



Clarifying the Definition of "Site" Under the National Priorities List

Office of Emergency and Remedial Response
State, Tribal, and Site Identification Center (5204G)

Quick Reference Fact Sheet

The purpose of the National Priorities List (NPL) under the Superfund program is to identify sites where releases of hazardous substances or pollutants and contaminants are priorities for further evaluation. Hence, the NPL is a list of releases. Over the years, questions have arisen regarding how sites are defined for placement on the NPL. This fact sheet is intended to answer some common questions on the definition of an NPL site. Subjects covered in this fact sheet include: NPL site boundaries, the way sites are delineated, and the way site boundaries change over time.

DEFINITIONS

Although CERCLA does not define the term "site," it does explain related terms such as "facility" (CERCLA §101(9)) and "release" (CERCLA §101(22)). According to CERCLA, there are two definitions of facility. The first definition is in broad terms of operable portions of properties (e.g., building, structure, installation, equipment, lagoon, landfill, etc.). The second defines a facility as "... any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located" The second CERCLA definition of facility is essentially synonymous with the definition of "site" as defined in the Hazard Ranking System (HRS), a screening tool that is EPA's primary mechanism for placing sites on the NPL (55 FR 51587, December 14, 1990). However, the CERCLA definition of facility is broader than the HRS definition of site.

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (55 FR 8845, March 8, 1990) specifies that the NPL is "... the list of priority releases for long-term remedial evaluation and response." Thus, the emphasis is on determining the extent of contamination rather than on identifying strict boundaries.

Based on these descriptions, a "site" is best defined as that portion of a facility that includes the location of a release (or releases) of hazardous substances and wherever hazardous substances have come to be located. As such, the extent of a site is not limited by property boundaries, and does not include clean areas within a facility's property boundaries. Furthermore, at the listing stage only a limited amount of information has been gathered in a preliminary assessment and site inspection. These screening tools focus on identifying the possible threat posed by a site, not on delineating the site boundary. Therefore, the extent of contamination (site extent) may not be precisely determined at the time a site is listed on the NPL. In fact, the extent of the site may change significantly as the cleanup process progresses.

HOW IS AN NPL SITE DELINEATED AT LISTING?

CERCLA §105(a)(8)(A) requires EPA to list national priorities among the known "releases or threatened releases" of hazardous substances; therefore, the focus is on the *release*, not on the precisely delineated site boundaries. Usually, EPA identifies and lists releases based on review of contamination at a facility, but this does not necessarily mean that site boundaries are limited to that facility's property. At listing, the term "site" corresponds with locations of any known releases (or threatened releases) of hazardous substances or

CERCLA eligible pollutants and contaminants associated with the facility under evaluation. In addition, if another area of contamination is discovered elsewhere on the property or on nearby properties, EPA may decide to evaluate that release for the NPL separately.

The main purpose of the NPL is to identify those sites that may warrant further investigation to assess the nature and extent of the public health and environmental threats associated with the site relative to other candidate sites (58 FR 27509, May 10, 1993). These sites may also be subject to lengthy, extensive investigations to determine the extent of a release later. Generally EPA does not delineate the exact boundaries of a site at NPL listing because the Agency's understanding of a hazardous waste site broadens during subsequent steps in the Superfund process as information becomes available.

EPA's first look at a potential hazardous waste site in the site assessment process is a preliminary assessment (PA), which is designed to verify site conditions and screen for Superfund eligibility. EPA reviews technical information on the site and on the location of contamination. For example, if EPA receives reports of a pile of hazardous wastes, the Agency will determine whether there is any possibility for overland flow of materials toward surface water or whether contaminants could migrate to the ground water or become suspended in the air. The "site" at this point is loosely defined as the pile and any obvious contamination surrounding it.

During a site inspection (SI), which is a focused screening study to identify releases, the EPA investigator may collect samples of the pile, the soil, the air, surface water/sediment, and/or the ground water. If another source of contamination from the same facility is discovered, it may be sampled as well. If the SI reveals releases that pose a potential threat to human health or the environment, EPA evaluates the site using the HRS and, if the site scores sufficiently high, may propose it to the NPL. EPA makes no definitive determination about the extent of the site at the time of proposal to the NPL nor at the time the site is placed on the NPL.

HOW AND WHY DOES THE EXTENT OF THE SITE CHANGE AFTER LISTING?

The extent and nature of a release becomes more refined as information from the remedial investigation (RI) is gathered. During the RI stage, EPA samples the site more extensively. This investigation frequently results in finding or verifying additional contamination that was unknown or undocumented in the site inspection. After the RI is completed, enough information is generally

available to determine areas to which contamination has spread and, therefore, determine site boundaries.

For example, if during the site inspection contamination is discovered in ground water as well as in a nearby wetland, the ground water plume and contaminated portions of the wetland are considered to be part of the site. If, during remedial actions, contamination is found to be either less or more extensive, site boundaries shift again. This is especially true for ground water contamination plumes, since their boundaries are in constant motion.

NPL site boundaries will vary over time. Throughout the life of the project, information may develop that results in finding more contamination than was previously thought to be present. Conversely, as remedial action is implemented, site boundaries may contract. This is especially true when ground water plumes get smaller during remediation and when portions of sites are cleaned. According to recent EPA guidance (*Procedures for Partial Deletion at NPL Sites*, Publication No. 9320.2-11, April 1996), portions of NPL sites can be deleted from the site when criteria for cleaning that portion are met.

WHAT DOES THE SITE NAME MEAN?

EPA uses the NPL primarily to identify those sites that appear to present a significant threat to public health or the environment and for which more study is needed. In naming the site, the Agency does not judge owner or operator activities, nor does it require those persons to undertake any action or assign liability. The name merely helps the public to identify hazardous waste sites.

EPA's *Regional Quality Control Guidance for NPL Candidate Sites* (December 1991) directs that the site name should "clearly inform the public as to what appears to be the primary source of the problems at the site on the basis of the information available at the time. In most cases this should be the principal operator." If the site is commonly known by another name, that name could be used. If it is unclear who is or was the operator, or whether there are more than three potentially responsible parties (PRPs), a geographic-based site name can be assigned.

A site does not necessarily correspond to boundaries of any specific property that may give the site its name. Further, the name itself does not imply that the site is within the property boundary of a certain plant or installation or that all parts of the named property are contaminated.

IS THE OWNER OF THE LAND ABOVE A GROUND WATER PLUME RESPONSIBLE FOR THE SITE?

In exercising its enforcement discretion, EPA will not take actions against a residential property owner to require the owner to undertake response actions or pay response costs, unless the homeowner's activities lead to a release or threat of release of hazardous substances that results in EPA taking a response action at the site (60 FR 34789, July 3, 1995). This policy is based on a May 24, 1995 memorandum entitled "Final Policy Toward Owners of Property Containing Contaminated Aquifers." This policy covers residential property owners whose property is located above a ground water plume that is proposed to or on the NPL, where the residential property owner did not contribute to the contamination of the site.

CERCLA LIABILITY

Identifying property that is part of an NPL site does not establish CERCLA liability. CERCLA liability is determined under CERCLA §107, which makes no reference to NPL listing. Placing a site on the NPL does not create CERCLA liability where it would not otherwise exist. The fact that a parcel lies within the area used to describe an NPL site does not impose liability on the owner or subsequent purchaser; liability is based on a release or threatened release of a hazardous substance from a facility. The liability will exist regardless of whether the site is listed on the NPL.

CASE STUDIES

The following actual case studies illustrate EPA's approach to identifying sites.

The Byron Salvage Yard site was proposed to the NPL as a site where all releases (or threatened releases) were thought to have come from a single facility. Waste containing cyanide and other plating waste was dumped in and around the yard. After the record of decision (ROD) was completed, the site boundaries changed to include not only portions of Byron Salvage Yard, but also portions of an adjacent property called "Dirk's Farm" and contaminant plumes that extended north from both properties to wells serving a nearby community.

The Hanford Facility sites are an example of one facility containing four separate sites. The four sites were listed on the NPL separately because the releases were from separate sources and threatened different targets. EPA evaluated the large number of potentially contaminated

areas (337) and determined that rather than listing all 337 areas separately, it was more appropriate to list them on the NPL as four sites, each with similar production processes and similar wastes. The four sites contained over 90 percent of the potentially contaminated areas at Hanford; the remaining 10 percent was handled under other regulatory programs. This approach was considered to be appropriate for the extremely large size of the Hanford Facility (570 square miles) and the CERCLA requirement that all criteria applicable to inclusion on the NPL are also applicable to Federal facilities, such as Hanford.

INTERAGENCY WORKGROUP

As a part of the Administrator's interest in clarifying the NPL listing policy, EPA formed a workgroup with representatives from the EPA Regions and the Department of Defense. After reviewing statutes, regulations, guidance, and statements of policy on NPL site listings, the interagency committee agreed that EPA has consistently defined sites at listing, but that the Agency needs to further clarify this definition. The focus of the group, therefore, was to formulate and disseminate a clear statement of what a listing on the NPL includes.

The workgroup accomplished three goals:

- Clarifying language for proposed or final NPL rules as published in 60 FR 50435, September 29, 1995;
- Amending currently proposed and final Superfund docket listing packages to include a clear statement that the sites are not based on property boundaries, but rather the area of contamination; and
- Coordinating with the Regional EPA staff to ensure HRS documentation records identify sites consistent with this definition.

SUMMARY

Three key points govern the nature of an NPL site at the time it is proposed for listing:

- An NPL site includes areas found to be contaminated from releases of hazardous substances. The boundaries of an NPL site are not tied to the boundaries of the property on which a facility is located. The release may be contained within a single property's boundaries or may extend across property boundaries onto other properties. The boundaries can, and often do,

change as further information on the extent and degree of contamination is obtained.

- Site names are chosen to aid the public in identifying the geographic location of the contamination.

- Liability is not based on an NPL listing. The liability associated with a Superfund site is based on the release of hazardous substances and exists whether a site is listed on the NPL or not.