

Introduction

By encouraging clean up and redevelopment of America's abandoned and contaminated waste sites . . . we are taking problem properties and transforming them back into community assets. We are empowering people to work together to revitalize and rehabilitate their communities.

Steve Johnson, EPA Administrator August 14, 2006

As part of its mission to protect human health and the environment, EPA is undertaking an Agency-wide initiative to revitalize land. To restore contaminated properties to economic and environmental vitality, EPA's land cleanup programs have set a national goal for returning formerly contaminated sites to long-term sustainable and productive uses. To help meet this goal, EPA Region 3 has conducted a comprehensive land use assessment that looks at Superfund Response and Removal Sites within Region 3 that were completed between January 1, 2001 and October 1, 2006.

The United States produces, transports, stores, uses, and disposes of millions of tons of hazardous substances per day. Many of us live and work among a wide variety of what are considered hazardous substances. Under normal conditions, these substances are controlled and pose no threat to human life and the environment. But when they enter the environment through an accidental release or intentional disposal, they can contaminate the land we use, the water we drink, and the air we breathe, with potentially disastrous results.

The Emergency Response and Removal program was established to reduce and eliminate the threats from hazardous substances releases. EPA, in close cooperation with a network of federal, state, and local government agencies, has conducted several thousand actions since the Superfund Emergency Response and Removal program began in 1980, and has directed and monitored many other actions carried out by those responsible for the contamination. The profiles of threats confronted by the program vary greatly in size, nature, and location, and have involved EPA in incidents requiring unusual or complex actions. However, very little is known about what happens to these sites after EPA and its partners have completed its Response and Removal activities.

Purpose

This report examines the status of the Superfund Emergency Response and Removal sites after EPA's removal activity is completed. The assessment offers a snapshot of the current status of land use at Federal Response and Removal Sites within the Region 3 States that were completed between January 1, 2001 and October 1, 2006.

This land use assessment at completed Response and Removal Sites will:

- Establish a Regional baseline of the total acres of land addressed by the program over the past five years and the current land use occurring on these sites. This baseline provides a picture of the

number of sites and acres that are: in continued use, reused, have a plan for reuse, or have no current use;

- Identify the sites, or portions of sites, which have no current use and have the potential for revitalization;
- Determine the extent of reuse occurring at the sites;
- Determine the types of reuse occurring at sites to help communicate more tangible information regarding accomplishments.

Methods

EPA Region 3 developed a master list of all the Superfund Response and Removal Sites at Non-National Priority List sites as well as National Priority List (NPL) sites within Region 3 that were completed over the past five years. (NPL Sites are sites with known or potential health or environmental risks that are placed on the list, qualify for Superfund cleanup and are eligible for long term remedial action financed under the Federal Superfund program.) A list of all the sites in Region 3 completed between January 1, 2001 and October 1, 2006 was generated using the WasteLAN, CERCLIS database. The list generated by the database included the site name, its EPA Site ID number, whether it was an NPL or Non-NPL site, and its completion date. All sites identified on the list were further researched for the following parameters:

- 1) Site location including town, county and state
- 2) Historical use at the site
- 3) Acres of land involved in the Response and Removal activity
- 4) Current category of land use in acres (Continued, Reused, Planned Reuse, No Current Use/Vacant)
- 5) Current type of land use in acres (Agricultural, Commercial, Natural, Industrial, Public Services, Recreational, Residential, Mixed)

Information on each site was developed by reading through files that were written and assembled by the On-Scene Coordinators (OSCs) of each site, conducting intensive internet searches and, if necessary, interviewing the OSCs. Acres assessed for each site were estimates either generated by the OSCs or calculated using maps of the site. The number of acres reported for each Response and Removal site represents only the portion of the site where actual activity occurred and is not coextensive with the definition of the term “on-site” and does not represent the boundaries of a site for purposes of undertaking a response action or an enforcement action. For example, if a site was 100 acres in size, yet only one acre of land was actually involved in the Response and Removal activity, then only one acre of land was used in this assessment. There are a number of problems with estimating acreage and usage for Response and Removal activities involving groundwater. All groundwater sites were counted and acreage estimates were based on the land located within the property boundaries. For example, if the removal activity involved installing and operating a pump and treat facility, the property boundaries of the facility that caused the groundwater contamination was calculated and reported. If the removal activity involved hooking up a residential home to the public water supply, the property boundary of the home was calculated and recorded. Areas where groundwater contamination had migrated off the property were not counted as part of the site. Use or reuse of the groundwater site applied only to the land portion of the removal site.

The definition for each current land use is as follows:

Continued Use – A site or portion of a site which is currently being used in the same general manner as it was when the site became contaminated. For example, continued use would be an appropriate description for a property where industrial operations resulted in the contamination and the property is still used as an operating industrial facility.

Reused – A site or a portion of a site where there has been a change in the type of use after the Response and Removal activity (e.g., industrial to commercial) or the property was vacant and now supports a specific use. This means that the developed site, or portion of the site, is “open” or actually being used by customers, visitors, employees, or residents.

Planned Reuse – A site or portion of a site which is currently vacant but where a plan for a new use or uses is in place. This could include conceptual plans, a contract with a developer, secured financing, approval by the local government, or the initiation of site redevelopment.

No Current Use/Vacant – A site or portion of a site which is currently vacant or not being used in any identifiable manner. This could be because additional site investigation and cleanup are ongoing, operations ceased, the owner is in bankruptcy, or cleanup is complete but the site remains vacant. In addition, if after researching the site, the current use of the site remained unknown, the site was classified as having no current use.

Each current land use was also further categorized by its type of use. For example, the land use identified as “continued use” can be further identified as being an industrial site. The types of use are categorized as follows:

Agricultural Use - Property used for agricultural purposes such as farmland for growing crops and pasture for livestock. Agricultural use can also encompass other activities such as orchards, agricultural research and development, and irrigating existing farmland.

Commercial Use -Property used for retail shops, grocery stores, offices, restaurants, and other businesses.

Natural- Property left in its natural state such as rivers, creeks, forests, wildlife sanctuaries, nature preserves, meadows, and wetlands.

Industrial Use -Property used for traditional light and heavy industrial uses such as processing and manufacturing products from raw materials, as well as fabrication, assembly, treatment, and packaging of finished products. Examples of industrial reuse sites include factories, power plants, warehouses, waste disposal sites, landfill operations, and salvage yards.

Mixed Use -Property where the multiple uses cannot be differentiated on the basis of acres. For example a condominium with retail shops on the ground floor and residential use on the upper floors would fall into this category.

Public Service Use -Property which is being utilized by a local or state government agency or a non-profit group to serve citizens' needs. This can include transportation services such as rail lines

and bus depots, libraries and schools, government offices, public infrastructure such as roads, bridges, utilities, or other services for the general public.

Recreational Use –Property which is being used for recreational activities such as sports facilities, golf courses, ball fields, and other opportunities for indoor and outdoor leisure activities.

Residential Use - Property which is being used for residential purposes including single-family homes, apartment complexes, and condominiums.

Federal Facilities were not evaluated in this project. Federal facilities are defined as property used to support the federal government in federal agency operations, training, and research for purposes including national security or military. All Response and Removal activities that were conducted on Federal Facilities are listed in Appendix A. Evaluation of the actions at Federal Facilities may be considered in future assessments.

To address difficulties in distinguishing between the types of use, the following determined how a site was categorized: the predominant activity at the site; the site’s function; and likely exposures scenario(s). For example, a site that is currently used as a privately-owned golf course could be categorized as either recreational or commercial. This site would be categorized as recreational because recreational reflects the likely exposures scenario. To address the situation where a site had multiple uses over a period of time, only the most recent use was recorded. Lastly, if the use at the site was unknown, it was assumed that the site was vacant and was categorized as “No Current Use/Vacant.”