

# The Superfund Site Assessment Process

EPA's Superfund program works closely with states, tribes, and other EPA programs to identify and evaluate hazardous waste sites. Superfund site assessments are necessary for EPA to evaluate conditions and determine how to respond to releases of hazardous substances to the environment.

The Site Assessment process begins when EPA discovers or is notified of a release or a potential release to the environment. In many cases, EPA learns about such releases from local residents, state agencies, tribes, or other EPA program offices. Investigators follow the process outlined below to determine if EPA's Superfund program should clean up the site.



#### What is the Purpose of the Preliminary Assessment?

The Preliminary Assessment (PA) distinguishes sites that pose little or no potential threat to human health and the environment from sites that warrant further investigation. Investigators first gather readily available information about the site and its surroundings. They generally do not collect environmental or waste samples during a PA. Their focus is getting information on:

- Historical waste generation and disposal practices
- Hazardous substances potentially associated with the site
- · Potential sources of hazardous substances
- · Important migration pathways and affected media
- A survey of people and resources that might be threatened
- Critical sample locations for any potential site assessment

If they determine that a site may pose a threat to human health or the environment, they recommend a Site Inspection (SI).

# What Does the Site Inspection Process Involve?

EPA inspects sites to determine whether the potential threats identified in the PA exist. Investigators will collect samples to determine if there is an actual release of hazardous substances and identify the people, animals, and plants that are, or may be, exposed to them. If such a threat exists, investigators develop a Hazard Ranking System (HRS) package.

Investigators will conduct a Site Reassessment (or expanded SI) if additional information is needed to support a site's inclusion on the National Priorities List (NPL). During a Site Reassessment, investigators will focus on:

- · Investigating assumptions not completely evaluated by the SI
- Collecting samples to determine if hazardous substances are attributable to a site
- Collecting samples to identify representative background levels of hazardous substances in the environment
- Gathering any other information needed for a HRS package of the site

## What is the NPL?

EPA's National Priorities List identifies sites throughout the country with the most serious uncontrolled or abandoned releases of contamination. This list serves as the basis for prioritizing EPA Superfund cleanup funding and enforcement actions. Most sites assessed for potential NPL listing are not eligible for cleanup under the Superfund program.

## How is a Site Evaluated Under the Hazard Ranking System?

The HRS is a screening tool to evaluate the potential threat to human health and the environment. The HRS assigns a score that is used to determine a site's eligibility for listing on the NPL. The HRS scores a site by evaluating four potential exposure pathways to humans or the environment:

- Groundwater migration
- Surface water migration
- Soil exposure
- Air migration

The scoring system for each pathway is based on individual factors associated with conditions at the site, which are grouped into three categories:

- Likelihood of exposure (i.e. likelihood that a site has released or has the potential to release hazardous substances into the environment)
- Waste characteristics (i.e. toxicity, persistence, and quantity of the hazardous substance)
- Targets (i.e. people or sensitive environments actually or potentially exposed.)

A site's HRS score can range between 0 and 100 and is derived by combining the pathway scores. Those sites with a score of 28.50 or greater are eligible for placement on the NPL.