Assessment of the Current Land Use at EPA Region 3's Emergency Response & Removal Sites

EPA Region 3

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Disclaimer

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Executive Summary

EPA Region 3 conducted a comprehensive land use assessment that looked at Superfund Emergency Response and Removal sites within Region 3 that were completed between January 1, 2001 and October 1, 2006. This assessment included completed Response and Removals at Non-National Priority List sites as well as Superfund National Priority List (NPL) sites. Emergency Response and Removal sites were researched for their current land use in acres (Continued, Reused, Planned Reuse, and No Current Use/Vacant). That land use was further categorized for the type of land use in acres (Agricultural, Commercial, Natural, Industrial, Public Services, Recreational, Residential, and Mixed).

This report begins with a general analysis of land uses occurring at Response and Removal within the entire region. The regional analysis is followed by a more in-depth assessment of each Region 3 state including Delaware, District of Columbia (DC), Maryland, Pennsylvania, Virginia and West Virginia.

The results show that in Region 3 there were a total of 109 Superfund Response and Removal sites identified as having a removal activity successfully completed between the dates of January 1, 2001 and October 1, 2006. The 109 sites encompassed a total of 766 acres with 93 sites and 463 acres identified as Non- NPL Sites and 16 sites and 303 acres identified as NPL sites. Below are some additional key findings:

- The majority of acres that were impacted by contamination were returned to their original use after a Response and Removal action. Of the 463 acres at Non-NPL sites, 64% or 298 acres continued to be used in the same manner as before the contamination.

- Approximately 21% of the acreage at Non-NPL sites (99 acres) that were cleaned-up under the Response and Removal program were found to be vacant. While some of the acreage remains vacant to allow further assessment and possible additional clean up activity, much of the vacant land has the potential to be returned to productive use. The vacant land is identified within the specific State sections of this report.

- The Response and Removal Program restored property to all types of land use including recreational, natural, commercial and agricultural. However, most acres were largely restored to either their industrial (100 acres) or residential (110 acres) original uses.

- The status of response and removal sites within each State completed between 2001 and 2006 reflected the uniqueness of each State. Some highlights of the land use within each state are:

    - Delaware and DC did not have removal activities at NPL sites during the five year time frame.
    - Over 55% of land impacted by removal actions in the state of Delaware currently has no identifiable use.
    - Removal activity in DC took place largely on public land. All of the land in DC that was involved in a removal activity was restored to its original use.
    - Over the past five years, Region 3's Response and Removal program was least active in Maryland with only 13 acres cleaned-up under the program. Of the 13 acres, 8 acres were at NPL sites and 5 acres were at Non-NPL sites.

- Region 3's Response and Removal program was most active in Pennsylvania with over 405 acres cleaned-up under the program. Of the 405 acres, over 52% (212 acres) were located at NPL sites and 48% (193 acres) were located at Non-NPL sites. Of the Non-NPL sites, 95 acres (50%) were restored to their original use, 50 acres were being used in a new way (26%), 5 acres (2%) were being planned for redevelopment and 43 acres (22%) remained vacant.
- Approximately 84% of Non-NPL sites in Virginia were returned to their original industrial and residential uses. The remaining 16% of the land cleaned-up remains vacant.
- In West Virginia, the Response and Removal program restored 33 acres to natural conditions and 19 acres to industrial use. Only 16% of land remains vacant.

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."

Results

Regional

There were a total of 109 Superfund Response and Removal Sites that were identified as having successfully completed all non-enforcement activity between the dates of January 1, 2001 and October 1, 2006. Of the 109 sites, most (93 sites) were identified as Non- NPL Sites. See Figure 1. During this time frame, the Response and Removal Program completed actions on 766 acres of land throughout the Region. For this analysis, the acreage estimates represent only the portion of site where actual removal activity occurred. Although NPL sites represented only 15% of the total amount of Response and Removal activity, NPL sites had 39% of the acreage (303 acres) involved. Region 3 either directed and/or implemented Response and Removal activities to completion at 93 Non-NPL Sites with a total of 463 acres involved.

Figure 1: Total Number of Region 3 Response and Removal Sites that were completed between 2001 and 2006 – (NPL and Non-NPL Sites)

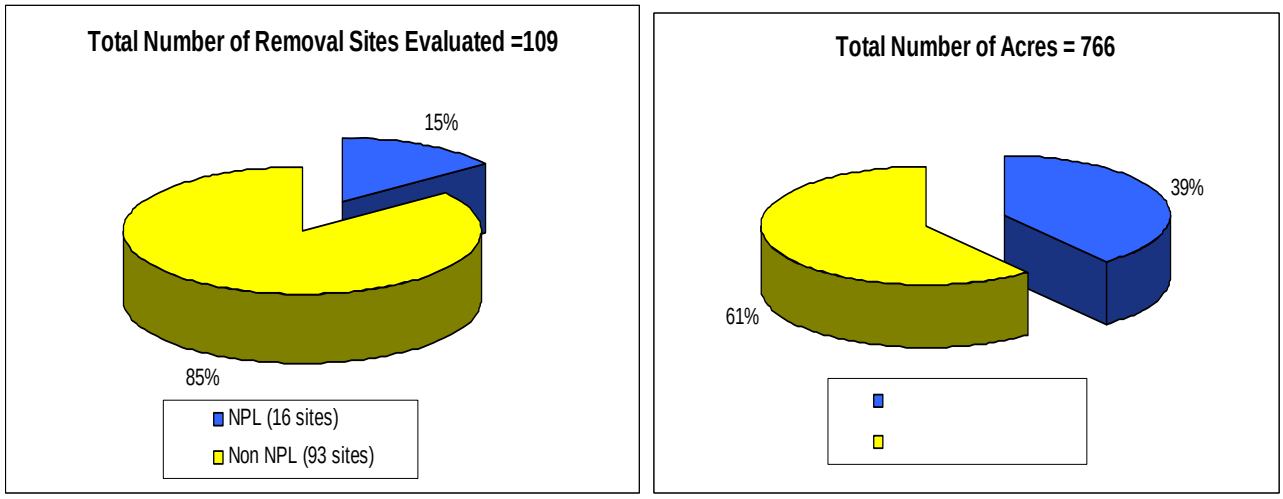


Figure 2 illustrates that over the past five years, most Response and Removal sites within Region 3 are located in Pennsylvania. Maryland had the smallest share of the Region's sites, both in number and acreage. A more in-depth analysis of the sites within each state is located further in this report.

Figure 2. Response and Removal Sites completed in each State between 2001 and 2006 (Non-NPL and NPL sites)

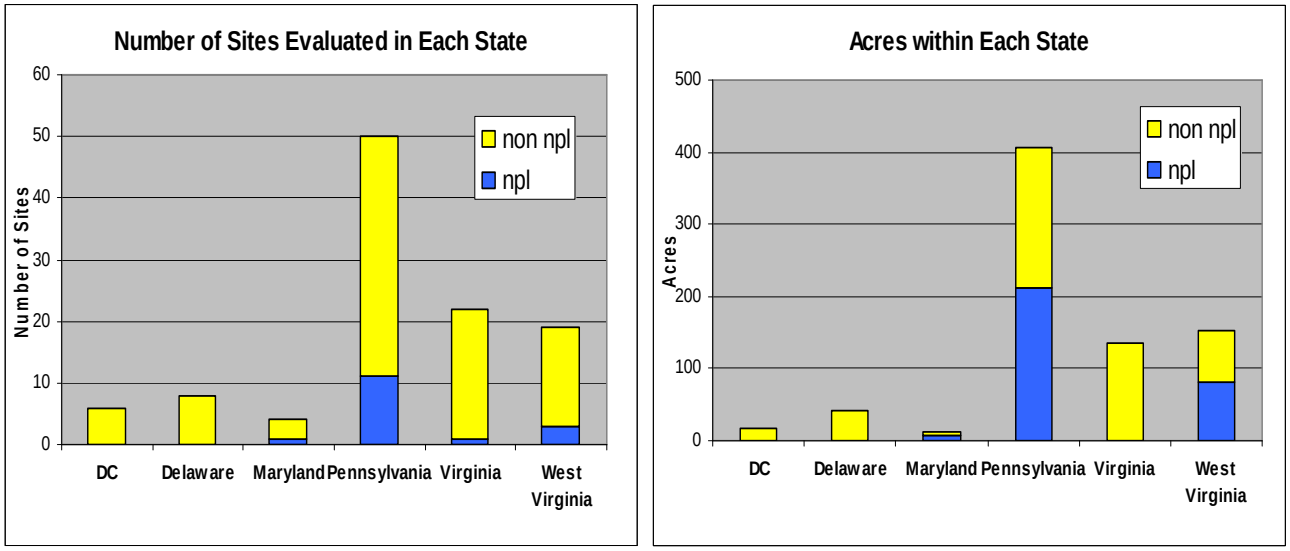
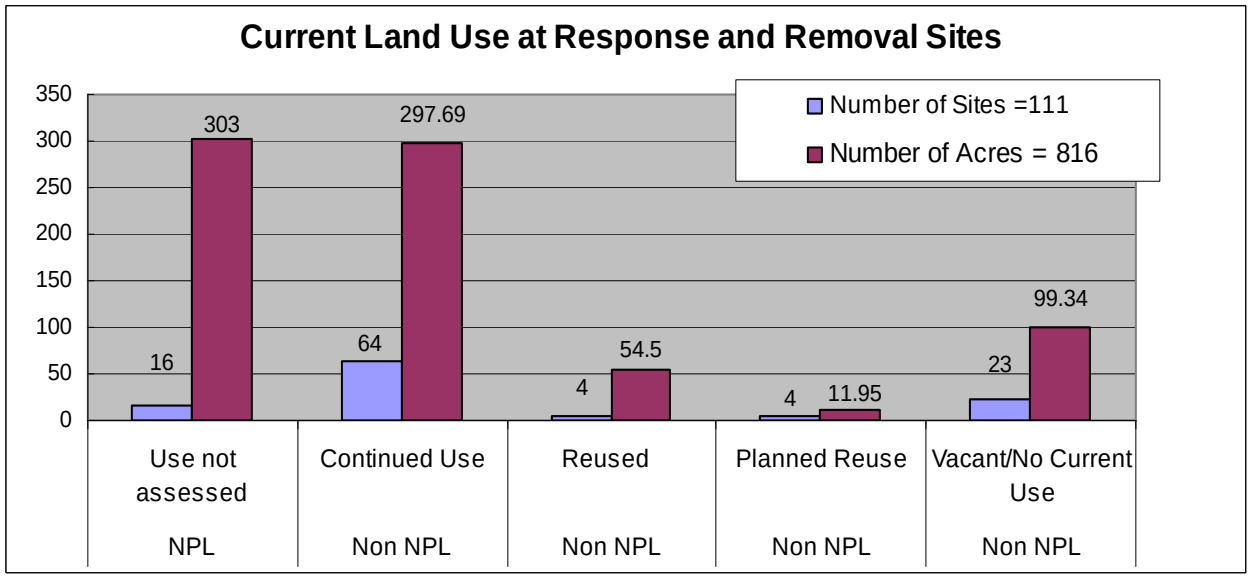


Figure 3 shows the distribution of the "Current Land Use" at the Response and Removal Sites at both NPL and Non-NPL sites. Figure 3 illustrates that of the 766 acres, 303 acres are associated with NPL sites. The NPL sites were not assessed for current land use in this study. Land uses at NPL sites were assessed in the study, "Hazardous Waste Cleanup Sites Land Use & Reuse Assessment" dated May 2006. This document can be found at the following website: http://www.epa.gov/region03/revitalization/reuse.htm Please refer to this document for further information on NPL sites. Figure 3 also indicates that 23 sites (99 acres) are currently vacant with no current use and 64 sites (298 acres) have been restored to their original use.

Figure 3. Current Land Use at Response and Removal Sites that were completed between 2001 and 2006



* Some sites had more than one current land use, therefore the number of sites in each land use adds up to more than the number of sites evaluated.

The remaining graphs and charts in this section of the report consider only Non-NPL sites. Figure 4 illustrates that the majority of Non-NPL sites are being used or have a plan for use. Of the acres affected by contamination, 64% (298 acres) were returned to their original use after a Response and Removal action. (e.g. industrial facility remains an industrial facility), 12% (55 acres) are being reused and 3 % (12 acres) are being considered for reuse. Of the 463 acres at Non-NPL sites that have had Response and Removal activity, 21 % (99 acres) remain vacant.

Figure 4. Per Cent of Non-NPL Response and Removal Sites in Each Land Use Category

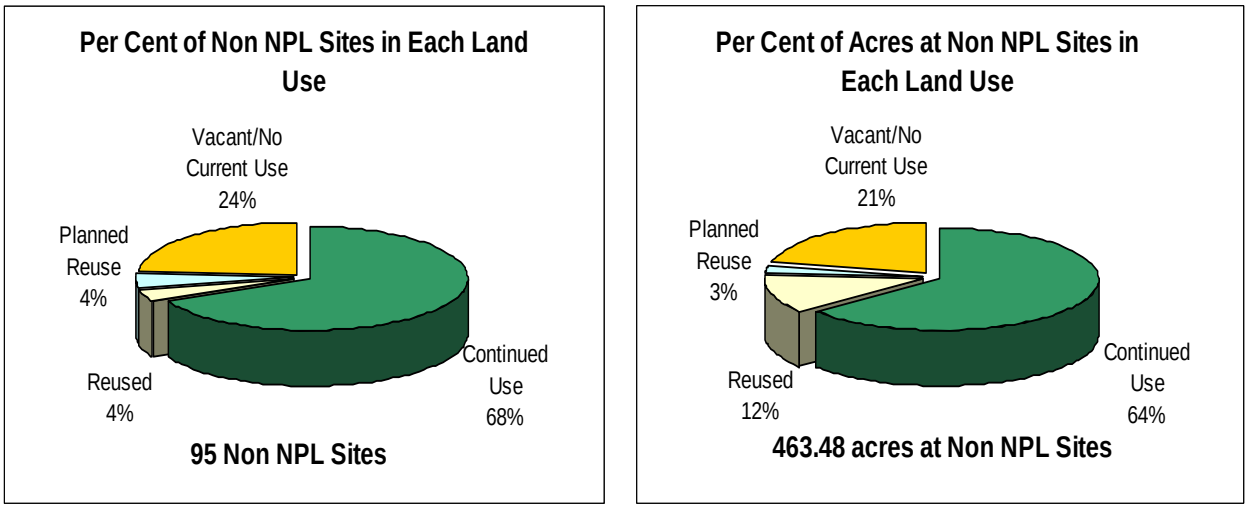


Figure 5 breaks down the land use at Response and Removal sites within each State. Figure 5 illustrates that the majority of land impacted by Response and Removal activities in Virginia, Pennsylvania and West Virginia were returned to their original use. The Commonwealth of Pennsylvania has the most response and removal sites with most of its land being returned to its original use and about 50 acres currently remaining vacant.

Figure 5. Acreage within each Land Use Category and State

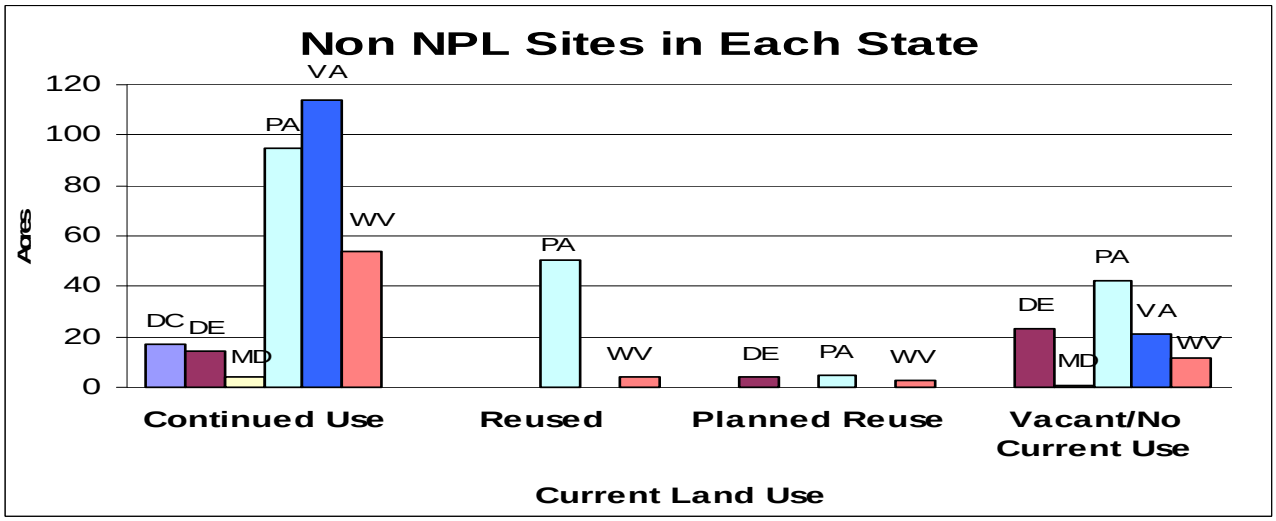


Figure 6 identifies the type of land use for each category of current land use. The analysis indicated that throughout the Region, industrial and residential uses were predominately the "continued use" after a Response and Removal action. The Response and Removal program was instrumental in restoring over 110 acres of contaminated residential land to be safely enjoyed by their homeowners and cleaning up and returning 100 acres of industrial land to productive use. Figure 6 illustrates that the majority of land that was "reused" was developed for recreational activity, with some land developed for commercial or residential uses.

Figure 6. Type of Land Use at Non-NPL Response and Removal Sites in Region 3 that were completed between 2001 and 2006

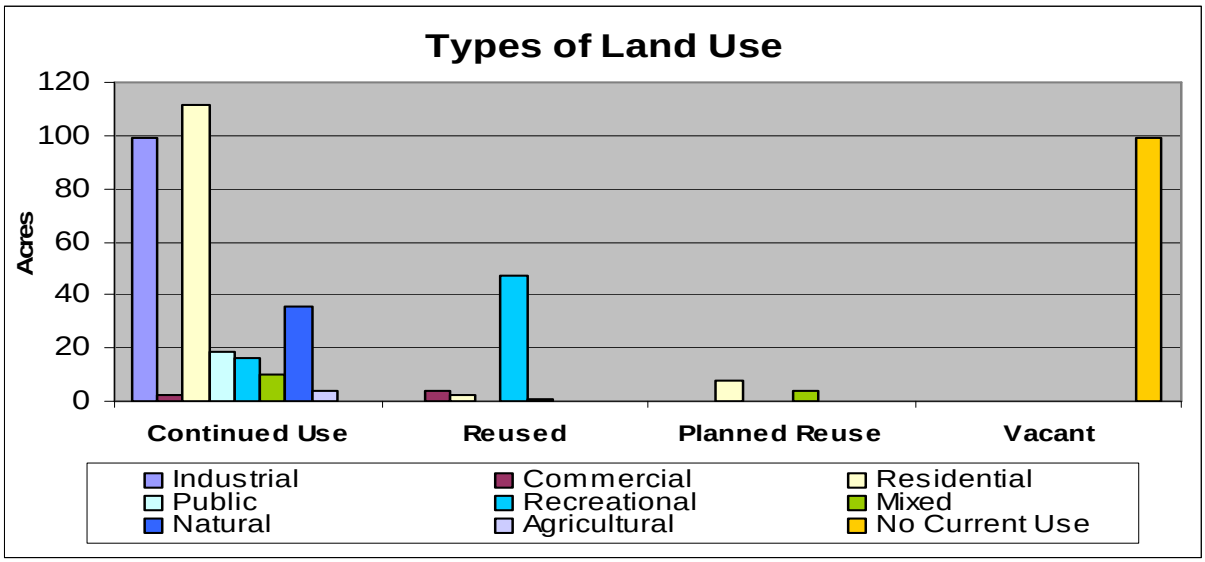
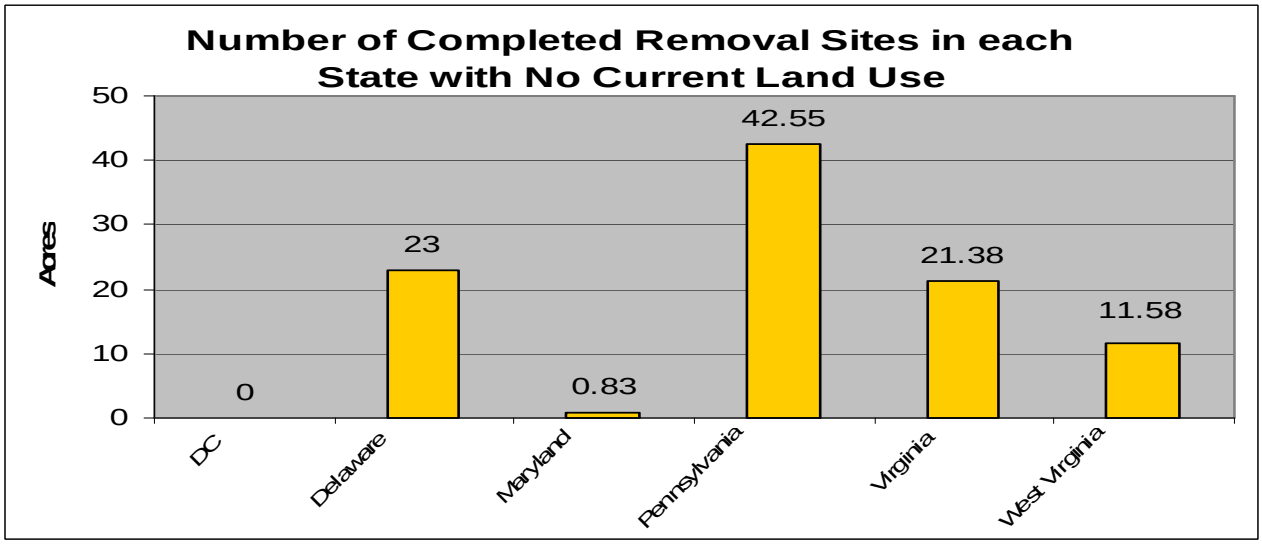


Figure 7 illustrates the amount of land in acres that remains vacant after a response and removal action that was completed between 2001 and 2006. While some of the vacant property may need further assessment before it can be productively reused, much of the vacant land is currently available for reuse.

Figure 7. Vacant land at Non-NPL Response and Removal Sites in Region 3 that were completed between 2001 and 2006



Delaware

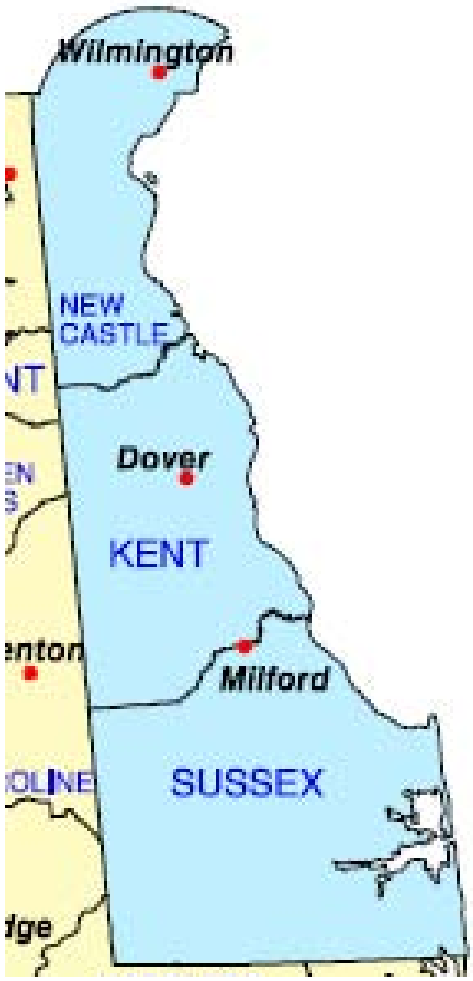


Table DE-1 lists a total of 8 Superfund Response and Removal Sites that were completed between January 1, 2001 and October 1, 2006. As Figure DE-1 illustrates, all of the 8 completed Response and Removal Sites were Non-NPL sites and covered 41.59 acres.

Table DE-1. Response and Removal Sites in Delaware completed between January 1, 2001 to October 1, 2006

EPA ID Number	Site Name	County	Continued Use	Reused	Planned Reuse	Vacant	Type of Use
			Acres				
DED002337806	NVF (Yorklyn)	New Castle	2			3	Industrial/ Vacant
DEN000305677	Motiva Enterprises	New Castle	10				Industrial
DEN000305976	Motiva Tank 3	New Castle	0.1				Industrial
DESFN0305412	Harbeson Dead Swan Site	Sussex	0.23				Agricultural
DEN000305992	Red Clay Hazmat Response	New Castle	2				Mixed with Residential
DESFN0305510	12th Street Dump Site	New Castle				20	Abandoned Landfill
DEN000305651	Brandywine Creek Mystery	New Castle	0.06				Creek
DE0000122218	Diamond State Salvage	New Castle			4.2		Residential/ Commercial

*Acres are estimates and represent only the portion of site where actual removal activity occurred.

Figure DE-1. Delaware Response and Removal Sites Completed Between 2001 and 2006

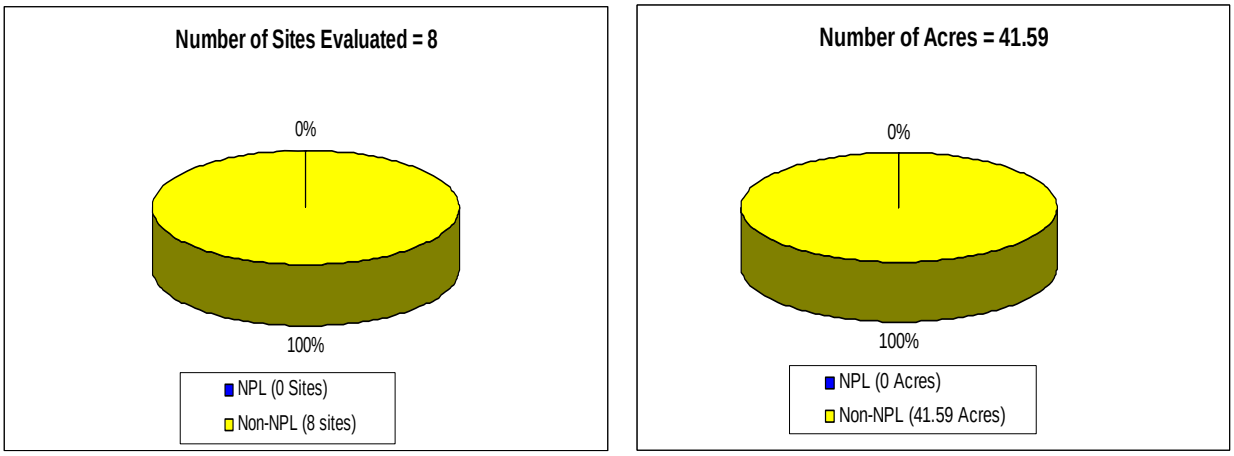
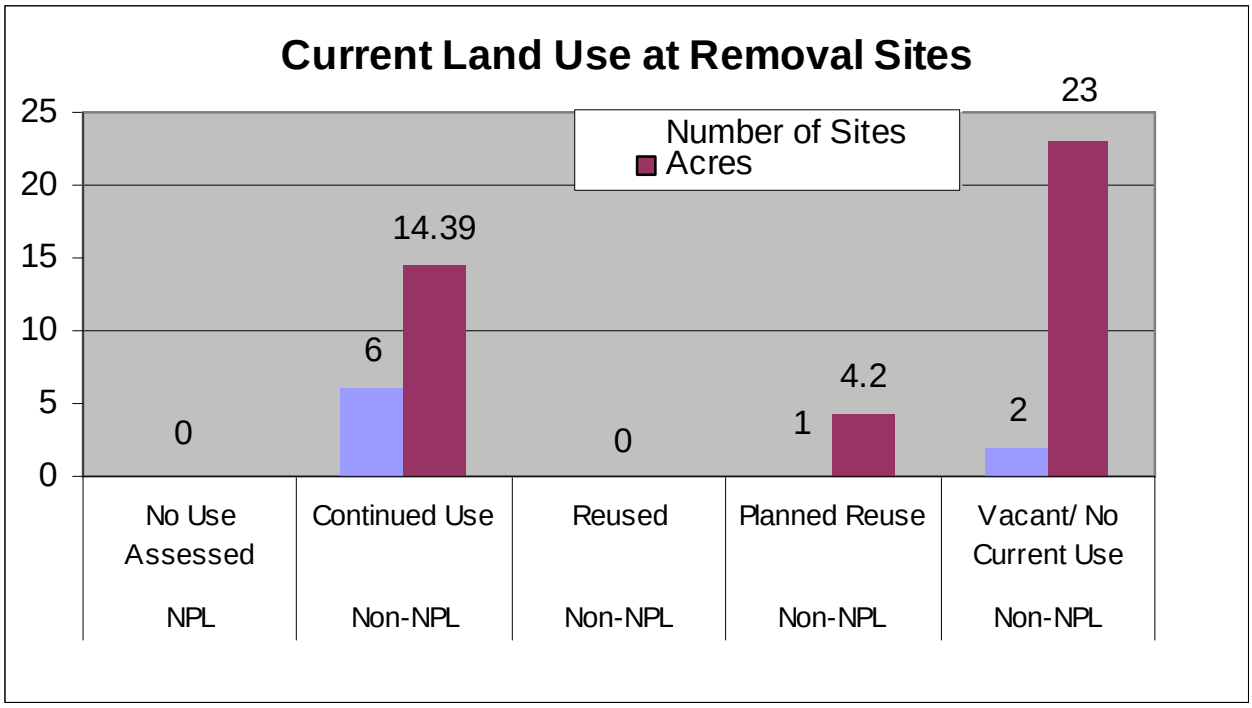


Figure DE-2 shows the distribution of the "Current Land Use" at the Response and Removal Sites within the State of Delaware over the past five years. Figure DE-2 illustrates that 14.39 acres have been restored to their original use while 23 acres are currently vacant and unused.

Figure DE-2. Delaware Response and Removal Sites Completed Between 2001 and 2006



*One site In Delaware has more than one current land use, therefore the number of sites in each land use adds up to more than the number of sites evaluated.

Figure DE-3 illustrates that of the acres affected by contamination, 55% (23 acres) remain vacant and unused. One vacant site is a 20 acre inactive landfill. Further assessment at the site would be required before the land could be developed. As Figure DE-4 illustrates, one site in Delaware has a "planned reuse." This site was a former salvage yard. It is a 4.2 acre site that has been remediated to its previous ecosystem and currently has buyers who may be interested in developing the land into an area with condominiums and commercial businesses.

There are 14.39 acres of land that are currently being used in the same general manner as when the site became contaminated. Figures DE-4 and DE-5 illustrate that 12 of those acres have been restored to its previous industrial use.

Figure DE-3. Current Land Use at Delaware Response and Removal Non-NPL Sites Completed Between 2001 and 2006

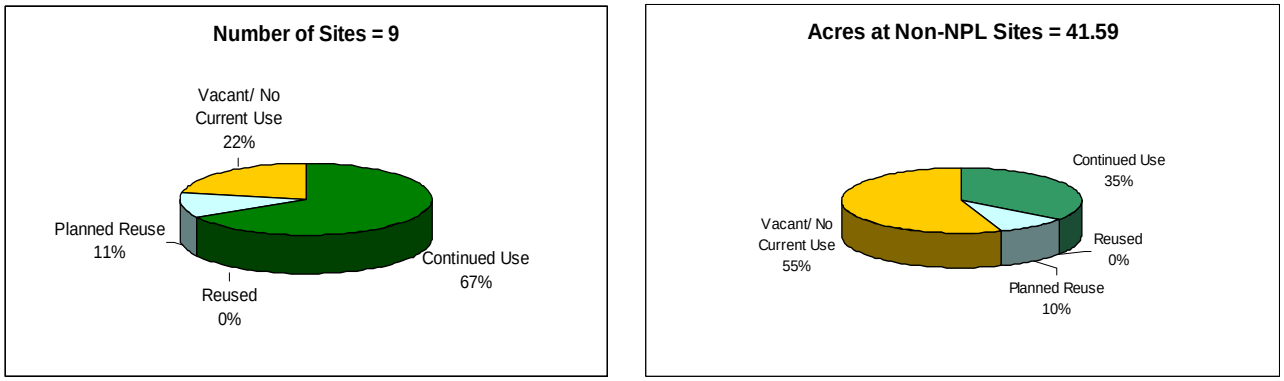


Figure DE-4. Types of Land Use at Delaware Response and Removal Sites Completed Between 2001 and 2006

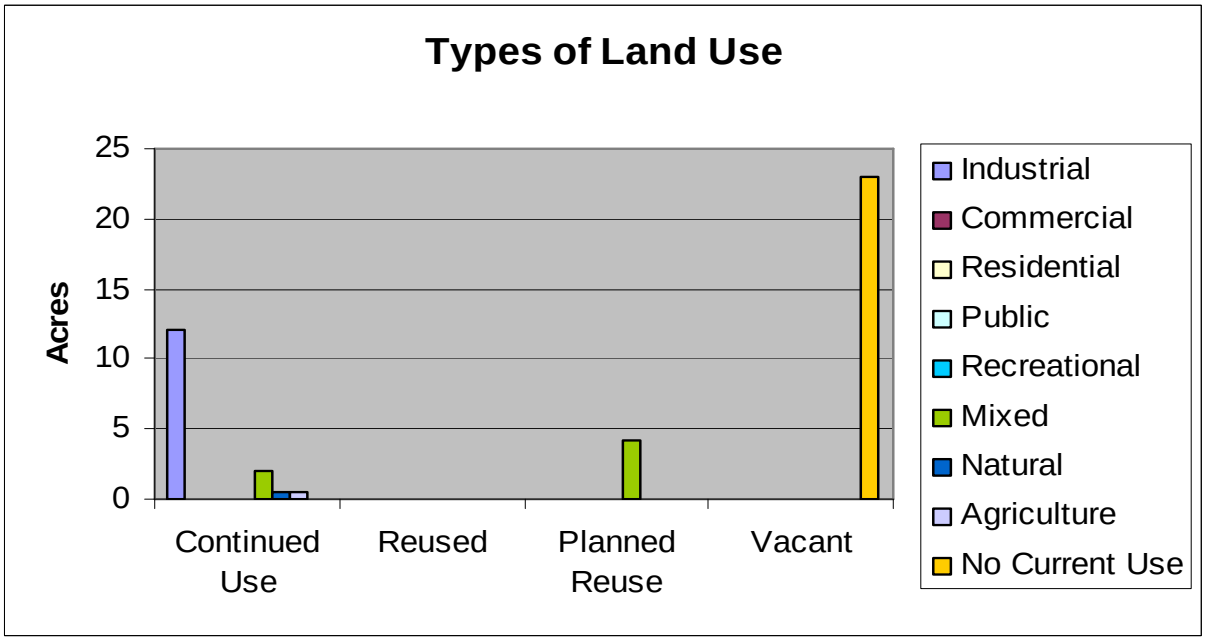
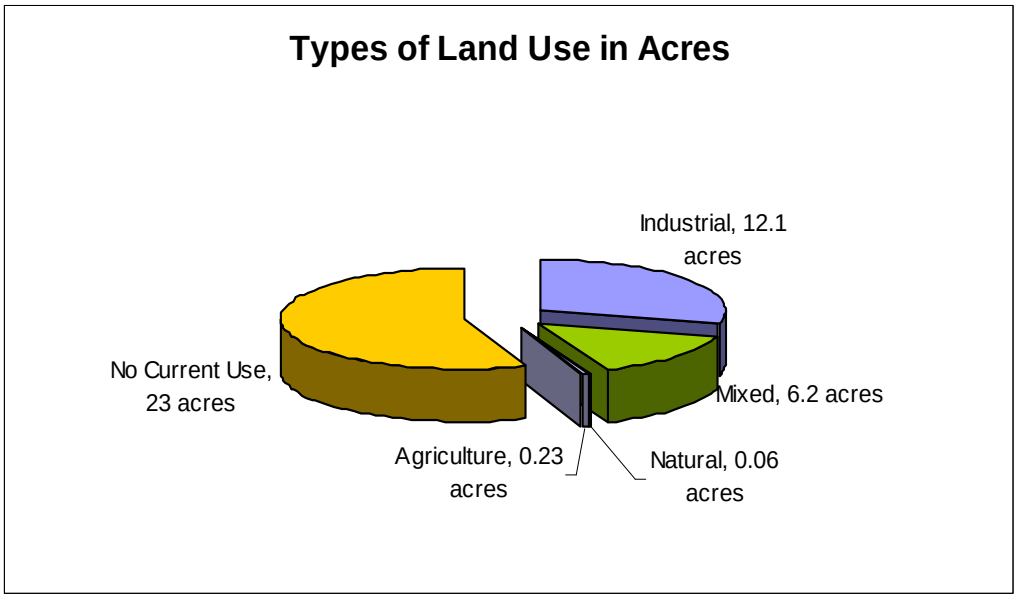


Figure DE-5. Types of Land Use at Delaware Response and Removal Sites Completed Between 2001 and 2006



District of Columbia

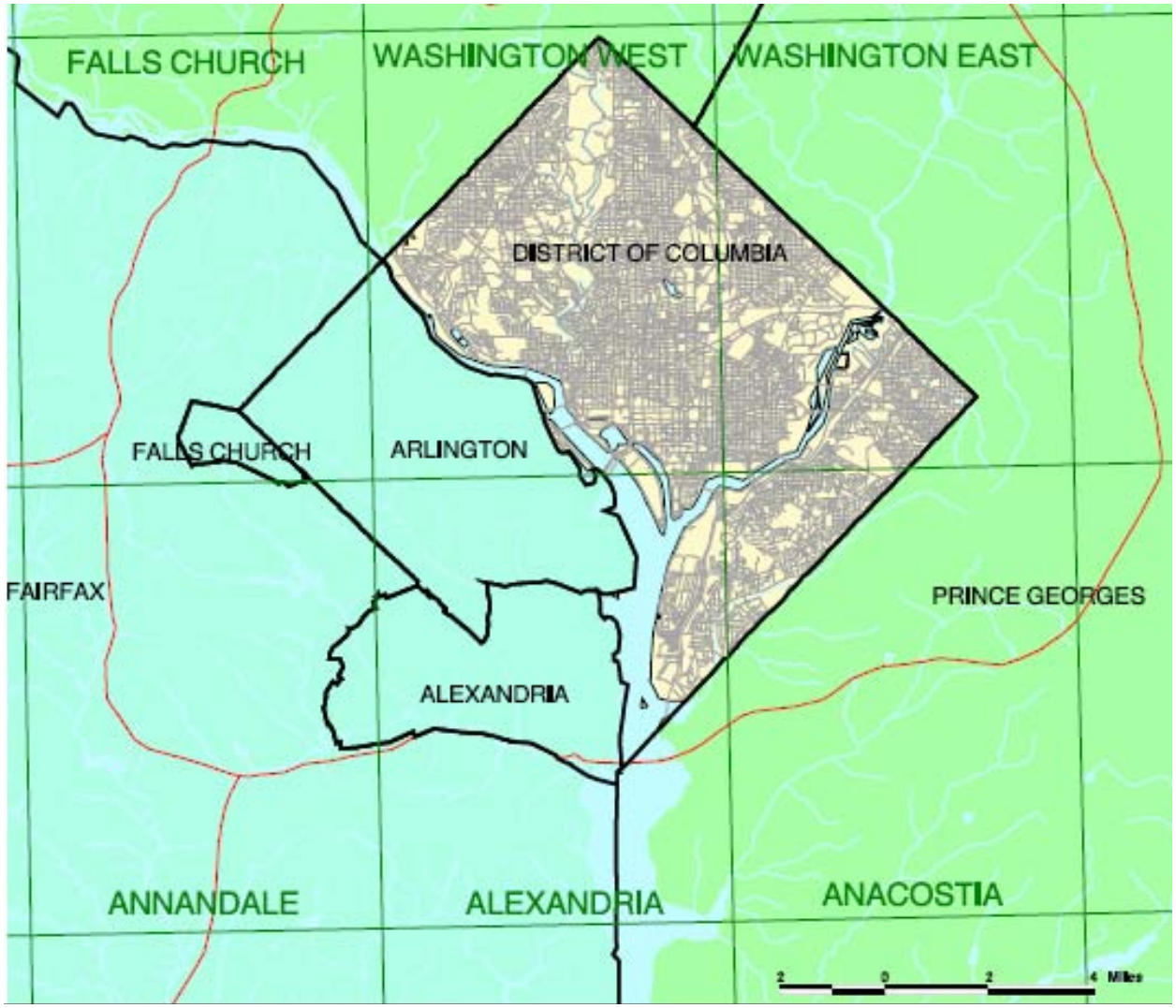


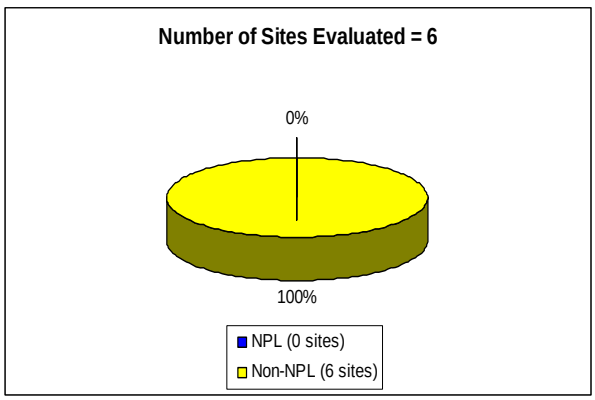
Table DC-1 lists a total of 6 Superfund Response and Removal Sites that were completed between January 1, 2001 and October 1, 2006 in the District of Columbia. As Figure DC-1 illustrates, all of the Completed Response and Removal Sites were Non-NPL sites and covered 17.01 acres.

Table DC-1. Response and Removals Sites in Washington, DC completed between January 1, 2001 to October 1, 2006

EPA ID Number	Site Name	Continued Use	Reused	Planned Reuse	Vacant	Type of Use
		Acres				
DCSFN0305431	50th And Hayes	0.5	0	0	0	Industrial - Auto scrap yard
DCN000305703	Capitol Hill Anthrax Site	10	0	0	0	Public Buildings
DCN000306094	Capitol Hill Ricin Site	1.5	0	0	0	Public Buildings
DCN000306151	Cardozo High School Mercury	1	0	0	0	High School
DCN000305870	Curtis & Brown Barge Spill	0.01	0	0	0	Natural- Water Channel
DCN000306000	Washington DC Mercury	4	0	0	0	1 acre High School and 3 acres Residential

*Acres are estimates and represent only the portion of the site where actual removal activity occurred.

Figure DC- 1. DC Response and Removal Sites Completed Between 2001 and 2006



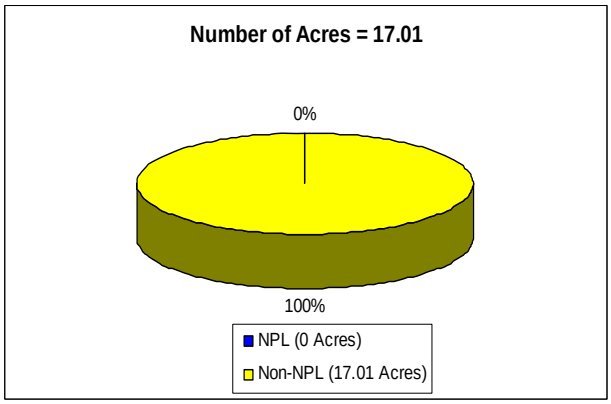


Figure DC-2 illustrates the distribution of the "Current Land Use" at the Response and Removal Sites within DC over the past five years. Figures DC-2 and DC-3 show that 100% (17.01 acres) of the 6 sites impacted by contamination were restored to their original use.

Figure DC -2. DC Response and Removal Sites Completed Between 2001 and 2006

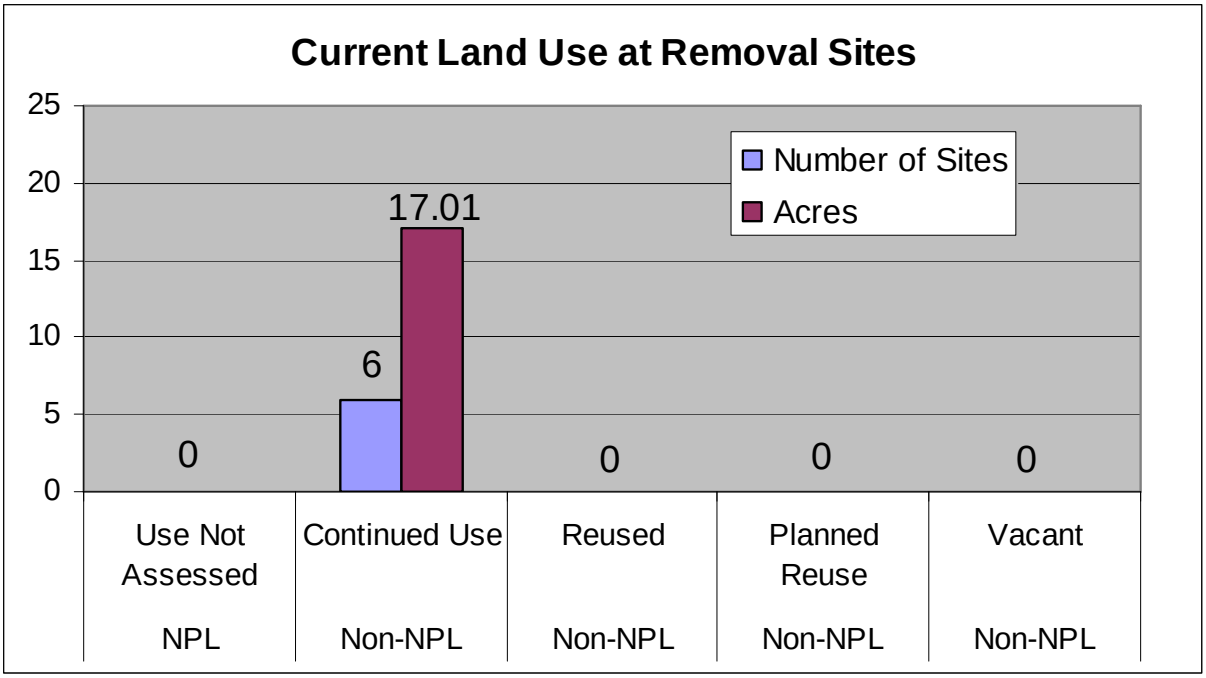
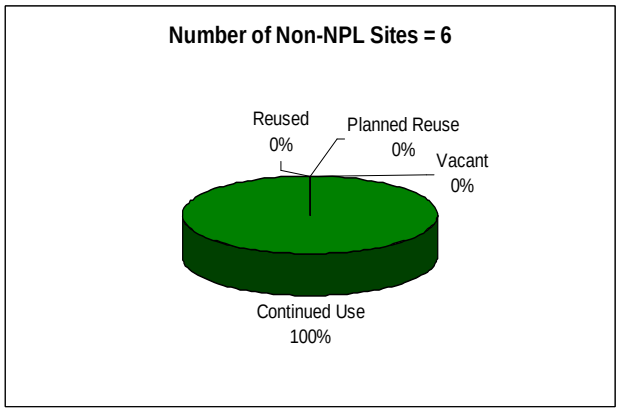
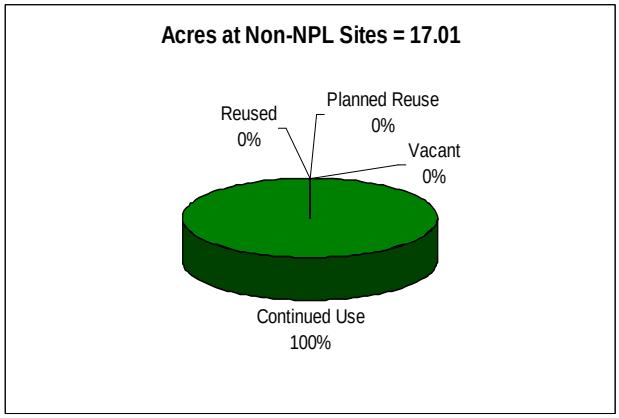


Figure DC- 3. Current Land Use at DC Response and Removal Non-NPL Sites Completed Between 2001 and 2006





Figures DC-4 and DC-5 illustrate the type of use occurring at the sites after the response and removal sites were completed. The charts show that over 13 acres of the land were restored to their previous public use. Two of the public sites cleaned up were High Schools with mercury spills. Over 11 acres of land remediated were public buildings on Capital Hill that had been contaminated with anthrax or ricin.

Figure DC- 4. Types of Land Use at DC Response and Removal Non-NPL Sites Completed Between 2001 and 2006

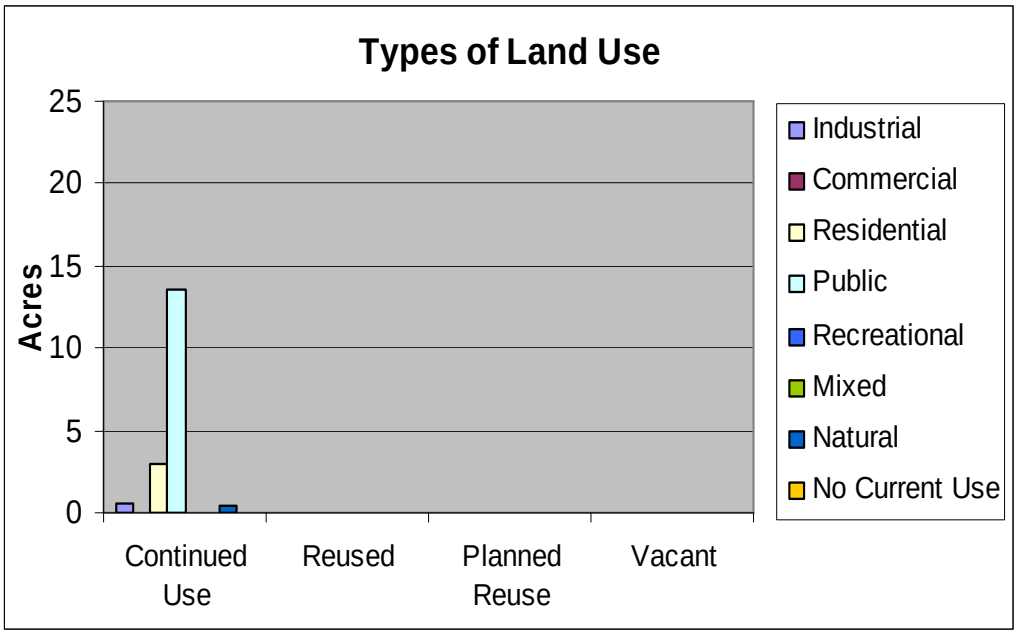
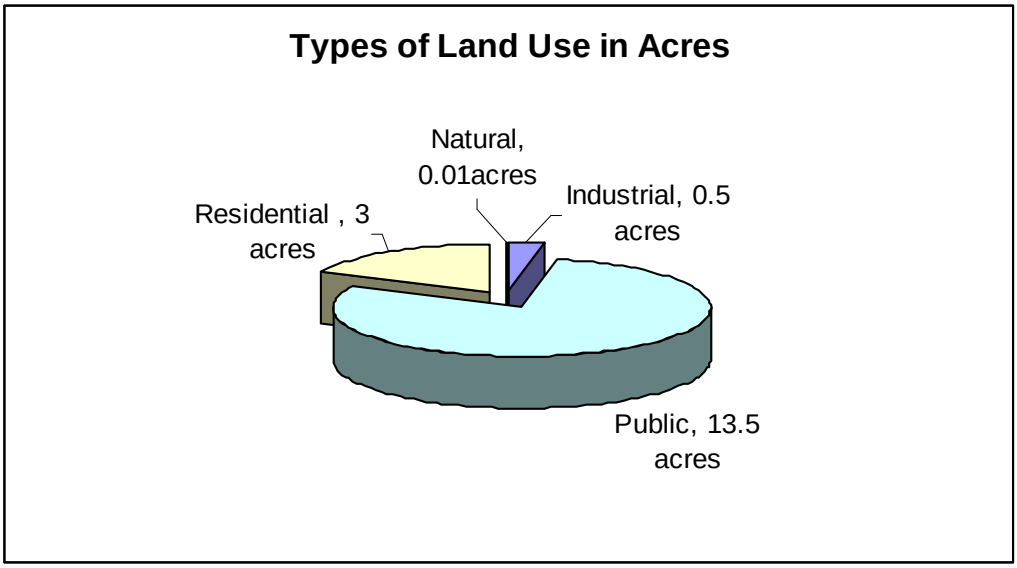


Figure DC- 5. Types of Land Use at DC Response and Removal Non-NPL Sites Completed Between 2001 and 2006



MARYLAND

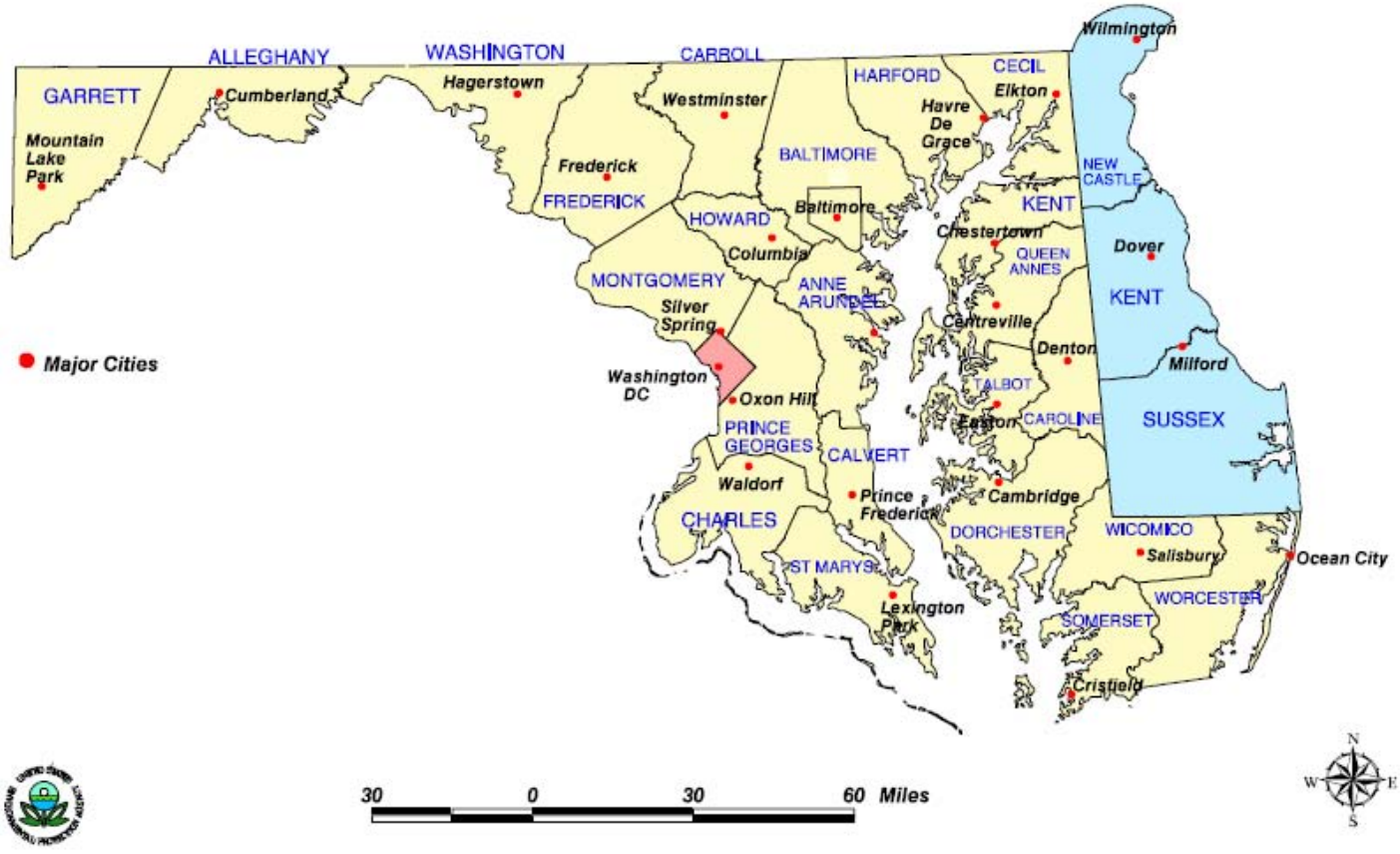

GARRETT
ALLEGHANY
WASHINGTON
CARROLL
HARFORD
CECIL
Wilmington
Cumberland
Hagerstown
Westminster
Havre De Grace
Elkton
Mountain Lake Park
Frederick
BALTIMORE
NEW CASTLE
FREDERICK
Baltimore
KENT
HOWARD
Chestertown
Columbia
QUEEN ANNES
Dover
MONTGOMERY
ANNE ARUNDEL
KENT
Silver Spring
Centreville
Major Cities
Denton
Milford
Washington DC
TALBOT
Oxon Hill
Easton
CAROLINE
SUSSEX
PRINCE GEORGES
CALVERT
Waldorf
Prince Frederick
Cambridge
CHARLES
DORCHESTER
WICOMICO
Salisbury
Ocean City
ST MARYS
Lexington Park
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Figure MD-1 illustrates that EPA completed only 4 Superfund Response and Removal Sites (12.86 acres) between January 1, 2001 and October 1, 2006 in the state of Maryland. Table MD-1 lists the Non- NPL Response and Removal Sites. Table MD-2 lists the NPL Response and Removal Sites. As Table MD-2 and Figure MD-1 illustrate, the removal activity at the NPL site was a groundwater cleanup with an estimate of 8 acres of land involved. Figure MD-1 shows that the 3 Non-NPL sites covered only 4.86 acres.

Table MD-1. Completed Response and Removals at Non- NPL Sites in Maryland - 2001 to 2006

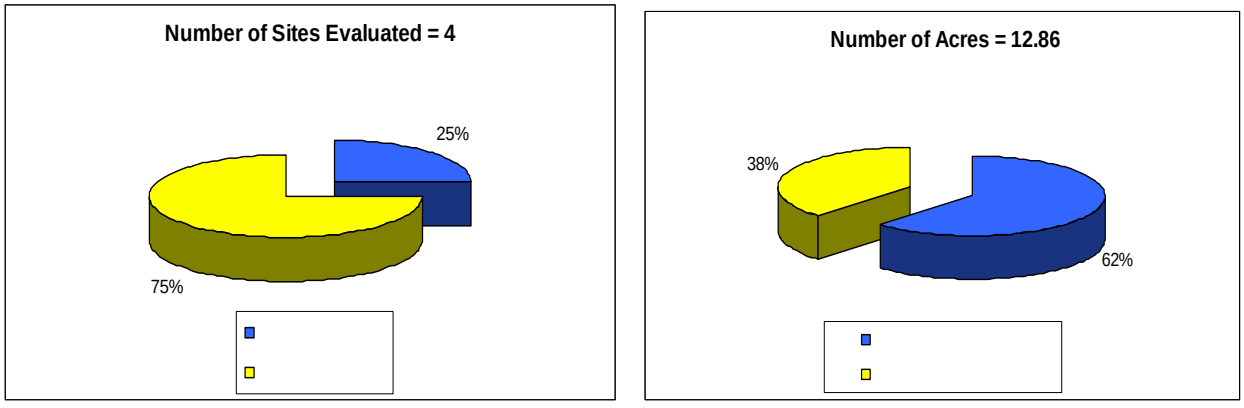
EPA ID Number	Site Name	County	Continued Use Reused	Reuse	Planned Reuse	Vacant	Type of Use
			Acres				
MDN000306098	Cosmechem	Baltimore				0.83	Empty Building
MDN000306107	Edwards Lane Site	Harford	4				Agriculture
MDN000306193	22nd Street Mercury	Baltimore	0.03				Residential

*Acres are estimates and represent only the portion of the site where actual removal activity occurred.

Table MD-2. Completed Response and Removals at NPL Sites in Maryland - 2001 to 2006

EPA ID Number	Site Name	County	Acres
MDD000218008	Spectron	Cecil	8 acres Groundwater

Figure MD- 1. Maryland Response and Removal Sites Completed Between 2001 and 2006



*Acres are estimates and represent only the portion of site where actual removal activity occurred. The one NPL Site was a groundwater clean up site.

Figure MD-2 shows the distribution of the "Current Land Use" at the Response and Removal Sites within the State of Maryland over the past five years. Figures MD-2 and MD-3 illustrate that of the acres at Non-NPL sites, 83% or 4.03 acres have been restored to their original use and 17% or 0.83 acres are currently vacant and unused. Figures MD- 4 and MD-5 illustrate that 4 acres were restored to an agricultural use. The 0.83 acres of vacant land is an old abandoned warehouse.

Figure MD -2. Maryland Response and Removal Sites Completed Between 2001 and 2006

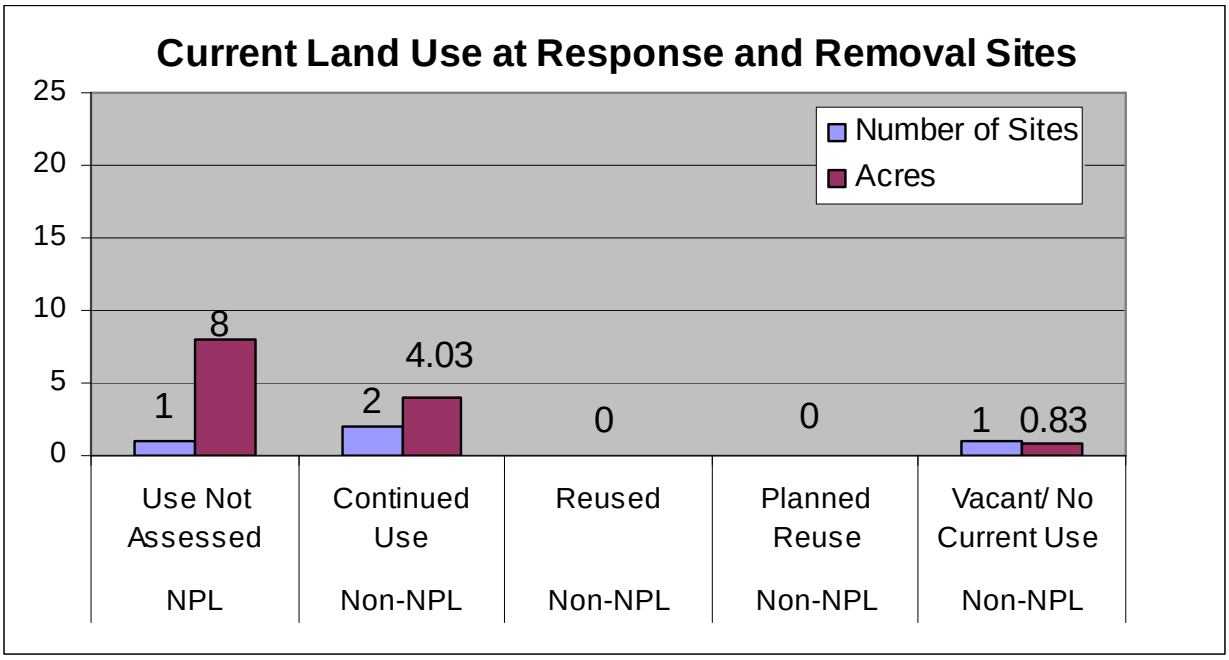


Figure MD- 3. Current Land Use at Maryland Response and Removal Non-NPL Sites Completed Between 2001 and 2006

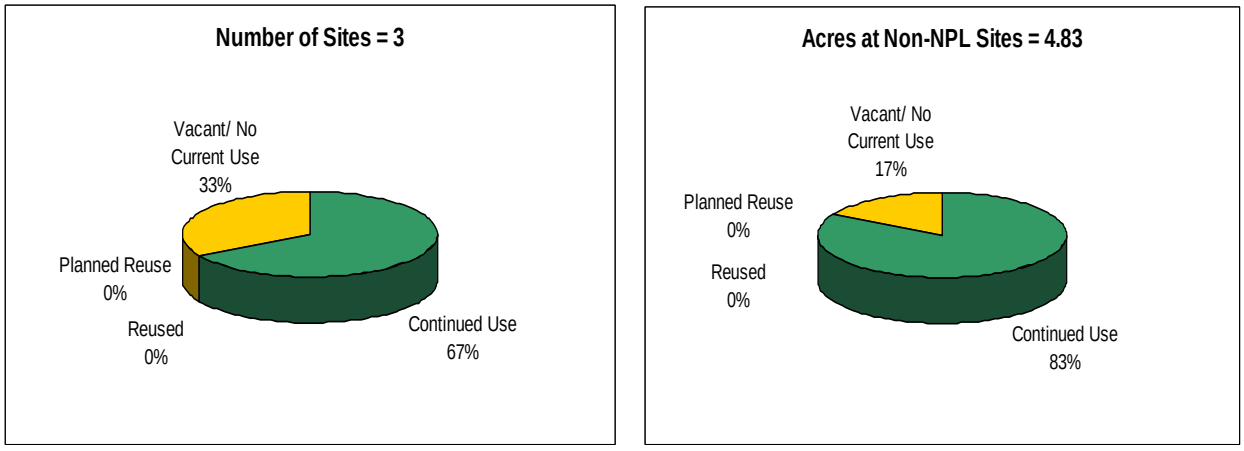


Figure MD- 4. Types of Land Use at Maryland Response and Removal Non-NPL Sites Completed Between 2001 and 2006

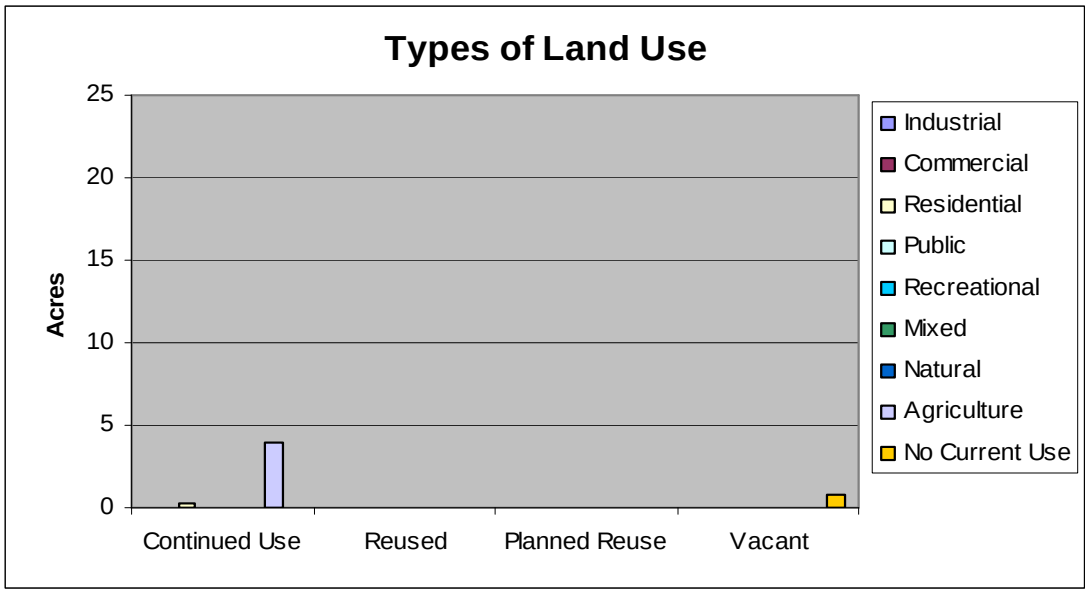
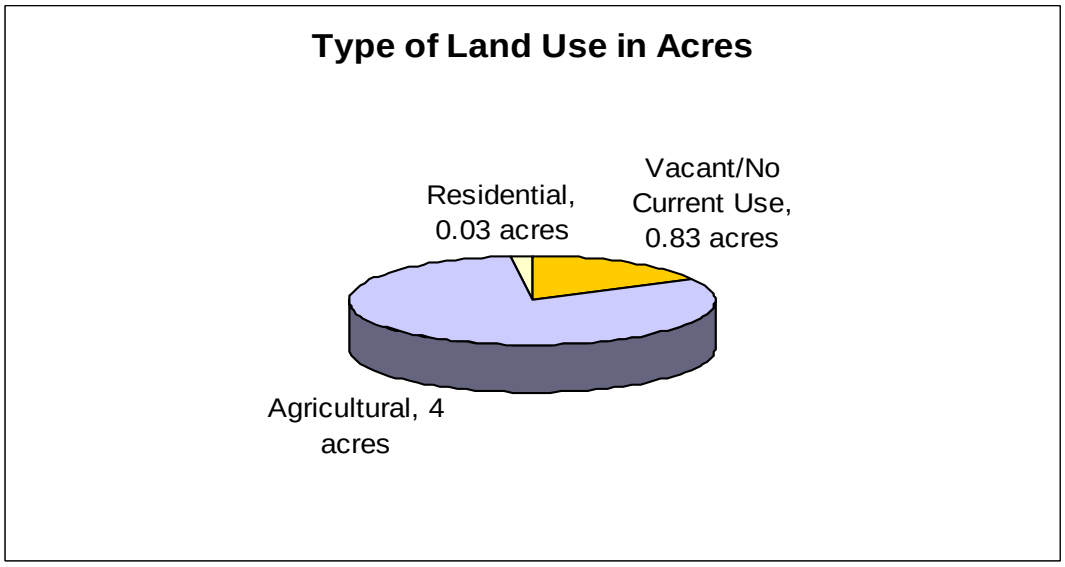


Figure MD-5. Types of Land Use at Maryland Response and Removal Non-NPL Sites Completed Between 2001 and 2006



PENNSYLVANIA

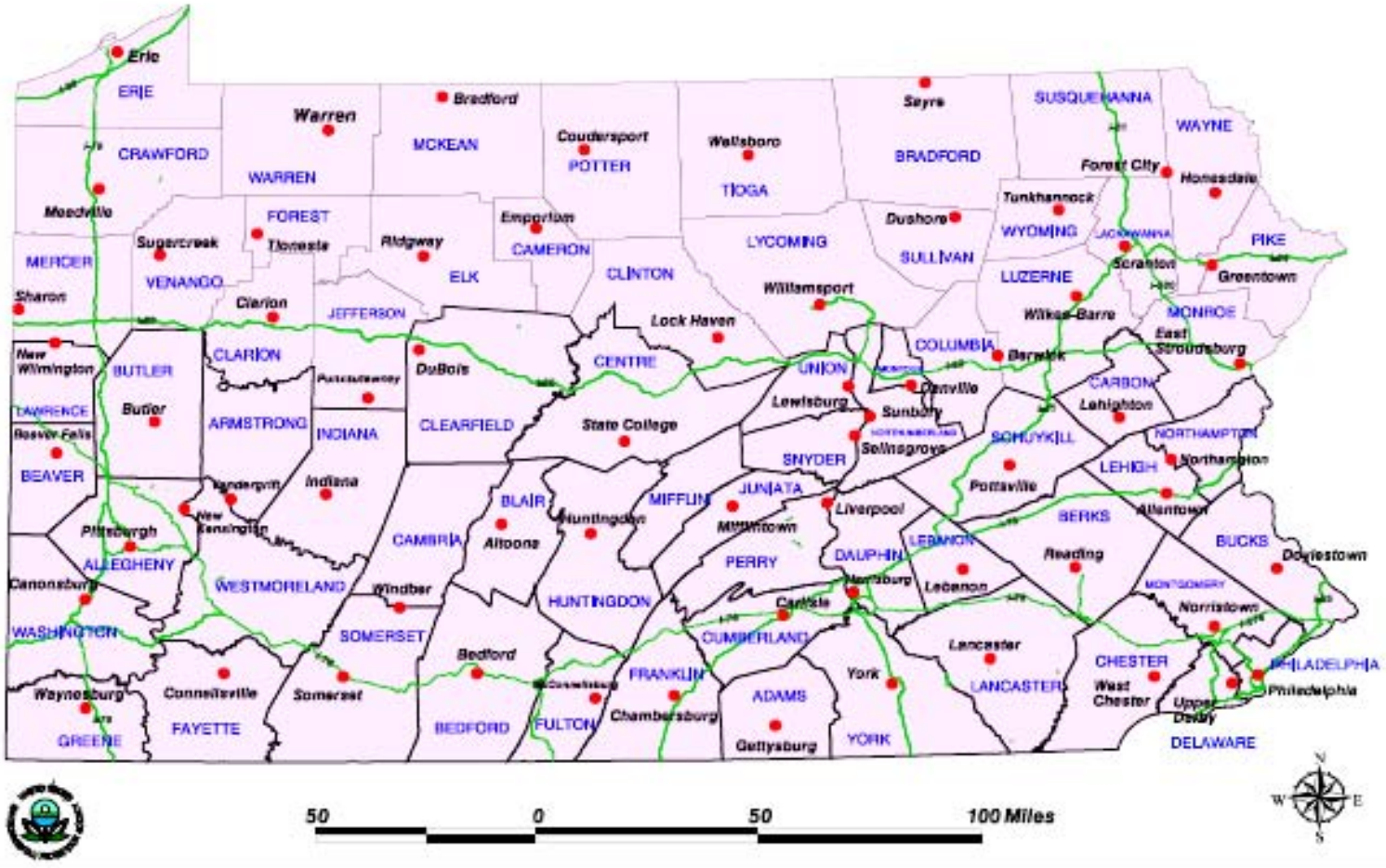


Table PA-1 lists 39 Non-NPL Superfund Response and Removal Sites and Table PA-2 lists 11 NPL Superfund Response and Removal Sites that were completed between January 1, 2001 and October 1, 2006. Figure PA-1 illustrates that a total of 50 removal sites covered 405.39 acres. Although NPL sites represented only 22% of the 50 removal actions, it covered over 52% of the land (212.5 acres). Non-NPL sites had 192.89 acres cleaned-up through the response and removal program in Pennsylvania.

Table PA-1. Completed Response and Removals at Non- NPL Sites in Pennsylvania – 2001 to 2006

EPA ID Number	Site Name	County	Continue Use	Reused	Planned Reuse	Vacant	Type of Use
			Acres				
PAD077060358	Abar Corp	Bucks	1.25				Industrial
PAN000305882	Absco Scrap Yard	Philadelphia			2.75		Residential
PAN000305908	Allegheny Iron Radiation	Philadelphia	0.01				Industrial
PAN000305607	American Ash Recycling	York	0.01				Industrial
PA0000585901	Andela - Aka Warwick Twp	Bucks		47			Recreational Golf Community
PAN000305904	Astatech, Inc.	Philadelphia	0.25				Industrial
PAN000305664	Bridgeport Industrial Park	Montgomery			2		Residential
PAN000305861	Bryn Athyn Mercury	Montgomery	1				Public - School
PAN000305939	Hamburg - Broom Works	Berks				0.56	Further Assessment Required Vacant Lot
PAN000305872	Hamburg - Port Clinton	Berks	5.52				Mixed Commercial, Residential, Recreational
PAN000306088	Hamburg - Woodland Road	Berks	30				Residential
PAN000305723	Hamburg Lead Kaercher Creek	Berks	0.41				Natural - Creek
PAN000305724	Hamburg Lead - Mill Creek	Berks	0.59				Commercial
PAN000305725	Hamburg Lead - Railcut Site	Berks	0.85				Mixed Residential/Commercial
PASFN0305567	Hamburg Lead Site	Berks	17.76				15 acres – Recreational 2.76 acres -

EPA ID Number	Site Name	County	Continue Use	Reused	Planned Reuse	Vacant	Type of Use
			Acres				
							Residential
PAN000305975	Horsham Mercury Site	Montgomery	0.25				Residential
PAN000305641	Kelly Drive Sulfuric Acid	Philadelphia	2.3				Public
PAD003004496	Lancaster Battery	Lancaster	1.5				Mixed Commercial public, industrial
PASFN0305530	Logan Section Contamination	Philadelphia				31	Vacant/ Sinking land
PASFN0305573	Malter International	Luzerne	0.5				Industrial
PAN000306181	Marienville Furnace Prop	Forest	20				Residential
PAN000305884	Mayburg Tar Seep	Forest	0.25				Residential/ Year Round Campground
PAN000306168	Montex Textile Site	Lehigh				1	demolished building
PAD107214116	National Vulcanized Fiber	Chester	0.05				Industrial
PAD987355096	North Penn - Area 8	Montgomery	7.75				Groundwater
PASFN0305566	Pa Railroad Transformers	Allegheny	0.01				Public (PADOT tunnels)
PAN000305909	Peach Alley Parking Lot	Berks	0.94				Commercial Parking lot
PAN000305669	Pennsylvania Engineering	Delaware		2.5			Residential
PAN000305681	Pennsylvania Engineering	Philadelphia				0.5	Vacant building
PAN000305918	Perma Grain Products	Clearfield				5	Vacant site belongs to PA
PASFN0305579	Pyramid Chemical Site	Montgomery		1			mixed-community college/commercial
PASFN0305402	River Bend / Creek Rd Sandblasting	Bucks				1.6	Further Assessment Required
PAN000306148	South Mountain Boulevard	Luzerne	1				Groundwater
PAN000305629	Verdict Chemical Site	Philadelphia				0.5	Empty lot

EPA ID Number	Site Name	County	Continue Use	Reused	Planned Reuse	Vacant	Type of Use
			Acres				
PAD987365426	Village Of Reeders	Monroe	1.25				Groundwater
PAN000305657	Walter Warehouse Site	Philadelphia				0.5	Building to be demolished
PAN000305972	Water Street Battery Site	Berks	1.64				Residential
PAD002272615	Wonder Chemical	Bucks				1.29	Industrial Building ready for sale
PAN000305638	York Metal Finishing	Philadelphia				0.6	Building to be demolished

*Acres are estimates and represent only the portion of site where actual removal activity occurred.

Table PA- 2: Completed Response and Removals at NPL Sites in Pennsylvania – 2001 to 2006

EPA ID Number	Site Name – NPL Sites	County	Acres
PAD980831812	Brown's Battery Breaking	Berks	14.0
PAD002338010	Havertown PCP	Delaware	12.0
PAD014353445	Malvern TCE	Franklin	3.2
PAD057152365	North Penn - Area 12	Franklin	25 Groundwater)
PAD980692693	North Penn - Area 5	Montgomery	35 (Groundwater)
PAD980926976	North Penn - Area 6	Montgomery	38 (Groundwater)
PAD002498632	North Penn - Area 7	Montgomery	0.5
PAN000305679	Price Battery	Berks	9.5
PAD981033459	Ryeland Road Arsenic Site	Berks	7.3
PAD987295276	Safety Light Corporation	Columbia	10.0
PAD005000575	Westinghouse Electric	Mercer	58 (Groundwater)

*Acres are estimates and represent only the portion of site where actual removal activity occurred.

Figure PA- 1. Pennsylvania Response and Removal Sites Completed Between 2001 and 2006

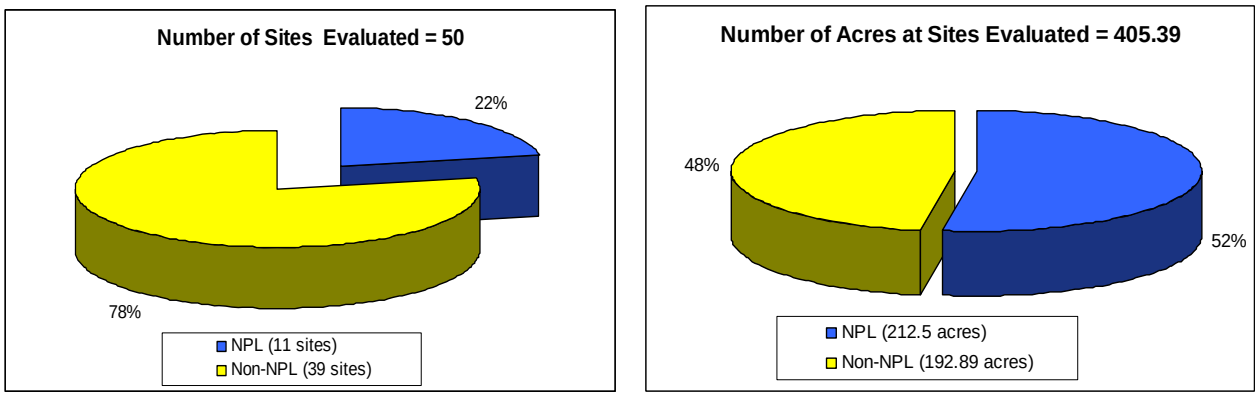


Figure PA-2 shows the distribution of the "Current Land Use" at the Response and Removal sites within Pennsylvania over the past five years. The chart illustrates that 95 acres have been restored to their original use while 42.55 acres are currently vacant and unused.

Figure PA- 2. Pennsylvania Response and Removal Sites Completed Between 2001 and 2006

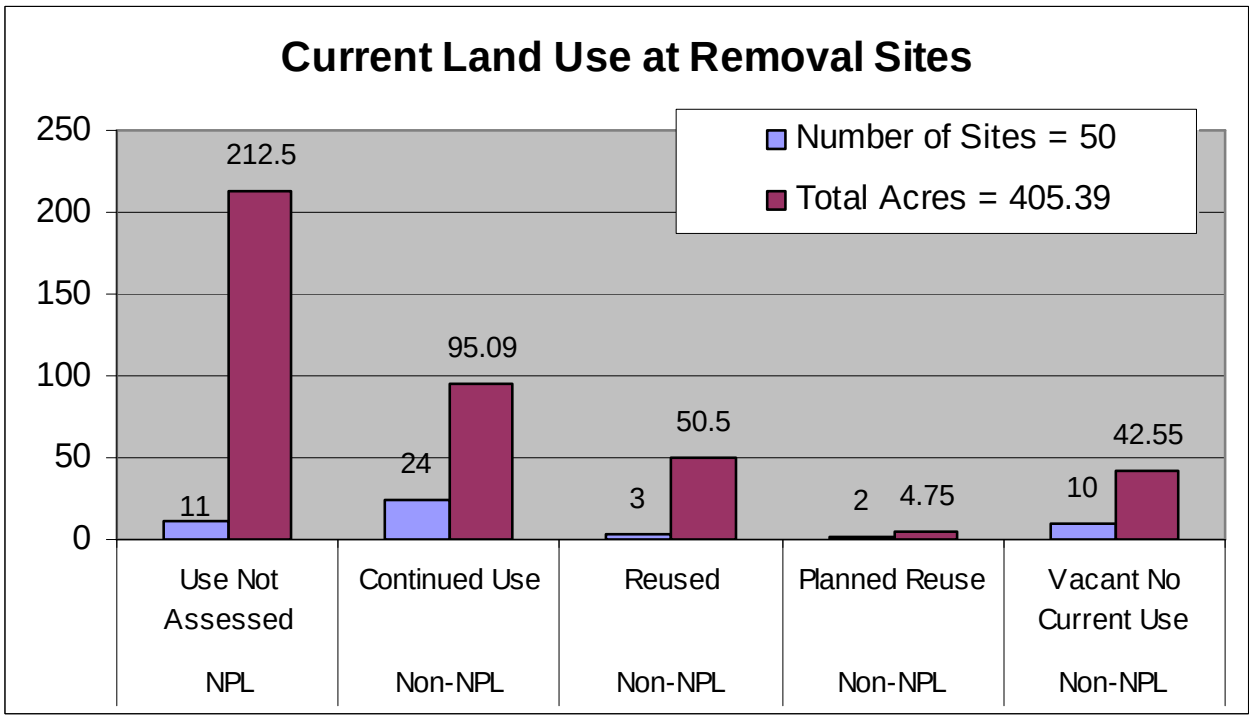
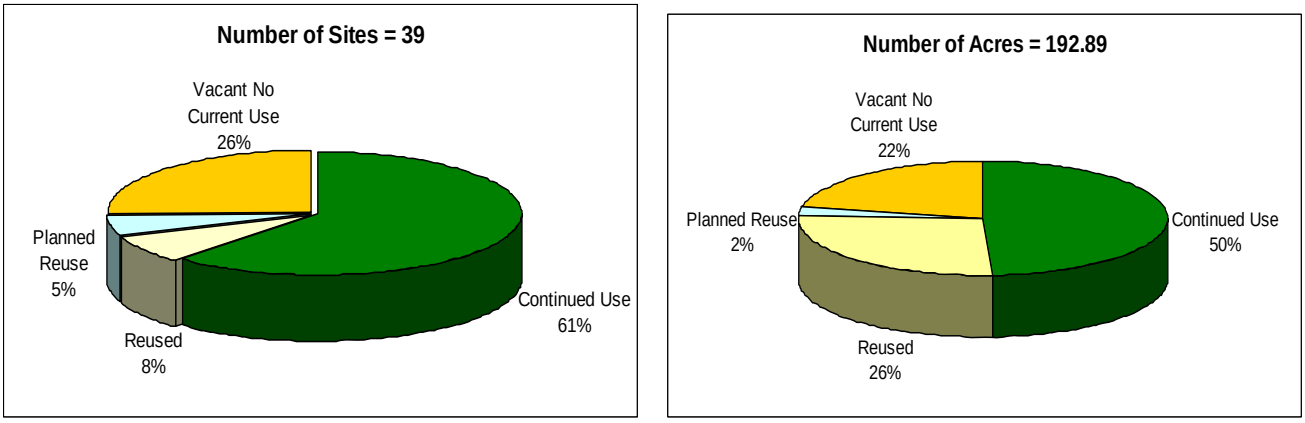


Figure PA-3 illustrates that of the 192.89 acres of Non-NPL sites affected by contamination, 50% (95 acres) have been restored to their original use, 26% (50.5 acres) have been used in a new way, 2% (4.75 acres) are in the process of being reused and 22% (42.55 acres) are vacant with no use planned.

Figure PA- 3. Current Land Use at Pennsylvania Response and Removal Non-NPL Sites Completed Between 2001 and 2006



As indicated in Figures PA-4 and PA-5, 65 acres were restored to their original residential use followed by about 15 acres restored to their recreational use and less than 10 acres restored to industrial, commercial, public and natural uses. Most of the residential and the recreational restoration occurred in the town of Hamburg, PA. The response and removal actions in Hamburg involved the cleanup of lead contamination caused by the past use of battery casings as filler during the development of the homes and parks in the town. Under the "Reused" category, about 47 acres of previously vacant land have been redeveloped into a golf course, and under the "planned reuse" category, about 5 acres of vacant land are currently being considered for residential development. There are 42.55 acres of unused vacant land. Of the 42.55 acres, most are available for reuse with only 2.16 acres needing further investigation before redevelopment.

Figure PA- 4. Types of Land Use at Pennsylvania Response and Removal Non-NPL Sites Completed Between 2001 and 2006

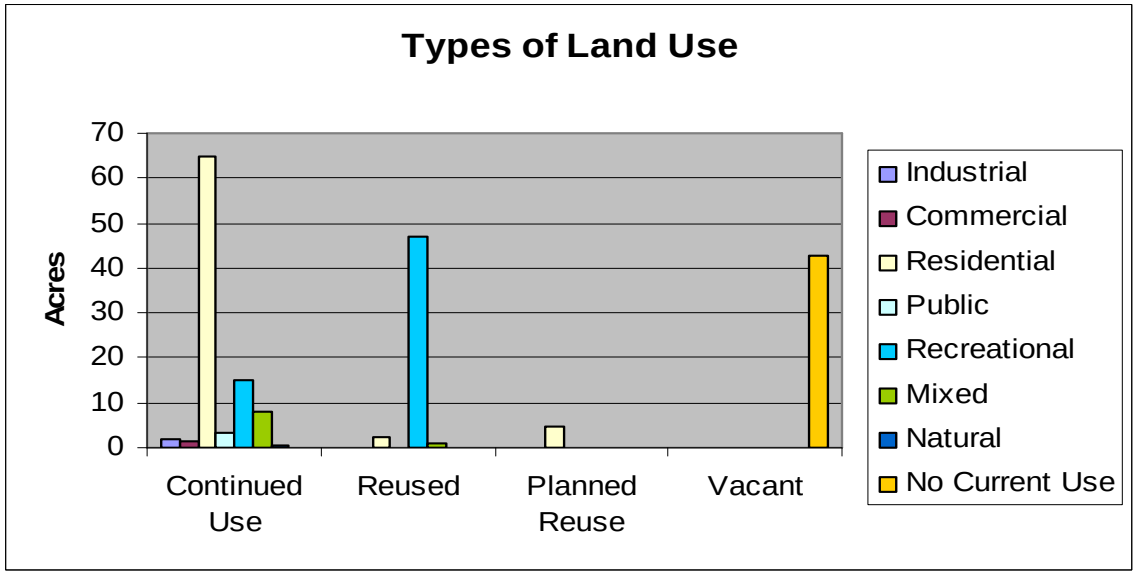
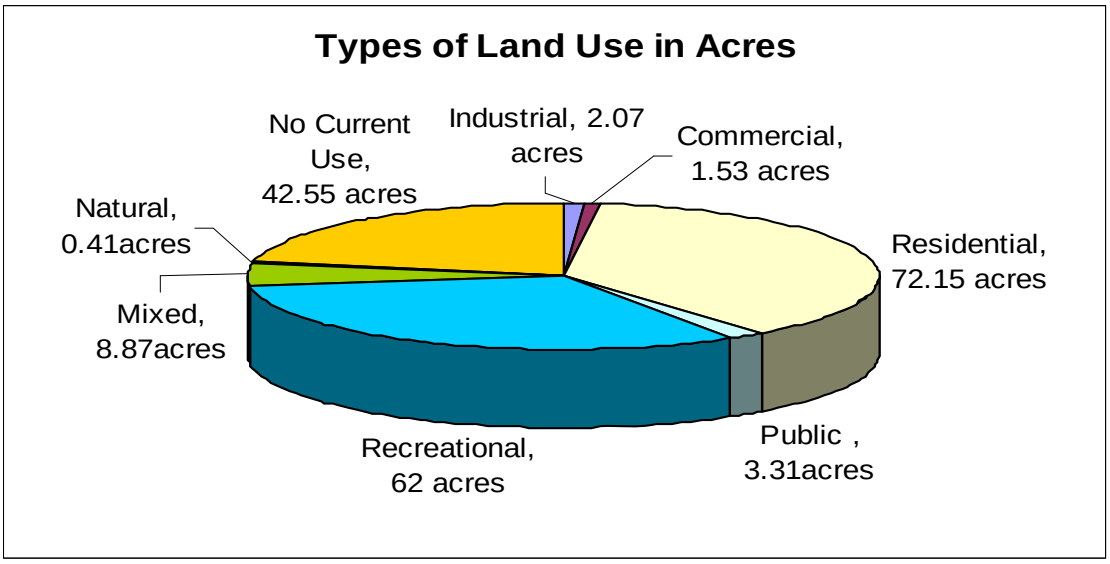


Figure PA- 5. Types of Land Use at Pennsylvania Response and Removal Non-NPL Sites Completed Between 2001 and 2006



VIRGINIA

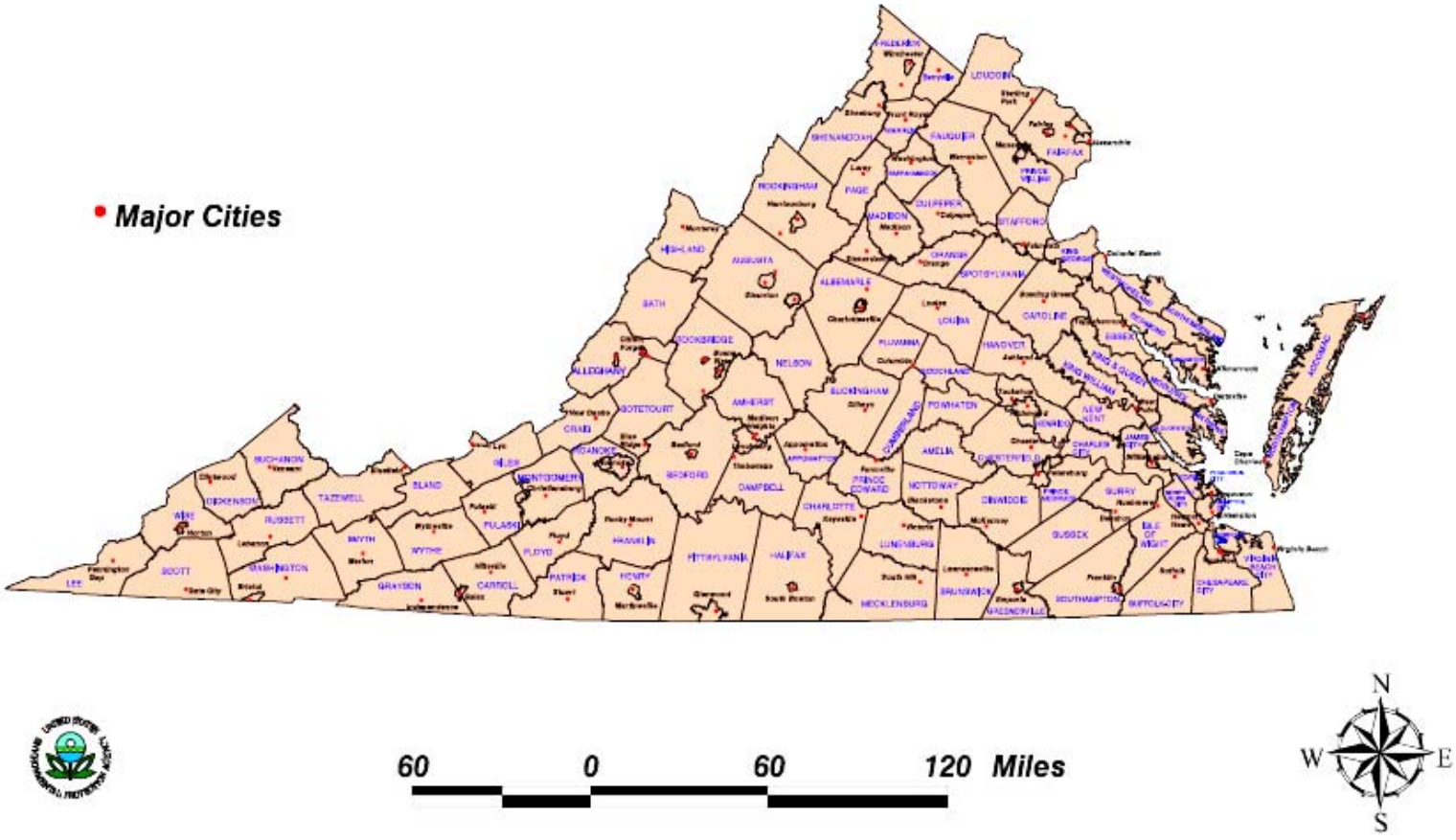


Table VA-1 lists a total of 21 Non-NPL Superfund Response and Removal Sites and Table VA-2 lists 1 NPL Superfund Response and Removal Site that were completed between January 1, 2001 and October 1, 2006. Figure VA-1 illustrates that a total of 136.01 acres represents the 22 removal sites. Of the136 acres, the Response and Removal program cleaned-up 135 acres at Non-NPL sites or 99% of the clean up activity occurred at Non-NPL sites in Virginia.

Table VA-1. Completed Response and Removals at Non-NPL Sites in Virginia - 2001 to 2006

EPA ID Number	Site Name	County	Continued Use	Reuse	Planned Reuse	Vacant	Type of Use
			Acres				
VAD988201976	Alexandria Town Gas & Oronoco Outfall	Alexandria City	0.01				Public
VAN000305653	Blue Ridge Drum Dump Assessment	Botetort	0.01				Natural
VAN000306152	Boundary Street Mercury Spill	James City	0.75				Public building
VAN000305666	Coal Technology Corporation	Washington				1.66	Vacant buildings
VAN000305931	Coeburn Produce Disposal	Wise	0.75				Public land
VASFN0305570	Evans Chemical Site	Roanoke				2	Abandoned warehouse
VAN000306122	Gaston Richmond Floods	Henrico	0.01				Mixed
VAN000305932	Hanover Avenue Rocket Site	Henrico	0.25				Residential
VAD003112364	Hyman Viener & Sons	Henrico	30			6.72	30 acres - Residential abandoned industrial site
VAN000306150	I-81 Tractor Trailer Chemical Spill	Augusta	0.7				Road and stream
VAN000306155	Irondale Lead Site	Wise	1				Natural
VAN000305720	Mt. Sidney Plaza	Augusta	0.01				Commercial
VAN000305656	Perry St. Cylinder	Henrico	0.01				Residential
VAN000305989	Salem Hardware Fire	Salem City	1				Commercial
VAD981036858	Sam's (Jones') Junkyard	Prince William	66				Industrial - Active Scrap yard
VAN000305871	Starlight Lane Tire Fire	Roanoke	11				Private/ dump site
VASFN0305541	Sycamore Well Site	Pittsylvania	1				Residential

EPA ID Number	Site Name	County	Continued Use	Reuse	Planned Reuse	Vacant	Type of Use
			Acres				
VAN000306108	Thompson Street Playground	Henrico	0.1				Recreational
VAN000305650	Tri-City Tire Site	Sussex				3	Building to be demolished
VAN000305626	V & V Mining PCB Site	Wise				8	Inactive junkyard
VAN000306147	Wingfield Pointe Buried Waste	Chesapeake City	1				Residential

*Acres are estimates and only represent the portion of the site where actual removal activities occurred.

Table VA-2. Completed Response and Removals at NPL Sites in Virginia – 2001 to 2006

EPA ID Number	Site Name – NPL Site	County	Acres
VAD123933426	Former Nansemond Ordnance	Suffolk	1.03

*Acres are estimates and only represent the portion of the site where actual removal activities occurred.

Figure VA- 1. Virginia Response and Removal Sites Completed Between 2001 and 2006

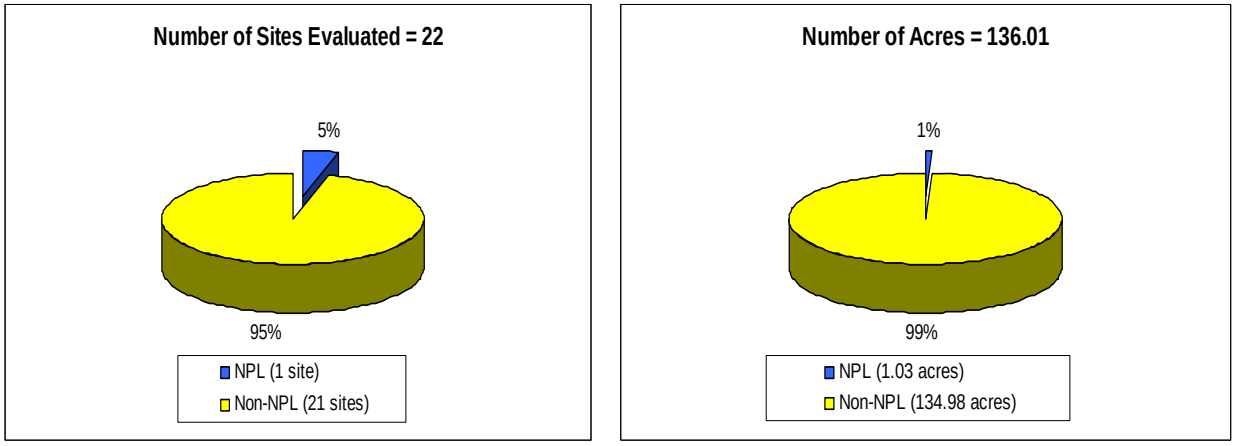
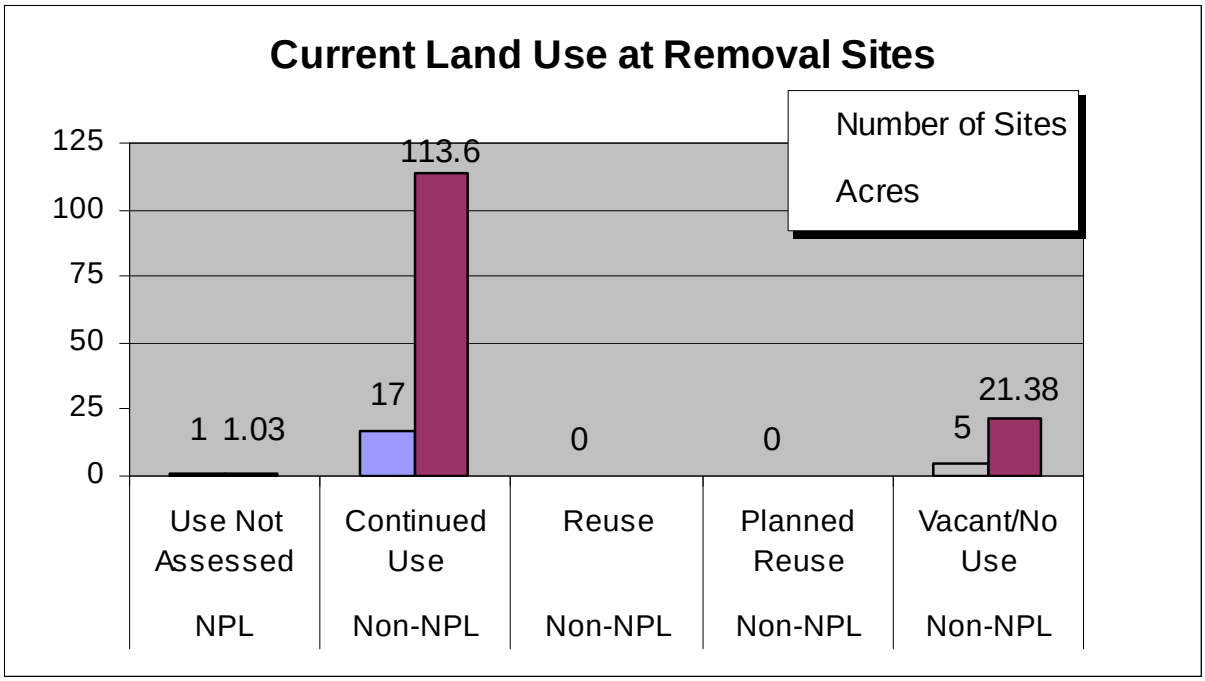


Figure VA-2 shows the distribution of the "Current Land Use" at the Response and Removal Sites within Virginia over the past five years. The chart illustrates that 113.6 acres have been restored to their original use while 21.38 acres are currently vacant and unused.

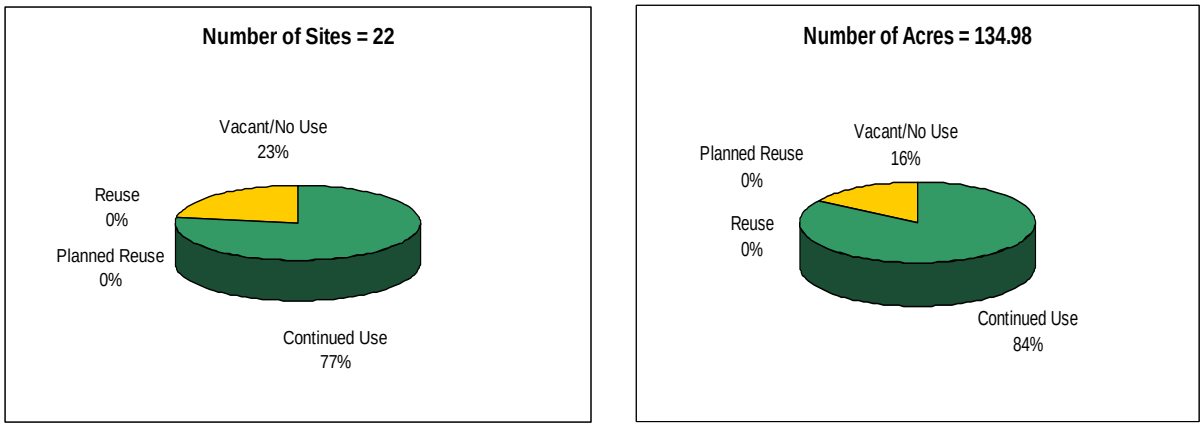
Figure VA- 2. Virginia Response and Removal Sites Completed Between 2001 and 2006



*Acres are estimates and only represent the portion of the site where actual removal activities occurred. One site in Virginia has more than one current land use, therefore the number of sites in each land use adds up to more than the number of sites evaluated.

Figure VA-3 illustrates that of the 134.98 acres of Non-NPL sites affected by contamination, 84% (113.6 acres) were restored to its original use and 16% (21.38 acres) are vacant with no use planned. No site that was cleaned-up over the past five years is being reused in a different way than its original use nor is there a vacant site currently being planned for a new use.

Figure VA- 3. Current Land Use at Virginia Response and Removal Non-NPL Sites Completed Between 2001 and 2006



As indicated in Figures VA-4 and VA-5, most land was restored to its original industrial use (66 acres) followed by about 43 acres restored to its residential use and under 10 acres restored to commercial, recreational, public and natural uses. There are 21.38 acres of unused vacant land that were former response and removal sites. Of the vacant land, 6.66 acres are abandoned industrial buildings that are available for reuse. Fifteen acres of the vacant land might require further assessment before redevelopment.

Figure VA- 4. Types of Land Use at Virginia Response and Removal Non-NPL Sites Completed Between 2001 and 2006

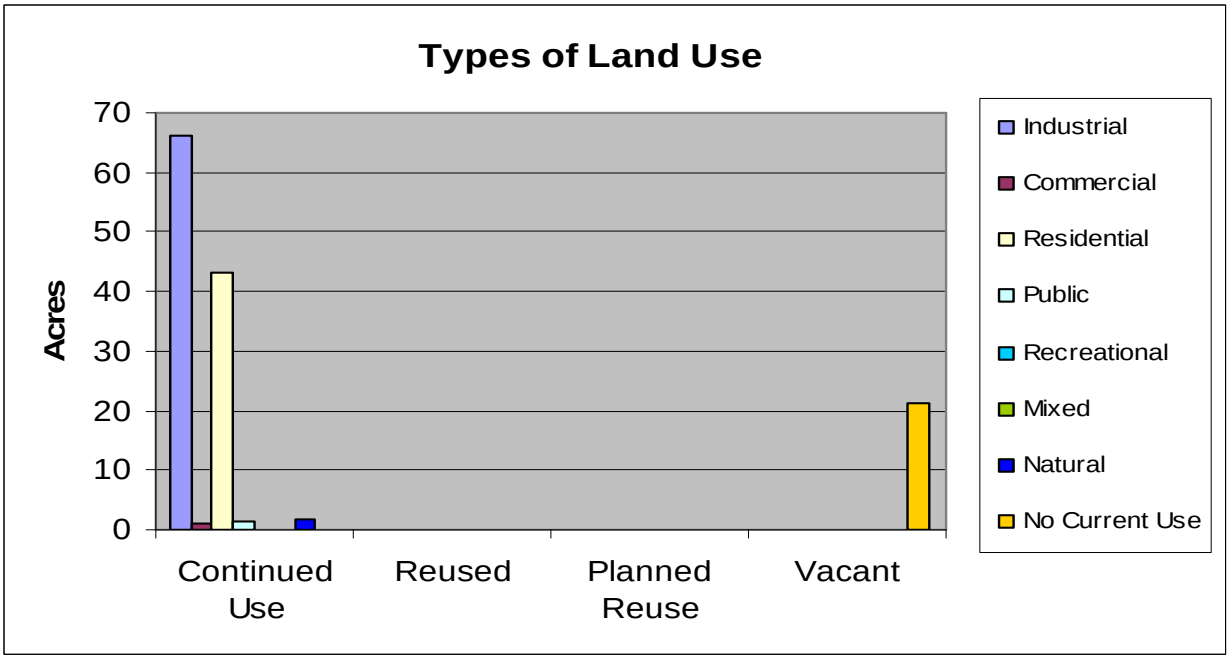
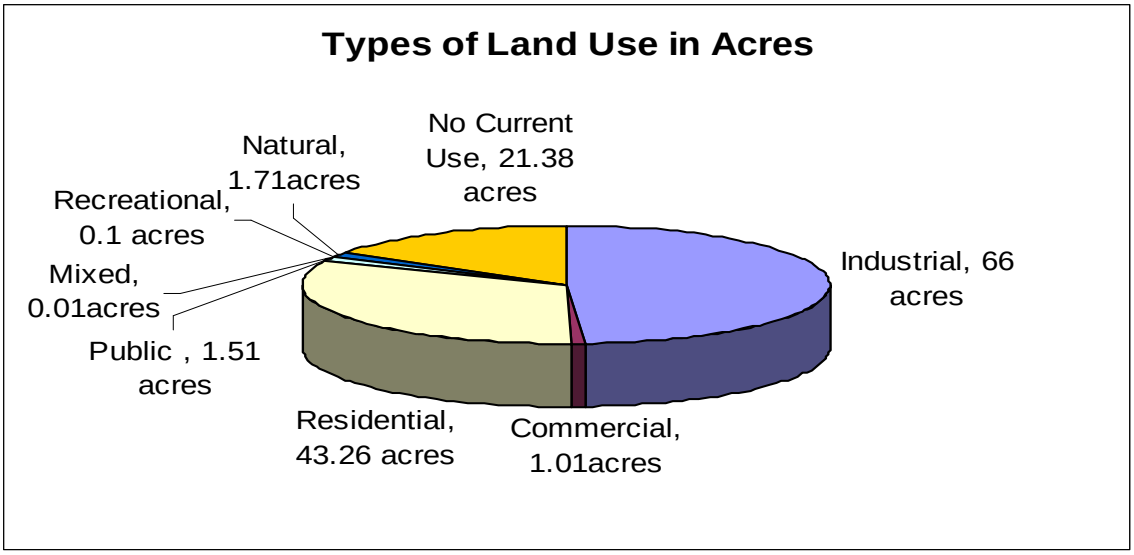


Figure VA- 5. Types of Land Use at Virginia Response and Removal Non-NPL Sites Completed Between 2001 and 2006



WEST VIRGINIA

Table WV-1 lists a total of 16 Non-NPL Superfund Response and Removal Sites and Table WV-2 lists 3 NPL Superfund Response and Removal Sites that were completed between January 1, 2001 and October 1, 2006. Figure WV-1 illustrates that a total of 153.15 acres represents the 19 removal sites. Although NPL sites represented only 16% of the 19 removal actions, the NPL sites covered over 53% of the land (81 acres) remediated. The Non-NPL sites had 72.15 acres cleaned-up through the response and removal program in West Virginia.

Table WV-1. Completed Removal Sites at Non-NPL Sites in West Virginia 2001 - 2006

EPA ID Number	Site Name	County	Continued Use	Reuse	Planned Reuse	Vacant	Type of Use
			Acres				
WVSFN0305408	AES-Monsanto Property	Putman	3				Industrial
WVN000305694	Arthur Road Duplex	Preston	0.5				Residential with no children restriction
WVD988788345	Beaumont Glass Company	Monongalia			3		Residential/ parking lot
WVSFN0305531	Dalzell Viking Glass Co.	Wetzell		4			Commercial/ Retail
WVN000306158	Farmington Ball Field	Marion	1				Recreational
WVSFN0305381	Glendale TCE Site	Marshall	0.25				Industrial
WVN000305643	Hoffman Metal Finishing	Raleigh				0.3	Abandoned warehouse
WVN000305636	Kentucky/West Virginia Coal Slurry Spill	Wayne	18.0				Natural-Stream
WVN000306141	Lin Electric Company	Mercer				4	Abandoned
WVN000306153	Mt. Olive Mercury	Mason	0.01				Natural - wooded area
WVD988790333	Princeton Enterprises Sit	Harrison				6	Abandoned Industrial
WVN000306116	Red Jacket Salvage Yard	Mingo				1	Abandoned Salvage Yard
WVSFN0305498	Rhone Poulenc (Dioxin Assessment)	Kanawha	0.01				Industrial
WVSFN0305434	Sophia Battery Dump	Raleigh				0.28	Abandoned/ demolished buildings
WVN000305670	Sterling Faucet Reedsville	Preston	30				15 acres Industrial 15acres natural-wooded area

EPA ID Number	Site Name	County	Continued Use	Reuse	Planned Reuse	Vacant	Type of Use
			Acres				
WVN000306138	West Huntington Spill	Wayne	0.8				0.5 acres industrial 0.3 acres natural

Table WV-2. Completed Removals at NPL Sites in West Virginia – 2001 to 2006

EPA ID Number	Site Name – NPL Sites	County	Acres
WVD054827944	Big John Salvage	Marion	20
WVD988798401	Vienna Tetrachloroethene	Wood	1 + Groundwater
WVD024185373	Hanlin-Allied-Olin	Marshall	60 + Groundwater

Figure WV- 1. West Virginia Response and Removal Sites Completed Between 2001 and 2006

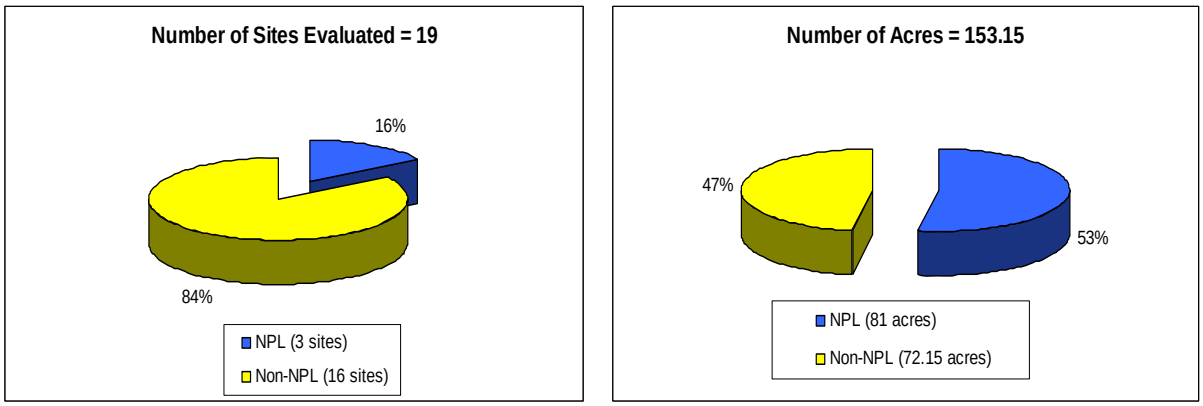
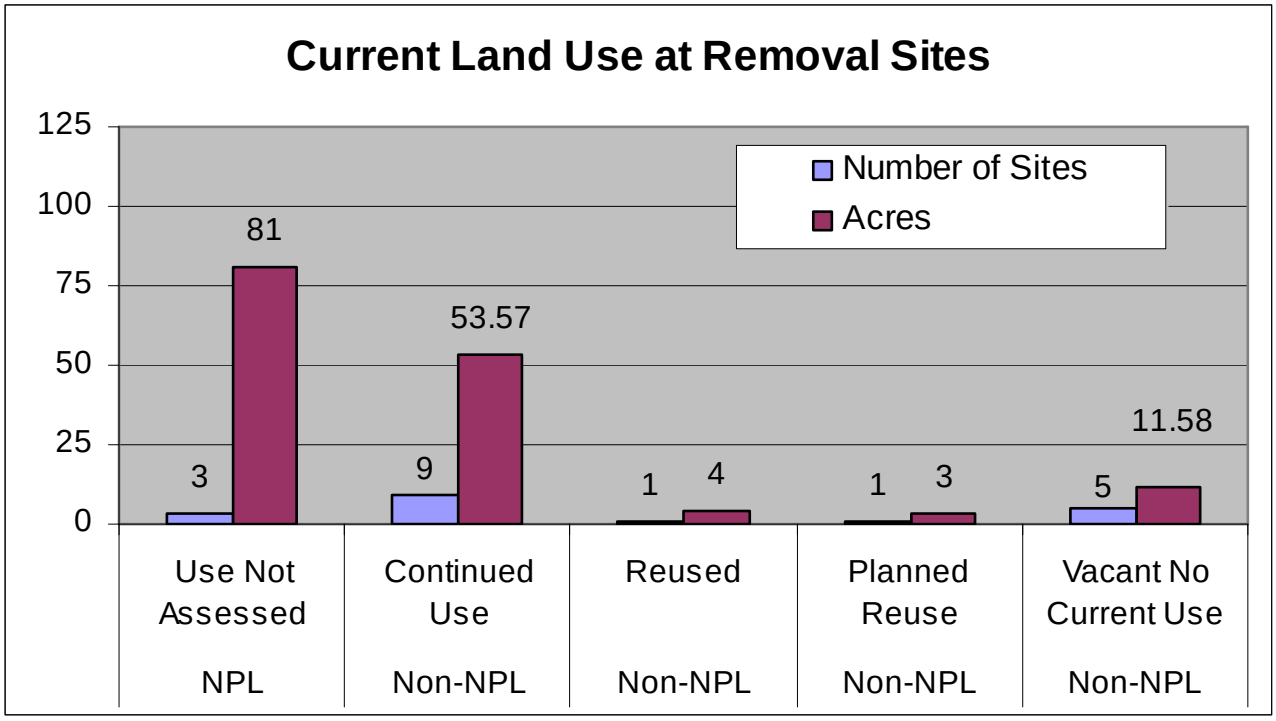


Figure WV-2 shows the distribution of the "Current Land Use" at the Response and Removal sites within West Virginia over the past five years. The chart illustrates that 53.57 acres have been restored to their original use while 11.58 acres are currently vacant and unused.

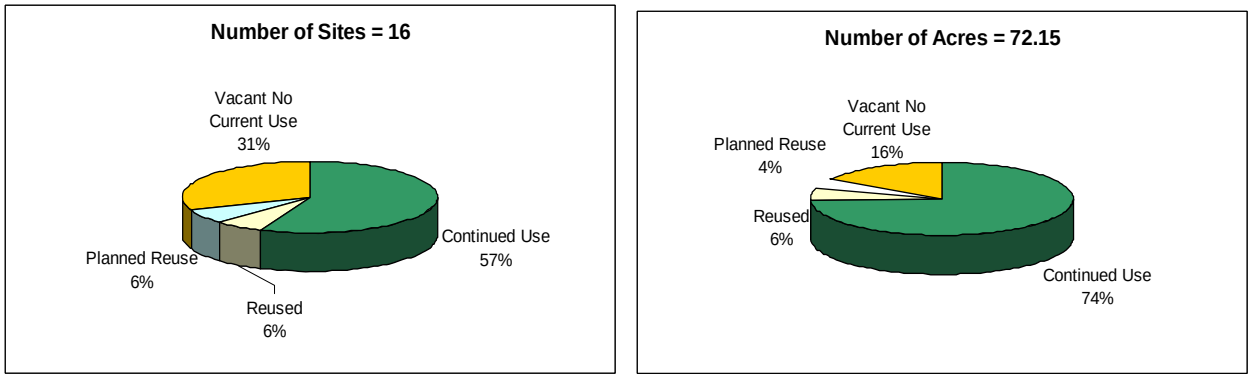
Figure WV- 2. West Virginia Response and Removal Sites Completed Between 2001 and 2006



*Acres are estimates and represent only the portion of site where actual removal activity occurred. There were 2 NPL sites that had groundwater cleanup activity in West Virginia.

Figure WV-3 illustrates that of the 72.15 acres of the Non-NPL sites affected by contamination, 74% (53.57 acres) have been restored to their original use, 6% (4 acres) have been used in a new way, 4% (3 acres) are in the process of being reused and 16% (11.58 acres) are vacant with no use planned.

Figure WV- 3. Current Land Use at West Virginia Response and Removal Non-NPL Sites Completed Between 2001 and 2006



As indicated in Figures WV-4 and WV-5, most land was restored to its original natural use (33 acres) followed by 18.76 acres restored to its industrial use and under 10 acres restored to commercial, residential and recreational uses. Over the past five years, the response and removal program restored approximately 33 acres of streams and woodland that were contaminated by neighboring industry. Under the "Reused" category, about 4 acres of previously abandoned industrial property was redeveloped into office and storage buildings. Under the "planned reuse" category, about 3 acres of vacant land are currently being considered for housing and a parking area

for a local university. There are 11.58 acres of unused vacant land. Of the vacant acres, most are available for reuse with only approximately 1 acre needing possible further investigation before redevelopment.

Figure WV-4. Types of Land Use at West Virginia Response and Removal Non-NPL Sites Completed Between 2001 and 2006

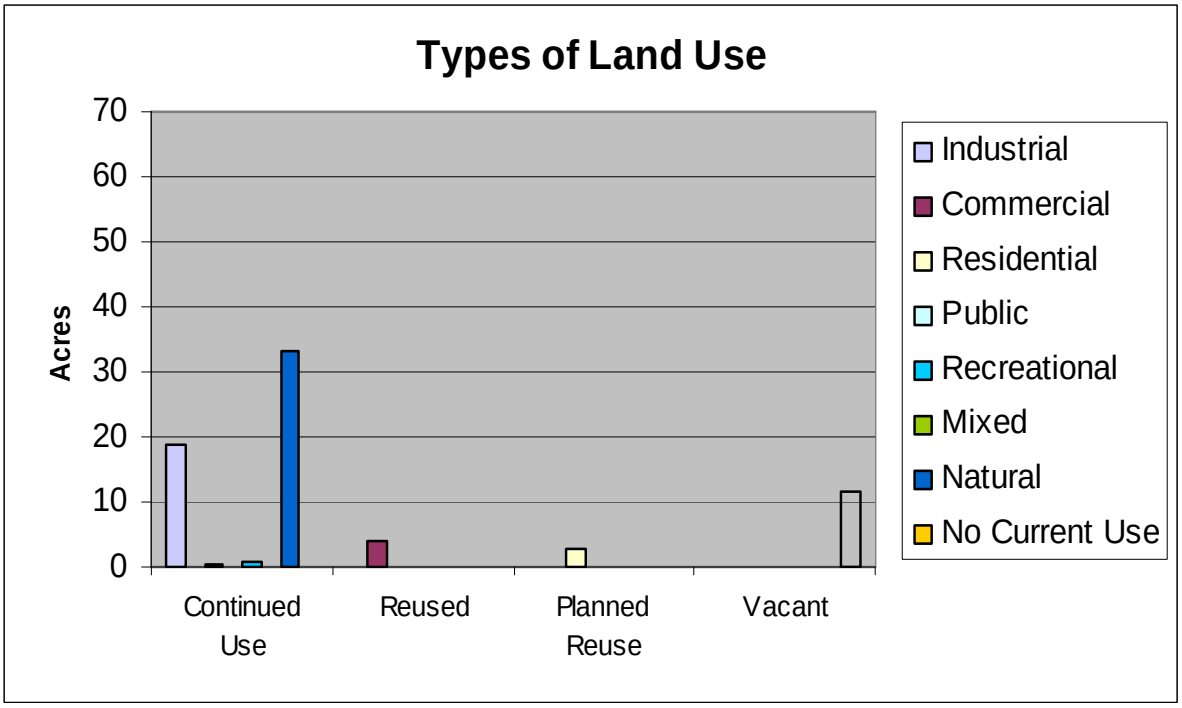
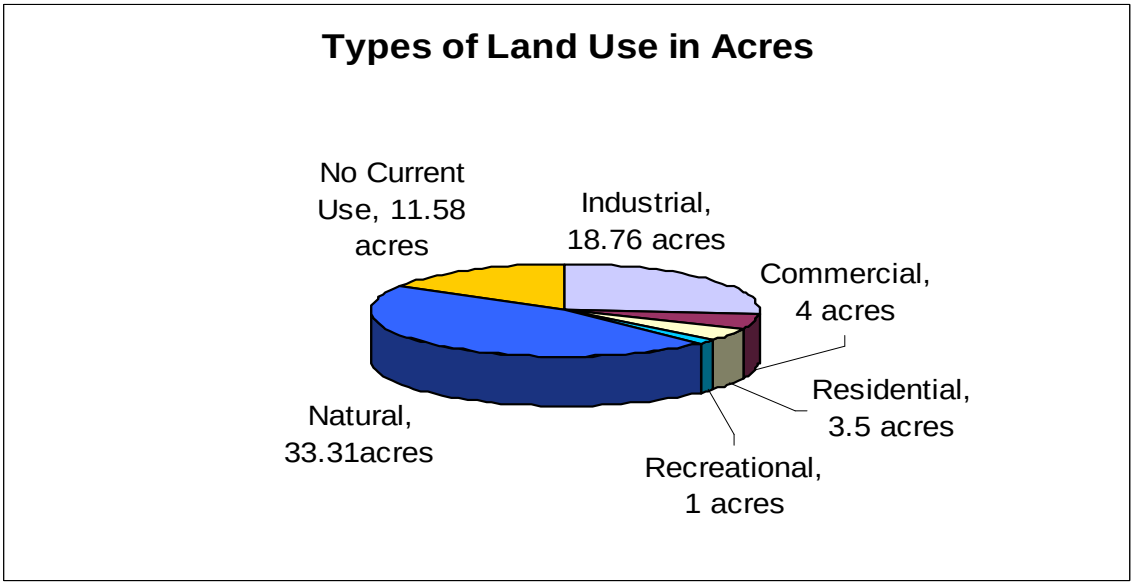


Figure WV- 5. Types of Land Use at West Virginia Response and Removal Non-NPL Sites Completed Between 2001 and 2006



APPENDIX A

Response and Removal actions located at Federal Facilities that were completed between January 1, 2001 and October 1, 2006

EPA ID Number	Site Name	County/State	NPL?
MD2210020036	Aberdeen Proving Ground-Edgewood	Harford/Baltimore Co., MD	Yes
MD0120508940	Beltsville Agricultural Research Center	Prince George's Co., MD	Yes
MD7170024684	Indian Head Naval Surface	Charles Co., MD	Yes
MD7170024536	Patuxent River Naval Air	St Mary's Co., MD	Yes
MD0170023444	USN Naval Surface Warfare	Montgomery Co., MD	No
PA2210090054	Letterkenny Army Depot (PDO Area)	Franklin Co., PA	Yes
PA6213820503	Letterkenny Army Depot (SE Area)	Franklin Co., PA	Yes
PA3170022104	Navy Ships Parts Control	Cumberland Co., PA	Yes
VA3971520751	Defense General Supply Center	Chesterfield Co., VA	Yes
VA6210020321	Fort Eustis (US Army)	Newport News Co., VA	Yes
VA2210020705	Fort Pickett	Nottoway Co., VA	No
VA1170024722	Marine Corps Combat Development	Prince William Co., VA	Yes
VA5170022482	Naval Amphibious Base	Virginia Beach Co., VA	Yes
VA7170024684	Naval Surface Warfare Center	King George Co., VA	Yes
VA8170024170	Naval Weapons Station - Yorktown	York Co., VA	Yes
VA6170061463	Norfolk Naval Base	Norfolk City Co., VA	Yes
VA1170024813	Norfolk Naval Shipyard	Portsmouth City Co., VA	Yes
VA3170024605	Norfolk Weapons Station Yorktown - Cheatham Annex	York Co., VA	Yes
VA5170000181	St. Juliens Creek Annex US Navy	Chesapeake Co., VA	Yes
WV0170023691	Alleghany Ballistics Labor	Mineral Co., WV	Yes
WVD980713036	West Virginia Ordnance (US Army)	Mason Co., WV	Yes