL is a ranked inventory of the nation's most dangerous uncontrolled and abandoned hazardous waste sites. It was designed to support EPA's policy of cleaning up the worst sites first.

A site must be on the NPL to undergo remedial action paid for with Superfund monies. Remedial action may involve activities such as containment, treatment, and disposal of wastes so that site conditions no longer threaten human health and the environment. The NPL is one tool EPA uses to help set priorities for cleaning up Superfund remedial sites.

#### How do sites get on the NPL?

To be placed on the NPL, a site must have a Hazard Ranking System (HRS) score of at least 28.50, must be chosen as a State's top priority site, or must meet all three of these criteria:

- The Agency for Toxic Substances and Disease Registry (ATSDR) has issued a
  health advisory recommending that individuals be removed from the area where
  the release of hazardous substances occurred;
- EPA has determined that the site represents a significant threat to human health and the environment; and,
- EPA has determined that long-term remedial action is more cost-effective than short-term removal action.

To add sites to the NPL, EPA must publish a list of proposed sites in the *Federal Register*. The public then has 60 days to review the list and let EPA know if it agrees or disagrees with the HRS score and any other information used to propose a site. After considering relevant comments, all sites that still meet the criteria for listing are added to the NPL and published in the *Federal Register*. Currently about 1,200 sites are on or proposed for the NPL.

### What does the HRS do?

The HRS evaluates the potential risks to human health and the environment posed by different sites. It is intended as a screening mechanism for determining which sites may need additional comprehensive study. The HRS does not determine if cleanup is possible or worthwhile, or the amount of cleanup needed. Rather, it allows EPA to determine which sites should be placed on the NPL for remedial action.

### How does the HRS work?

Taking information from preliminary assessments and site inspections, EPA uses the HRS to rank hazardous waste sites according to their potential risks to human health and the environment. Individual sites are scored for a total of 0 to 100 points, based on three factors:

- Whether the site has released (or may release) contaminants into the environment;
- The concentrations, toxicity, and quantity of waste on site; and
- The people or sensitive environments affected by any release of hazardous waste.

The HRS score gives EPA a measure of the likelihood that people or the environment will be harmed by hazardous substances either on site or leaving the site via air, soil, ground water, or surface water.

## Why are sites on the NPL presented in groups of 50?

EPA considers sites within each group of 50 to have approximately the same priority for cleanup.

#### Why did EPA select 28.50 as the cutoff score for listing sites on the NPL?

EPA originally selected 28.50 as the cutoff HRS score because it produced an NPL of at least 400 sites, the minimum set by the law that established Superfund. The law set no upper limit on the size of the NPL. To be consistent, EPA has continued to add sites with scores of 28.50 or above. The cutoff was selected to meet legal requirements; sites scoring below the cutoff may present some risk. Sites scoring below 28.50 should be regarded as potentially dangerous and should be considered candidates for State- or local-funded cleanups.

### How often are sites added to the NPL?

The NPL must be updated at least once a year. EPA usually updates the NPL more frequently.

#### If a site is on the NPL, will EPA pay for the cleanup?

Not necessarily. EPA, States, or potentially responsible parties (PRPs) will study the nature and extent of the problems at an NPL site before determining if it requires remedial action. Whenever possible, EPA attempts to have those responsible (i.e., PRPs) take remedial action. Superfund will pay only when those responsible cannot or will not fund the cleanup.

## Can EPA take action at sites proposed for, but not yet on, the NPL?

Yes. Removals can be undertaken before a site is placed on the NPL. EPA also may start the *Remedial Investigation/Feasibility Study* (RI/FS), which examines the type and extent of contamination at the site, identifies alternatives for remedial action, and performs technical and cost analyses for these alternatives. However, the remedy selected cannot be constructed or implemented until the site is finally on the NPL.

# How does EPA determine funding priorities among NPL sites?

For the most part, EPA funds cleanups at the most hazardous NPL sites first. Occasionally, other factors (such as whether a particular technology is available to clean up a site) will influence funding decisions.

# Will sites on the NPL keep their priority for response actions after new sites are added?

Not necessarily. EPA's policy is to clean up the worst problems and the worst sites first, regardless of when a site is listed. Funds may be shifted from sites already undergoing cleanup to new sites if the new sites have more acute problems than do the active sites.

#### How long do remedial actions take?

The time required for a remedial action varies widely depending on the site. Remedial actions usually require many steps, including an RI/FS, and the design and construction or implementation of the selected remedy. Remedial actions usually involve long-term, expensive measures—for example, cleaning polluted ground water or dredging contaminated river bottoms. In these cases, it can take several years of complex engineering analysis and design work before the actual construction can begin.

EPA is developing the Superfund Accelerated Cleanup Model (SACM) to make hazardous waste cleanups more timely and efficient. This will be accomplished through more focus on the front end of the process and better integration of all Superfund program components.

SACM will operate within the existing statutory and regulatory structure. As SACM develops, there may be modification of certain policies noted in this fact sheet. However, overall priorities will remain the same: deal with the worst problems first; aggressively pursue enforcement opportunities; and involve the public in every phase of the process.

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