



EPA Completes Construction at 217 Sites by September 30, 1993

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

Quick Reference Fact Sheet

For the past two years, completing construction at hazardous waste sites on the National Priorities List – the nation's most pressing hazardous waste sites – has been the top priority of the Superfund program. Since 1991, when the final cleanup remedy was considered completed at only 61 sites, EPA has made significant progress, doubling and then more than tripling that number in the last 2 years. During Fiscal Year (FY) 1993, final remedy construction was completed at 68 sites, increasing the total to 217. These 217 sites demonstrate the diversity of the nation's hazardous waste sites: the chemical contaminants, geographic locations, and cleanup technologies present unique challenges at each site. Although construction of the final site remedy has been completed at the 217 sites, many of the sites may require long-term operation of the cleanup technology to ensure that the cleanup is effective and protective of human health and the environment. While the completion of construction at 217 sites represents a meaningful accomplishment in finalizing activities at sites, it portrays only a portion of the total work under Superfund to address hazardous sites, conduct site assessments to evaluate the need and type of cleanup required, and construct cleanup remedies. EPA intends to continue to emphasize completing final remedy construction and is moving forward toward goals set for the year 2000.

WHAT IS THE CONSTRUCTION COMPLETION LIST?

In the early years of the Superfund program, EPA concentrated on starting cleanups at sites, striving to identify and evaluate sites as quickly as possible. After many years of experience and substantial progress, EPA now turns its attention to the sites near the end of the Superfund process. EPA realized that the accomplishments of the Superfund program were not being conveyed effectively to the public. The number of sites deleted from the National Priorities List (NPL) did not accurately reflect the amount of work completed and the extent to which threats were actually mitigated at Superfund sites. Due to the frequent need to conduct complex, long-term remedies and the stringent regulatory criteria for site deletion, sites must remain on the NPL despite the fact that extensive remedial actions have taken place and the site may no longer present a threat to human health and the environment.

EPA established the construction completion list to capture these milestones and more accurately communicate progress toward cleaning up NPL sites. The list includes:

- Sites where physical construction is completed and that have an operating remedy in place that will take many years to complete (such as groundwater pump-and-treatment, bioremediation or soil vapor extraction)

- Sites where the response action only requires measures that do not involve construction (such as institutional controls)
- Sites where all remedial action is completed and that will most likely be deleted when the required public notice and state consultation process has been completed.

The construction completion list was officially announced to the public in the Federal Register on March 2, 1993 (58 FR 12142). The list as of September 30, 1993, is provided at the end of this fact sheet.

WHAT ARE THE NATIONAL COMPLETION TARGETS?

At the time the construction completion list was created, 61 sites had been completed or deleted from the NPL. In FY 1992, EPA's Administrator established national targets to more than double the number of NPL construction completions by the end of FY 1992 (a goal of 130 sites), more than triple the number by the end of FY 1993 (200 sites), and a goal of more than 650 sites by the year 2000.

EPA has met and exceeded these goals. As the following table illustrates, EPA completed construction at 149 sites by September 30, 1992, exceeding the target of 130 by approximately 15 percent. For FY 1993, EPA again surpassed its target, reaching

217 sites by September 30, 1993. EPA staff at Headquarters and in the Regions worked closely to achieve this rigorous pace, using improved communication, streamlined requirements, and comprehensive tracking systems to ensure sites meet construction completion criteria.

Number of Construction Complete Sites Exceeds EPA's Goals

	Sites Added	Cumulative Sites Goal	Total Sites
FY80 - 91	N/A	N/A	61
FY92	88	130	149
FY93	68	200	217
Year 2000		650	

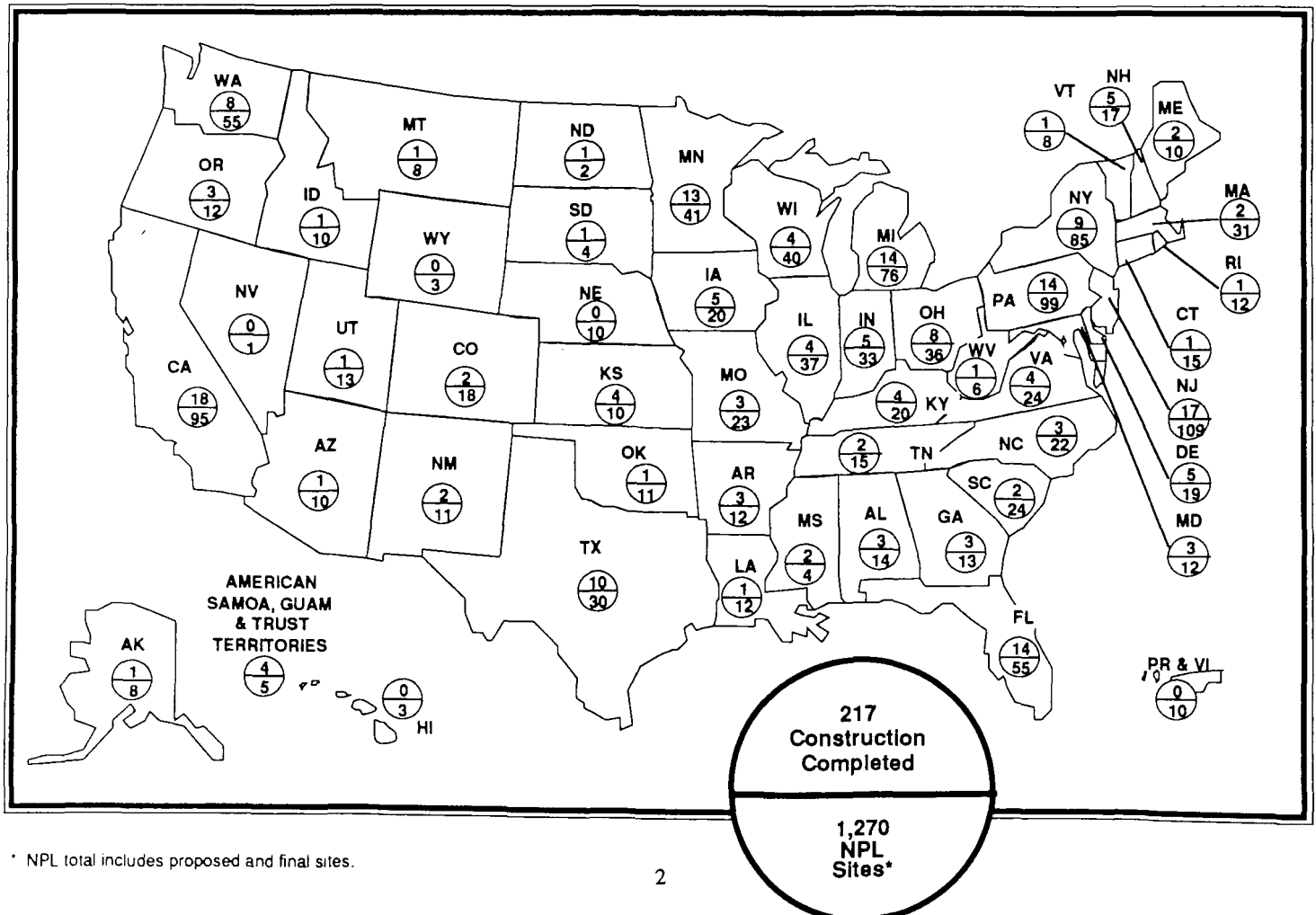
WHAT KIND OF SITES ARE ON THE CONSTRUCTION COMPLETION LIST?

The national distribution of the construction completion list sites mirrors the NPL both geographically and numerically, with sites from 47 states and 2 territories. The United States map demonstrates construction completion site distribution and equity.

The 217 sites currently on the list also reflect the makeup of the NPL in terms of site type. Sites range from landfills and industrial sites to mines and well fields. The technologies used to clean up these sites and reduce the environmental threats are as diverse. Tailored to the problems at each site, solutions include straightforward remedies like excavation or an alternate water supply, and complex, sophisticated techniques such as bioremediation or thermal desorption. Using both containment and treatment technologies as remedies, EPA has increasingly selected permanent treatment over containment. Innovative technologies are a steady by-product of the Superfund process, and were used at 19 construction completion list sites. The technologies used are listed in the table on page 3.

Because sites often have complex or multiple contamination issues being addressed in separate cleanup actions, a site is only eligible for the construction completion list when all areas of the

Distribution of Construction Complete Sites Versus Total Sites on the Current NPL



Technologies Used at Construction Complete Sites

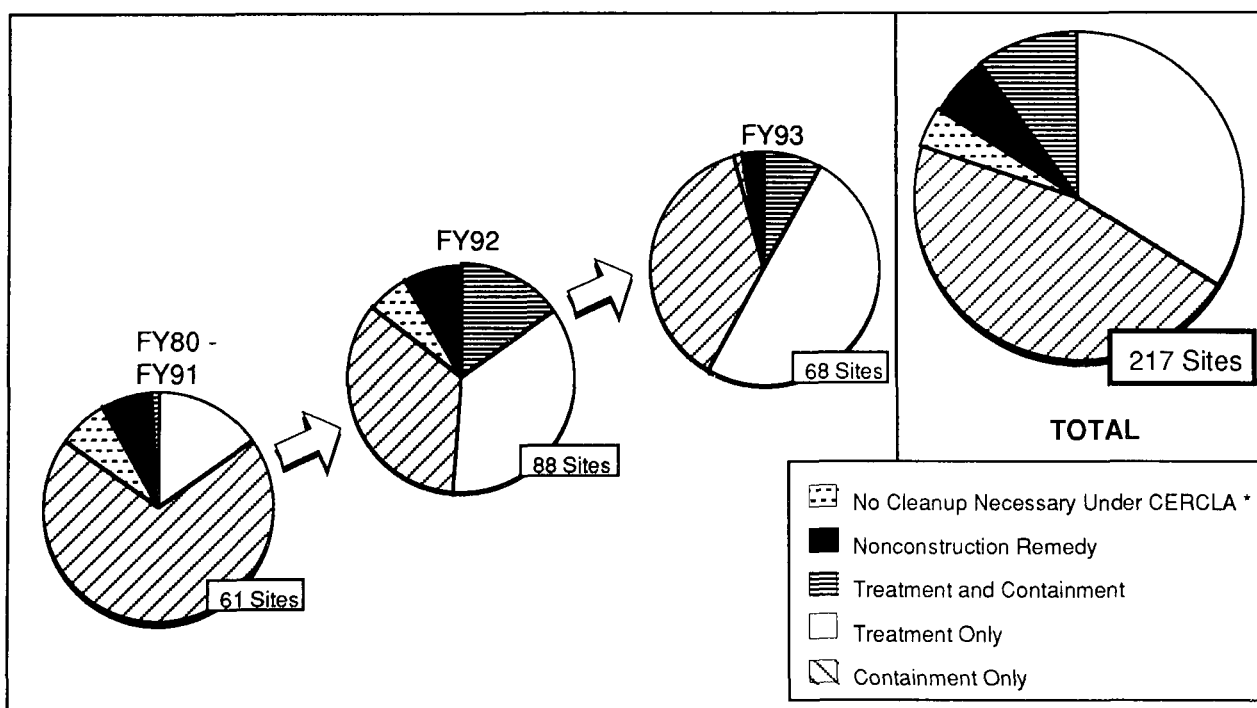
SITE REMEDY/TECHNOLOGY	SITES*
CONTAINMENT	
Excavation and Removal	168
Surface Capping/Soil Cover	86
Surface Drainage Control	34
Backfilling	30
Solidification/Stabilization & Immobilization	15
Slurry Walls	8
Drum Storage	2
TREATMENT	
Groundwater Pump and Treatment	63
Air Stripping	27
Innovative Technologies	19
Soil Vapor Extraction (9)	
Bioremediation (3)	
Thermal Desorption (3)	
Dechlorination (2)	
In-Situ Flushing (1)	
Soil Washing (1)	
Incineration	13
Leachate Treatment	8
Neutralization	4
OTHER ACTIONS	
Groundwater Monitoring/Wells	126
Institutional Controls	71
Alternate Water Supply	33
Relocation of Residents	2

More than one technology may be associated with any completed site.

site are addressed and physical construction is completed for all site actions. The percentage of listed sites using more complex remedies and treatment technologies has increased steadily over time, while the percentage of sites with no cleanup required or containment-only remedies has steadily decreased, as illustrated in the figure below. Sites using treatment technologies and a combination of treatment strategies, waste removal, and containment have increased from 10 (16%) on the initial list to 39 (57%) for sites added in FY 1993. Similarly, the number of sites requiring only nonconstruction actions such as institutional controls or for which a decision of no cleanup necessary is made based on a comprehensive remedial investigation has declined since the creation of the construction completion list: the initial site list had 8 no remedy sites (13%), but EPA added only 3 (4%) in FY 1993. These statistics indicate EPA is accomplishing more meaningful cleanups as well as improving the rate of construction completion.

The responsibility for cleaning up sites on the construction completion list involves states and responsible parties as well as EPA. Responsible parties include original polluters, current landowners, and other legally responsible private parties that contributed to contamination at a site. The decision of who will lead the cleanup for a site is made on a site-specific basis, with EPA always overseeing activities. As seen in the figure on page 4, responsible parties have taken responsibility for undertaking and financing cleanups at the largest percentage of listed sites, demonstrating the success of EPA's enforcement first strategy.

Increased Focus on Treatment Technologies



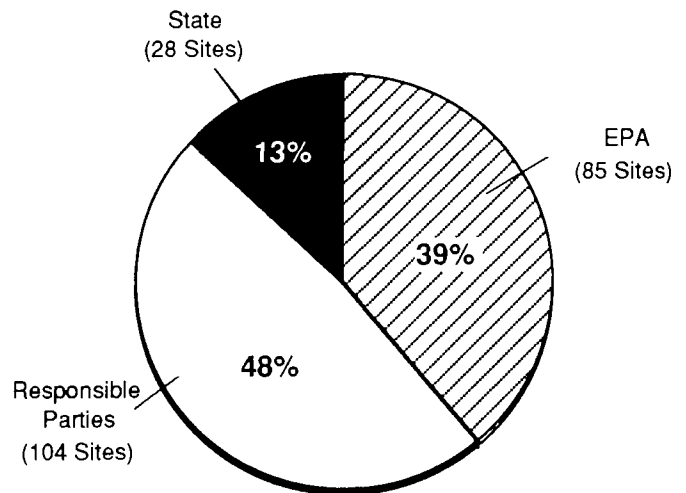
* Includes sites deferred to alternate authorities.

WHAT HAPPENS TO A SITE AFTER CONSTRUCTION IS COMPLETE?

The remedial process can be very complex, taking many years to complete for large or difficult sites. Toward the end of that process a long period of time may pass when the remedy construction is complete, but the site requires some kind of ongoing or periodic work. For example, a site may only need routine maintenance, such as ensuring a landfill cap is not deteriorating, or operation of a cleanup technology, such as a groundwater pump-and-treat system that may require 30 years to complete treatment. The construction completion list identifies sites at an advanced stage of the remedial process, when all anticipated construction of the remedy or site actions is completed. Construction completion sites can be sites awaiting deletion, sites that require no further action, sites where response action continues in the form of institutional controls such as deed or zoning restrictions but no further construction is required, or sites with long-term response actions (LTRAs), which require a continuous period of on-site activity before cleanup levels are achieved. There may be continuing site activity to maintain and operate sites where construction is complete.

The construction completion list has no regulatory significance and inclusion does not mean the same thing as site deletion from the NPL. Of the 217 sites on the list, 51 have been deleted according to the procedural requirements in the National Contingency Plan as of September 30, 1993. The remaining sites on the construction completion list will also ultimately be deleted. Each site must go through the regulatory and site review process to verify that all cleanup goals have been met, then the notice to delete the site will be published in the Federal Register to be subject to public comment.

Responsible Parties, States, and EPA Managed Cleanups* at Construction Complete Sites



* Denotes lead for last cleanup project.

FOR FURTHER INFORMATION

For information on the status of the construction completion list, contact the RCRA/Superfund Hotline at 1-800-424-9346 (TDD 800-553-7672), or in the Washington, DC, area, (703) 412-9810 (TDD (703) 412-3323). For further information contact:

Design and Construction Management Branch (5203G)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460
(703) 603-8830

CONSTRUCTION COMPLETION SITES THROUGH FY 1993

This list presents the 217 construction completed sites in alphabetical order by state. The site name, location, and type of site is provided. Hawaii, Nebraska, Nevada, Wyoming, Puerto Rico, and the Virgin Islands have no sites on the construction completion list.

Alabama

Mowbray Engineering Co., Greenville; manufacturing plant
Perdido Groundwater Contamination Site, Perdido; wells
Triana/Tennessee River, Limestone; waterways

Alaska

Alaskan Battery Enterprises, Fairbanks; industrial waste

American Samoa

Taputimu Farm, Island Of Tutuila; organic wastes

Arkansas

Cecil Lindsey, Newport; landfill
Industrial Waste Control, Fort Smith; industrial waste
Mid-South Wood Products, Mena; manufacturing plant

Arizona

Mountain View Mobile Homes, Globe; asbestos mill tailings

California

Advanced Micro Devices #915, Sunnyvale; manufacturing plant
Advanced Micro Devices Inc., Sunnyvale; manufacturing plant

Applied Materials, Santa Clara; manufacturing plant
 Beckman Instruments (Porterville), Porterville; manufacturing plant
 Celtor Chemical Works, Hoopa; mines/tailings
 CTS Printex, Mountain View; manufacturing plant
 Del Norte Pesticide Storage, Crescent City; groundwater
 Fairchild Semiconductor (SSJ), South San Jose; manufacturing plant
 Firestone Tire (Salinas Plant), Salinas; manufacturing plant
 Intel Corp. (Santa Clara III), Santa Clara; manufacturing plant
 Intersil, Cupertino; manufacturing plant
 Jibboom Junkyard, Sacramento; landfill
 Micro Storage/Intel Magnetics, Santa Clara; manufacturing plant
 Sola Optical USA Inc., Petaluma; manufacturing plant
 Spectra Physics, Inc., Mountain View; manufacturing plant
 Synertek (Building #1), Sunnyvale; manufacturing plant
 Teledyne Semiconductor, Mountain View; manufacturing plant
 TRW Microwave, MC (Building 825), Sunnyvale; manufacturing plant

Colorado

Marshall Landfill, Boulder; landfill
 Woodbury Chemical Co., Commerce City; chemical plant

Connecticut

Revere Textile Prints Corp., Sterling; manufacturing plant

Delaware

Coker's Sanitation Service Landfills, Cheswold; landfill
 New Castle Spill Site, New Castle County; industrial waste
 New Castle Steel Plant, New Castle County; manufacturing plant
 Sealand Ltd., Mt. Pleasant; industrial waste
 Wildcat Landfill, Dover; landfill

Florida

Alpha Chemical Corp., Lakeland; chemical plant
 Beulah Landfill, Pensacola; landfill
 Brown Wood Preserving, Live Oak; manufacturing plant
 Chem-Form Inc., Pompano Beach; manufacturing plant
 Gold Coast Oil Corp., Miami; industrial waste
 Hollingsworth Solderless Term Co., Fort Lauderdale; manufacturing plant
 Miami Drum Services, Miami; industrial waste
 Parramore Surplus, Mount Pleasant; industrial waste
 Peppers Steel & Alloys, Medley; manufacturing plant
 Pioneer Sand Co., Pensacola; industrial waste
 Tri-City Oil Conservationist Corp., Tampa; chemical plant
 Varsol Spill Site, Miami; wells
 Wilson Concepts of Florida, Pompano Beach; manufacturing plant
 Woodbury Chemical Co., Princeton; chemical plant

Georgia

Luminous Processes, Athens; radioactive waste
 Monsanto Corp. (Augusta Plant), Augusta; industrial waste
 Powersville Landfill, Powersville; landfill

Guam

Ordot Landfill, Ordot; landfill

Idaho

Arrcom Corp. (Drexler Enterprise Inc.), Rathdrum; industrial waste

Illinois

A & F Materials Reclaiming Inc., Greenup; groundwater
 Belvidere Municipal Landfill #1, Belvidere; landfill
 Johns Manville, Waukegan; manufacturing plant
 Petersen Sand & Gravel, Libertyville; industrial waste

Indiana

IMC Terre Haute East Plant, Terre Haute; manufacturing plant
 Poer Farm, Jackson Township; industrial waste
 Seymour Recycling Corp., Seymour; industrial waste
 Tri-State Plating, Columbus; manufacturing plant
 Wedzeb Enterprises Inc., Lebanon; manufacturing plant

Iowa

Aidex Corp., Council Bluffs; chemical plant
 EI Dupont De Nemours & Co Inc., West Point; industrial waste
 John Deere (Ottumwa Works Landfill), Ottumwa; landfill
 Labounty Site, Charles City; landfill
 Lawrence Todtz Farm, Camanche; landfill

Kansas

Arkansas City Dump, Arkansas City; landfill
 Big River Sand Co., Wichita; inorganic waste
 Hydro-Flex Inc., Topeka; manufacturing waste
 Johns Sludge Pond, Wichita; lagoons

Kentucky

A. L. Taylor (Valley Of Drums), Shepherdsville; industrial waste
 Distler Farm, Louisville; industrial waste
 Lees Lane Landfill, Louisville; landfill
 Newport Dump, Wilders; landfill

Louisiana

Bayou Sorrel Site, Bayou Sorrel; industrial waste

Maine

McKin Co., Gray; industrial waste
 Saco Tannery Waste Pits, Saco; lagoons

Maryland

Chemical Metals Industries, Baltimore; landfill
Mid-Atlantic Wood Preservers, Harmons; manufacturing plant
Middletown Road Dump Site, Annapolis; industrial waste

Massachusetts

Cannon Engineering Corp., Bridgewater; industrial waste
Plymouth Harbor/Cannon Engineering, Plymouth; industrial waste

Michigan

American Anodco Inc., Ionia; manufacturing plant
Anderson Development Co., Adrian; chemical plant
Burrows Sanitation, Hartford Township; lagoons
Cemetery Dump Site, Rose Township; landfill
Charlevoix Municipal Well Field, Charlevoix; wells
Grand Traverse Overall Supply Co., Traverse City; manufacturing plant
Gratiot County Golf Course, St. Louis; chemical plant
Hedblum Industries, Oscoda; manufacturing plant
Mason County Landfill, Pere Marquette Township; landfill
Metal Working Shop, Lake Ann; manufacturing plant
Novaco Industries, Temperance; chemical plant
US Aviex, Niles; chemical plant
Velsicol Chemical, St. Louis; chemical plant
Whitehall Municipal Wells, Whitehall; wells

Minnesota

Adrian Municipal Well Field, Adrian; wells
Boise Cascade/Onan/Medtronics, Fridley; manufacturing plant
FMC Corp., Fridley; manufacturing plant
General Mills/Henkel Corp., Minneapolis; chemical plant
LeHillier/Mankato Site, Mankato; wells
Morris Arsenic Dump Site, Morris; industrial waste
Nutting Truck & Caster Co., Faribault; manufacturing plant
Oak Grove Sanitary Landfill, Oak Grove Township; landfill
Twin Cities AF Reserve (San. Landfill), Minneapolis; landfill
Union Scrap Iron Metal, Minneapolis; manufacturing plant
Washington County Landfill, Lake Elmo; landfill
Whittaker Corp., Minneapolis; chemical plant
Windom Muni Dump, Windom; landfill

Mississippi

Flowood Site, Flowood; manufacturing plant
Walcotte Chemical Co. Warehouses, Greenville; chemical plant

Missouri

Conservation Chemical Co., Kansas City; landfill
Fulbright Landfill, Springfield; landfill
North-U Drive Well Contamination Site, Springfield; groundwater

Montana

Libby Groundwater Contamination, Libby; wells

New Hampshire

Kearsarge Metallurgical Corp., Conway; manufacturing plant
Keefe Environmental Services, Epping; lagoons
Mottolo Pig Farm, Raymond; housing area
Sylvester's, Nashua; industrial waste
Town Garage/Radio Beacon Site, Londonderry; wells

New Jersey

Beachwood/Berkeley Wells, Berkeley Township; wells
Combe Fill North Landfill, Chester Township; landfill
Cooper Road Site, Vorhees Township; industrial waste
Friedman Property, Upper Freehold; industrial waste
Goose Farm, Plumsted Township; industrial waste
Helen Kramer Landfill, Mantua Township; landfill
Krysowaty Farm, Hillsborough Township; industrial waste
Lodi Municipal Wells, Lodi; groundwater
M & T Delisa Landfill, Ocean Township; landfill
Monroe Township Landfill, Monroe Township; landfill
Pomona Oaks Well Contamination Site, Galloway Township; groundwater
Ringwood Mines/Landfill, Ringwood; landfill
Tabernacle Drum Dump, Tabernacle Township; industrial waste
Upper Deerfield Township Sanitary Landfill, Upper Deerfield Township; landfill
Vineland State School, Vineland; chemical plant
Wilson Farm, Plumsted Township; industrial waste
Witco Chemical Corp. (Oakland Plant), Oakland; chemical plant

New Mexico

Cimarron Mining Corp., Carrizozo; mines/tailings
Pagano Salvage, Los Lunas; mines/tailings

New York

Action Anodizing, Plating & Polishing Co., Capoiague; industrial waste
BEC Trucking, Vestal; manufacturing plant
Bioclinical Laboratories Inc., Bohemia; chemical plant
C & J Disposal Site, Hamilton; industrial waste
Clothier Disposal, Granby; industrial waste
Katonah Municipal Well, Bedford; wells
Suffern Village Well Field, Suffern; groundwater
Tronic Plating Co. Inc., Farmingdale; manufacturing plant
Wide Beach Development, Brant; industrial waste

North Carolina

Celanese Corp. Shelby Fiber Operations, Shelby; chemical plant
Chemtronics Inc., Swannanoa; industrial waste
PCB Spills, Roanoke Rapids; industrial waste

North Dakota

Arsenic Trioxide Site, Lidgerwood; groundwater

Ohio

Bower's Landfill, Circleville; lagoons
Chem-Dyne Corp., Hamilton; industrial waste
Chemical & Minerals Reclamation, Cleveland; industrial waste
EH Schilling Landfill, Ironton; landfill
Laskin/Poplar Oil, Jefferson; industrial waste
New Lyme Landfill, New Lyme; landfill
Old Mill, Rock Creek; industrial waste
Republic Steel Quarry, Elyria; industrial waste

Oklahoma

Compass Industries (Avery Drive), Tulsa; landfill

Oregon

Allied Plating Inc., Portland; manufacturing plant
Joseph Forest Products, Joseph; manufacturing plant
United Chrome Products Inc., Corvallis; manufacturing plant

Pennsylvania

Ambler Asbestos Piles, Ambler; mines/tailings
Bruin Lagoon, Bruin Borough; lagoons
Enterprise Avenue, Philadelphia; landfill
Henderson Road Site, Upper Merion; chemical plant
Kimberton Site, Borough of Kimberton; chemical plant
Lansdowne Radiation Site, Landsome; radioactive waste
Lehigh Electric & Engineering Co., Old Forge; manufacturing plant
Presque Isle, Erie; industrial waste
Reeser's Landfill, Upper Macungie Township; landfill
Route 940 Drum Dump, Tobyanna Township; landfill
Taylor Borough Dump, Taylor; landfill
Voortman Farm, Ladark; waste disposal facility
Wade (ABM), Chester City; industrial waste
Westline Site, Westline; lagoons

Rhode Island

Western Sand & Gravel, South Kensington; lagoons

South Carolina

Independent Nail Co., Beaufort; lagoons
SCRDI Dixiana, Cayce; industrial waste

South Dakota

Whitewood Creek, Whitewood; mines/tailings

Tennessee

Amnicola Dump, Chattanooga; industrial waste
Lewisburg Dump, Lewisburg; industrial waste

Texas

Bio-Ecology Systems, Inc., Grand Prairie; industrial waste
Crystal City Airport, Crystal City; chemical spills
Dixie Oil Processors, Inc., Friendswood; industrial waste
Geneva Industries/Fuhrmann Energy, Houston; chemical plant
Harris (Farley Street), Houston; landfill
Highlands Acid Pit, Highlands; chemical plant
Pesses Chemical Co., Fort Worth; manufacturing plant
Sol Lynn/Industrial Transformers, Houston; manufacturing plant
Stewco, Inc., Waskom; lagoons
Triangle Chemical Co., Bridge City; chemical plant

Trust Territories

PCB Warehouse, Saipan Island; industrial waste
PCB Wastes Site, Majuro Island; industrial waste

Utah

Rose Park Sludge Pit, Salt Lake City; industrial waste

Vermont

Darling Hill Dump, Lyndon; industrial waste

Virginia

C & R Battery Co. Inc., Richmond; battery disposal
Chisman Creek, Seaford; industrial waste
Matthews Electric Plating, Roanoke; industrial waste
Suffolk City Landfill, Suffolk; landfill

Washington

FMC Corp. Yakima Pit, Yakima; chemical plant
Lakewood Site, Lakewood; chemical
Northside Landfill, Spokane; landfill
Pesticide Lab - Yakima, Yakima; chemical plant
Silver Mountain Mine, Loomis; mines/tailings
Toftdahl Drum Site, Brush Prairie; industrial waste
Western Processing Co. Inc., Kent; industrial waste
Yakima Plating Co., Yakima; manufacturing

West Virginia

Leetown Pesticide, Leetown; industrial plant

Wisconsin

Eau Claire Municipal Well Field, Eau Claire; wells
Northern Engraving Co., Sparta; manufacturing plant
Schmalz Dump, Harrison; landfill
Wheeler Pit, Jonesville; landfill