

SEPA United States Environmental Protection Agency New England

2003/Superfund Annual Report



A status report on the New England Superfund remedial, removal, brownfields, oil spill and emergency response programs.





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U.S. EPA New England



WELCOME TO EPA NEW ENGLAND



The New England office of the U.S. Environmental Protection Agency is dedicated to protecting all New Englanders from environmental health threats while also preserving and protecting our unique environmental resources.

This 2003 annual report details EPA New England's Office of Site Remediation and Restoration programmatic accomplishments and presents important information about funding for our Superfund and Brownfields programs. The Superfund program directs the clean up of National Priorities List (NPL) sites as well as the cleanup of smaller, often less complex, sites that pose a significant risk to people or the environment. This office is prepared to handle a broad spectrum of environmental emergencies, ranging from those posed by chemical or oil spills to those presented by potential acts of terrorism. This office also administers

the region's Brownfields program, oversees the regulation of underground storage tanks, and works with hazardous waste facilities to clean up contamination and create better systems for managing environmental threats.

Our New England Superfund program remains vital and boasts strong successes. Three-quarters of the 111 sites on the NPL are either undergoing or have completed construction of cleanup technologies. Nearly one-third of the sites are already being reused or have agreed upon productive reuse plans. Ten sites have been deleted from the NPL, having met all cleanup goals. Through an aggressive regional program to recoup federal expenses at these sites or to have responsible parties pay for the cleanup, we have restored \$2.1 billion to the Superfund Trust Fund since the program began. In early 2004, EPA added the Pike Hill Copper Mine in Corinth, Vermont to the NPL.

In addition, this office joins the entire agency in a focused federal effort to ensure that all New England residents enjoy the benefit of a healthy environment. The federal government recognizes the importance of environmental justice, and EPA seeks to protect all our communities from environmental threats.

Homeland Security continues to be a regional priority, and we have made many advances in our ability to respond to chemical, biological and radiological incidents. EPA has purchased updated chemical and radiological agent monitoring equipment and new protective equipment for response personnel. The region's mobile command post has been equipped with cell, satellite, and radio communications, a weather station, satellite television, and broadband internet. The region's emergency response staff have received advanced training that well prepares them to respond, along with local, state and federal response partners to environmental or other catastrophic events.

The agency's Land Revitalization Agenda has resulted in many underused or unused real estate parcels being redeveloped and contributing to the local economy in the way of taxes and jobs. l encourage you to visit EPA's Brownfields website to read case studies of redevelopment projects across the region, www.epa.gov/ne/Brownfields.

We look forward to another year of working with our Congressional delegation, states and tribes, the public and others to promote a cleaner, healthier and more productive environment.

Please visit EPA's Internet web pages to find a great deal of useful information as well as detailed descriptions of each of the Superfund sites in New England. Bookmark the following web addresses: www.epa.gov/ne/superfund and www.epa.gov/ne/brownfields

Robert W. Varney Regional Administrator

Following is a quick summary of EPA New England's Office of Site Remediation and Restoration (OSRR) programs highlighted in this report.

National Priorities List (Superfund) Program

OSRR's remedial branches oversee long-term cleanups at sites that are typically on EPA's National Priorities List Short-term cleanups can correct many hazardous waste problems and eliminate most threats to human health and the environment. Some sites, however, require lengthier and more complex cleanups. These may include large-scale soil remediation, restoring groundwater and taking measures to protect wetlands, estuaries, and other ecological resources. These sites are often caused by years of pollution and may take several years, even decades, to clean

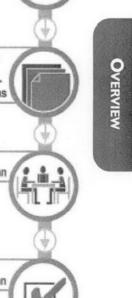
Emergency Planning and Response Program

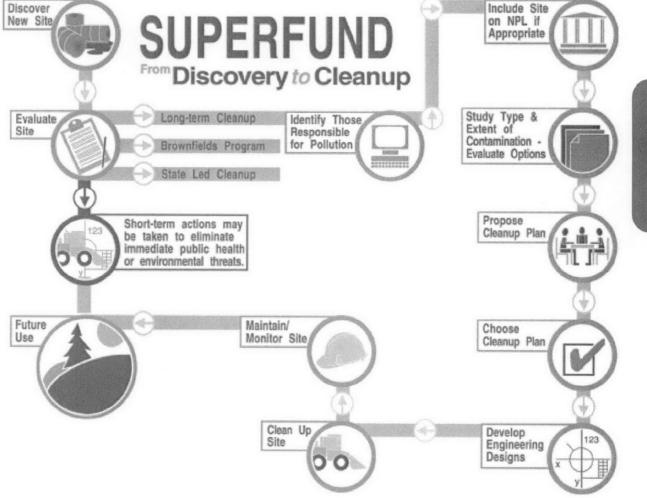
OSRR's Emergency Planning and Response branch prepares for and conducts responses to discharges of oil and releases of hazardous substances. In addition to planning and preparing for regional emergency responses, getting ready for counter-terrorism activities, inspecting oil storage facilities, cleaning up emergency oil and chemical spills, this branch oversees time-critical short-term cleanups in New England.

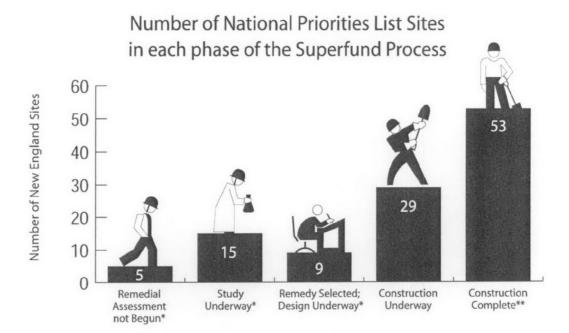
Short-term cleanups, also referred to as "removal actions," address immediate threats to public health and the environment. Short-term cleanups may take anywhere from a few days to a few years, depending on the type and extent of contamination.

Brownfields Program

Originally established as an EPA initiative in January 1995, the Brownfields program has evolved into an effort involving more than 15 federal partners. This collaborative effort, referred to as the Brownfields National Partnership, was created in June 1997 to promote beneficial reuse of contaminated sites. EPA's Brownfields Program consists of various initiatives designed to work with local, state and tribal partners to reuse brownfields in environmentally sound ways driven by the community. Key Brownfields programs include Site Assessment Demonstration Pilots, Targeted Brownfields Assessments, Cleanup Revolving Loan Funds, Job Training Grants, Showcase Communities and financial help to state brownfields programs, including Voluntary Cleanup Programs







^{*} may include sites where early action has occurred

^{**} long-term monitoring, operation, and maintenance ongoing Source: Superfund e-facts, February 2004



SUPERFIND SITE SUMMARY

	Remedial Assessment not Begun*	Study Underway*	Remedy Selected; Design Underway*	Construction Underway	Construction Complete**
CONNECTICUT	Broad Brook Mill ^	Durham Meadow Nutmeg Valley Rd Precision Plating Scovill Landfill SRS		Linemaster Sw N London Sub Old Southington Raymark	Beacon Heights Cheshire GWater Gallups Quarry Kellogg-Deering Laurel Park Revere Textile Yaworski Lagoon Barkhamsted
MASSACHUSETTS	Hoverhill Landfill Sutton Brook	Blackburn⋃ GE-Housatonic ^ Hoth & Patterson Nuclear Metals Shpack Landfill	Atlas Tack Natick Army Lab Naval Weapons S Weymouth NAS	Fort Devens Hanscom AFB Industriplex Iron Horse Park Army Matls Tech New Bedford Nyanza Otis ANG Base Silresim WR Grace/Acton Wells G&H	Baird & McGuire Cannon Eng Charles George LF Devens-Sudbury Ann Groveland Wells Hocomonco Pond Norwood PCBs Plymouth Harbor PSC Resources Re-Solve, Inc Rose Disposal Pit Salem Acres Sullivan's Ledge
MAINE	Callahan Mine		Eastland Woolen West Site/Hows Co	Portsmouth NSY	Brunswick NAS Eastern Surplus Loring AFB McKin Co O'Connor Co Pinette's Salvage Saco Municipal LF Saco Tannery Union Chemical Winthrop Landfill
NEW HAMPSHIRE	Troy Mills Landfill	Mohawk Tannery ^	Beede Waste Oil Dover Landfill	Fletcher's Paint N H Plating ^ ^ Ottati & Goss Savage Muni Somersworth LF	Auburn Road LF Coakley Landfill Kearsarge Metallurg Keefe Enviro Mottolo Pig Farm Pease AFB South Muni Well Sylvester Tibbetts Road Tinkham Garage Town Garage/ Radio Beac
RHODE ISLAND		Centredale Manor W Kingston/URI	Rose Hill Landfill	Central Landfill Davis Liquid Davisville NCBC Newport NETC Peterson/Puritan	Davis GSR Landfill Landfill & Res Rec Picillo Farm Stamina Mills Westem Sand & Gravel
VERMONT		Elizabeth Mine Ely Copper Mine		Parker Landfill Pine Street Conal Pownal Tannery	Bennington Landfill BFI Landfill Burgess Bros LF Darling Hill Dump Old Springfield LF Tansitor Electronics

^{*} may include sites where early actions (e.g., removal actions) have occurred or are underway

^{**} long-term monitoring, operation, and maintenance ongoing

[^] proposed NPL site

[^] past wetlands purchase considered "remedial action", awaiting funding for actual construction work Note Statistics represent most-advanced Operable Unit at each site, additional activities may be ongoing at these sites

Summary of Superfund Status—New England

EPA has worked aggressively to clean up hazardous waste problems in New England. In cooperation with our state counterparts, final cleanup activities are completed, underway, or in design at most of New England's 111 NPL sites.

- 76% of New England Superfund sites (proposed, final, and deleted) on the National Priorities List 82 of 111 sites have undergone or are undergoing cleanup construction.
- 53 sites have all cleanup construction completed, 29 sites have cleanup construction underway.
- 10 New England sites have been deleted from the NPL
- EPA has helped promote economic development by removing 1,594 sites in New England from the CERCLIS list of waste sites.
- The Superfund program has spent over \$1.3 billion in New England to cleanup Superfund National Priorities List sites
- EPA has spent over \$211.2 million on site assessment, investigation, and cleanup at non- National Priorities List sites in New England
- EPA, with the cooperation of the U S Department of Justice, continues to ensure that companies responsible for contamination at sites pay their fair share of cleanup costs. Since the inception of the program, responsible party commitments to cleanups in New England, via direct payments to the Superfund Trust Fund or via funding of studies and cleanup work, exceeds \$2.1 billion

Source EPA New England, January 1, 2004

Cumulative Federal Superfund Dollars Expended at National Priorities List Sites in New England (1980-2003)

CT \$197.9 million

MA \$759 2 million

ME \$117 million

NH \$156 2 million

RI \$73.5 million

VT \$45 million

NEW ENGLAND TOTALS:

\$1,348,800,000

Source EPA New England, January 1, 2004



2003 Superfund Fast Facts—Massachusetts

EPA has worked aggressively to clean up hazardous waste problems in Massachusetts In cooperation with the Massachusetts Department of Environmental Protection, final cleanup activities are completed, underway, or in design at most of Massachusetts' 35 NPL sites

- 71% of Massachusetts' Superfund sites on the National Priorities List - 25 of 35 sites - have undergone or are undergoing cleanup construction, or are in final design.
- 13 Superfund sites have all cleanup construction completed, 12 Superfund sites have cleanup construction underway
- 3 Superfund sites has been deleted from the National Priorities List; Plymouth Harbor/Cannon Engineering Corp in Plymouth, Fort Devens-Sudbury Training Annex in Sudbury, and Salem Acres in Salem.
- 1 site is proposed to the National Priorities List, GE-Housatonic River in Pittsfield.
- Region 1 has helped promote economic redevelopment by removing 662 Massachusetts sites from the CERCLIS waste list.
- The Superfund Program has spent over \$759.2 million in Massachusetts to clean up Superfund National Priorities List sites.
- EPA has spent over \$66.1 million on site assessment, investigation. and cleanup at non-National Priorities List sites in Massachusetts.
- EPA, with the cooperation of the U.S. Department of Justice, continues to ensure that companies responsible for contamination at sites pay their fair share of cleanup costs. Since the inception of the program, responsible party commitments to cleanups in Massachusetts, via direct payments to the Superfund Trust Fund or via funding of studies and cleanup work, exceeds \$1.3 billion, including \$22.4 million in 2003

Source EPA New England, January 1, 2004

Acton

W.R. Grace & Co. Acton Plant

for more information on this project, see www.epa.gov/ne/superfund/sites/graceacton

NPL Status Listed in 1983
Cleanup Status
Source Areas Construction Complete
Groundwater Study Underway
Superfund \$\$ Spent \$4 2 million

Ashland

Nyanza Chemical Waste Dump

for more information on this project, see www.epa.gov/ne/superfund/sites/nyanza

NPL Status Listed in 1983
Cleanup Status
Source Areas Construction Complete
Other Areas Study Underway
Superfund \$\$ Spent \$56 8 million

Bedford

Naval Weapons Industrial Reserve Plant

for more information on this project, see www.epa.gov/ne/superfund/sites/nwirp

NPL Status Listed 1994 Cleanup Status Study, Design, and Construction Underway Superfund \$\$ Spent \$532,000

Bedford, Concord, Lexington, and Lincoln

Hanscom Field/Hanscom Air Force Base

for more information on this project, see www.epa.gov/ne/superfund/sites/hanscom

NPL Status Listed in 1994 Cleanup Status Study, Design, and Construction Underway Superfund \$\$ Spent \$593,000

Billerica

Iron Horse Park

for more information on this project, see. www epa.gov/ne/superfund/sites/ironhorse

NPL Status Listed in 1983 Cleanup Status Shaffer Landfill & Lagoons Construction Complete Other Areas Study Underway Superfund \$\$ Spent \$11.1 million

<u>Bridgewater</u>

Cannons Engineering Corp.

for more information on this project, see www.epa.gov/ne/superfund/sites/cannon

NPL Status Listed in 1983 Cleanup Status All Construction Completed in 1991 Superfund \$\$ Spent \$3.7 million

Concord

Nuclear Metals

for more information on this project, see www.epa.gov/ne/superfund/sites/nmi

NPL Status Listed in 2001 Cleanup Status Study Underway and Removal Activities Superfund \$\$ Spent \$3.7 million

Dartmouth

ReSolve, Inc.

for more information on this project, see www.epa.gov/ne/superfund/sites/resolve

NPL Status Listed in 1983 Cleanup Status All Construction Completed in 1998 Superfund \$\$ Spent \$12.3 million

Devens, Ayer, Harvard, Lancaster, and Shirley

Fort Devens

for more information on this project, see www.epa.gov/ne/superfund/sites/devens

NPL Status Listed in 1989 Cleanup Status Study, Design, and Construction Underway Superfund \$\$ Spent \$5.4 million

Fairhaven

Atlas Tack

for more information on this project, see www epa gov/ne/superfund/sites/atlas

NPL Status Listed in 1990 Cleanup Status Remedy Selected, Design completed Superfund \$\$ Spent \$5 2 million

Falmouth

Otis Air National Guard Base/Camp Edwards

for more information on this project, see www.epa.gov/ne/superfund/sites/otis

NPL Status Listed in 1989 Cleanup Status Study, Design, and Construction Underway Superfund \$\$ Spent \$6.7 million

Groveland

Groveland Wells Nos. 1 & 2

for more information on this project, see www.epa.gov/ne/superfund/sites/groveland

NPL Status Listed in 1983 Cleanup Status All Construction Completed in 2000 Superfund \$\$ Spent \$16.3 million

Haverhill

Haverhill Landfill

for more information on this project, see www.epa.gov/ne/superfund/sites/haverhill

NPL Status Listed in 1986 Cleanup Status State-Lead, Study Underway Superfund \$\$ Spent \$530,000



<u>Holbrook</u>

Baird & McGuire

for more information on this project, see. www.epa.gov/ne/superfund/sites/baird

NPL Status Listed in 1983 Cleanup Status All Construction Completed in 2003 Superfund \$\$ Spent \$209 7 million

Lanesborough

F.T. Rose Disposal Pit

for more information on this project, see www.epa.gov/ne/superfund/sites/ftrose

NPL Status Listed in 1986 Cleanup Status All Construction Completed in 1994 Superfund \$\$ Spent \$1.3 million

Lowell

Silresim Chemical Corp.

for more information on this project, see www.epa.gov/ne/superfund/sites/silresim

NPL Status Listed in 1983 Cleanup Status Construction Underway Superfund \$\$ Spent \$45.9 million

Mansfield

Hathaway & Patterson

for more information on this project, see www.epa.gov/ne/superfund/sites/hathaway

NPL Status Proposed in 2001 Cleanup Status Study Underway Superfund \$\$ Spent \$3 9 million

Natick

Natick Laboratory Army Research, Development, and Engineering Center

for more information on this project, see www.epa.gov/ne/superfund/sites/naticklab

NPL Status Listed in 1994 Cleanup Status Study and Construction Underway Superfund \$\$ Spent \$889,000

New Bedford

New Bedford Harbor

for more information on this project, see www.epa.gov/ne/superfund/sites/newbedford

NPL Status Listed in 1983
Cleanup Status
Hotspot & Harbor Construction Underway
Upper Bay Study Underway
Superfund \$\$ Spent \$141.5 million

Sullivan's Ledge

for more information on this project, see www.epa.gov/ne/superfund/sites/sullivansledge

NPL Status Listed in 1984 Cleanup Status All Construction Completed in 2000 Superfund \$\$ Spent \$6.6 million

Norton

Shpack Landfill

for more information on this project, see www.epa.gov/ne/superfund/sites/shpack

NPL Status Listed in 1986 Cleanup Status Study Underway Superfund \$\$ Spent \$1.4 million

Norwood

Norwood PCBs

for more information on this project, see www.epa.gov/ne/superfund/sites/norwood

NPL Status Listed in 1986 Cleanup Status All Construction Completed in 1999 Superfund \$\$ Spent \$35.3 million

Palmer

PSC Resources

for more information on this project, see www.epa.gov/ne/superfund/sites/psc

NPL Status Listed in 1983 Cleanup Status All Construction Completed in 1998 Superfund \$\$ Spent \$4.1 million



Pittsfield

General Electric - Housatonic River

for more information on this project, see www.epa.gov/ge

NPL Status Proposed in 1997 Cleanup Status Study Underway, Removal Activities Superfund \$\$ Spent \$82 3 million

Plymouth

Plymouth Harbor/Cannons Engineering

for more information on this project, see www.epa.gov/ne/superfund/sites/plymouth

NPL Status Deleted in 1993 Cleanup Status All Construction Completed in 1992 Superfund \$\$ Spent \$615,000

<u>Salem</u>

Salem Acres

for more information on this project, see www.epa.gov/ne/superfund/sites/salem

NPL Status Deleted in 2001 Cleanup Status All Construction Completed in 1999 Superfund \$\$ Spent \$2 million

Sudbury, Maynard, Hudson, and Stow

Fort Devens-Sudbury Training Annex

for more information on this project, see www.epa.gov/ne/superfund/sites/sudburyannex

NPL Status Listed in 1990 Cleanup Status All Construction Completed in 2000 Superfund \$\$ Spent \$1.4 million

Tewksbury

Sutton Brook Disposal Area

for more information on this project, see www.epa.gov/ne/superfund/sites/ suttonbrook

NPL Status Listed in 2001 Cleanup Status Assessment Not Begun, Removal Activities Superfund \$\$ Spent \$4 million

Tyngsboro

Charles George Reclamation Trust Landfill

for more information on this project, see www.epa.gov/ne/superfund/sites/charlesgeorge

NPL Status Listed in 1983 Cleanup Status All Construction Completed in 1998 Superfund \$\$ Spent \$63.2 million

Walpole

Blackburn and Union Privileges

for more information on this project, see www.epa.gov/ne/superfund/sites/blackburn

NPL Status Listed in 1994 Cleanup Status Study Underway, Removal Activities Superfund \$\$ Spent \$1.6 million

Watertown

Army Material Technology Laboratory

for more information on this project, see www.epa.gov/ne/superfund/sites/amtl

NPL Status Listed in 1994
Cleanup Status
Area I Construction Complete
Soil & Groundwater Construction Underway
Charles River Study Underway
Superfund \$\$ Spent \$774,000

Westborough

Hocomonco Pond

for more information on this project, see www.epa.gov/ne/superfund/sites/hocomonco

NPL Status Listed in 1983 Cleanup Status All Construction Completed in 1999 Superfund \$\$ Spent \$1.6 million

U.S. EPA New England Status of New England National Priorities List Sites



Weymouth

South Weymouth Naval Air Station

for more information on this project, see www.epa.gov/ne/superfund/sites/sweymouth

NPL Status Listed in 1994 Cleanup Status Remedy Selected/Design Underway Superfund \$\$ Spent \$2 8 million

Woburn

Industri-Plex

for more information on this project, see www.epa.gov/ne/superfund/sites/industriplex

NPL Status Listed in 1983
Cleanup Status
Source Area Construction Underway
Groundwater/River: Study Underway
Superfund \$\$ Spent \$8.2 million

Wells G&H

for more information on this project, see www.epa.gov/ne/superfund/sites/wellsah

NPL Status Listed in 1983
Cleanup Status
Source Areas Construction Underway
Central Area/River Study Underway
Superfund \$\$ Spent \$12.9 million

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ATLAS TACK CORPORATION

Fairhaven, Massachusetts

Lead Federal NPL Listing 2/21/1990

Site Description:

The Atlas Tack facility is located on an approximately 20-acre parcel in Fairhaven, Massachusetts. The site also includes adjoining areas that have come to be contaminated by this facility, including a portion of Boys Creek and its tidal marsh. Built in 1901, the Atlas Tack facility manufactured tacks, steel nails, rivets, eyelets and bolts until 1985. From the early 1940s to the late 1970s or early 1980s, wastewater containing cyanide and heavy metals was discharged into an onsite lagoon, eventually contaminating the soil and groundwater. Three separate areas of the site are contaminated with volatile organic compounds (VOCs), heavy metals, pesticides, polychlorinated biphenyls (PCBs), and polycyclic aromatic hydrocarbons (PAHs). Approximately 7,200 people live within a one-mile radius of the site, which is located in a mixed residential and commercial area.

Current Site Status and Cleanup Actions to Date:

A three phased cleanup plan for the Atlas Tack site was approved in March of 2000

- In Phase I, EPA will demolish two of the three remaining buildings. During Phase II, EPA will remove 54,000 cubic yards of contaminated soil, debris and sediments, for disposal at a licensed, offsite facility. Once this is completed, EPA will use phytoremediation (using plants to clean up and contain pollutants in the environment) to prevent any residual contaminated groundwater from leaving the site. The final phase will include remediation and restoration of the salt marsh soils and creek bed sediments. EPA will then continue to monitor the phytoremediation efforts and groundwater quality.
- In 1998, EPA completed investigations into the nature and extent of site contamination
- In 1992, EPA limited access to the site by requiring the potentially responsible party (PRP) to install a fence around the site. Additionally, the Town of Fairhaven has banned shellfishing on or near the site to minimize the possible ingestion of fish due to bacterial contamination.
- In 1999, EPA's emergency response and removal program removed asbestos from three dilapidated buildings on the site, preventing the possibility of local community residents inhaling asbestos fibers
- This site has had a high level of community interest and the public is particularly interested in having the contaminated buildings demolished. The commercial area of the site may be redeveloped for commercial/industrial use after the cleanup has occurred.



Current Funding Status:

- To date, EPA has provided approximately \$6 million for activities described above
- EPA will continue to monitor this site for any changes that may trigger additional action
- EPA will consider funding new work at this site in Fiscal Year 2004

For more information on this site, please read the Fact Sheet on the Region 1 Superfund Web site

Key Accomplishments:

- EPA removed asbestos from three dilapidated buildings on the site, preventing the possibility of local community residents inhaling asbestos fibers
- EPA limited access to the site by requiring the potentially responsible party to install a fence around the site
- EPA plans to begin the first phase of cleanup, building demolition, valued at \$1.8 million in 2004

GE-PITTSFIELD/HOUSATONIC RIVER SITE

Pittsfield, Massachusetts April 2004

Lead: Hybrid 80% General Electric, 20% Federal

NPL Status: Proposed for the NPL in 1997, Listing process currently suspended, EPA retains the right to pursue final listing should GE not comply with the Consent Decree

Site Description:

The Site consists of the 254-acre GE facility, Allendale Elementary School, Silver Lake, Unkamet Brook, the Housatonic River, riverbanks and floodplains, and eleven former oxbows to the Housatonic River that have been filled with contaminated material

The 254 acre GE facility has historically been the major handler of PCBs in western Massachusetts, and is the only known source of polychlorinated biphenyls (PCBs) found in the Housatonic River sediments and floodplain soils. Although GE performed many functions at the Pittsfield facility throughout the years, the activities of the Transformer Division, including the construction and repair of electrical transformers using dielectric fluids, some of which contained PCBs (primarily Aroclors 1254 and 1260), were the likely significant source of PCB contamination According to GE's reports, from 1932 through 1977, releases of PCBs reached the waste and storm water systems associated with the facility and were subsequently conveyed to the East Branch of the Housatonic River and to Silver Lake

During the 1940s, efforts to straighten the Pittsfield reach of the Housatonic River by the City of Pittsfield and the U.S. Army Corps of Engineers (USACE) resulted in 1.1 former oxbows being isolated from the river channel. The oxbows were filled with material that was later discovered to contain PCBs and other hazardous substances.

Current Site Status and Cleanup Actions to Date:

The GE-Pittsfield/Housatonic River Site has been subject to various regulatory investigations dating back to the early 1980s EPA proposed the Site to the Superfund National Priorities List in September of 1997. The federal and state government agencies and GE entered into negotiations late in 1997 in an attempt to reach a comprehensive settlement which included remediation, redevelopment, and restoration components.

In September 1998, representatives of federal and state government agencies, GE, the City of Pittsfield, and the Pittsfield Economic Development Authority (PEDA) reached a tentative agreement-in-principle relating to GE's Pittsfield facility, other contaminated areas in Pittsfield, and the Housatonic River This agreement was translated into a Consent Decree which was lodged with the federal court on October 7, 1999, and approved by the court on October 27, 2000 The agreement provides for, among other things, the following

- GE to perform 25 distinct cleanup actions, including the remediation of one-half mile of the Housatonic River,
- EPA to perform a cleanup of a 1.5 mile stretch of the Housatonic River pursuant to a cost-share agreement with GE,
- A comprehensive EPA-lead study of the remainder of Housatonic River to determine if additional cleanup actions are required,

U.S. EPA New England Sites of Special Interest



- Compensation from GE for natural resource damages and GE payments to the government for past and future response costs
- A transfer of 52 acres of GE-owned land to PEDA for future redevelopment

Current Funding Status:

- To date, EPA has spent approximately \$80,000,000, much of which came from GE pursuant to the Consent Decree.
- EPA expects to expend over \$30,000,000 over the next five years on the following oversight of GE's cleanup actions, remediation of the 1.5 miles of the Housatonic River (currently being performed by EPA), completion of the comprehensive study of the remainder of the Housatonic River, and coordination/oversight of redevelopment activities

Key Accomplishments:

- EPA supervised GE's cleanup of Allendale Elementary School. This included the removal and replacement of over 40,000 cubic yards of PCB-contaminated soil
- EPA is overseeing GE's ongoing investigation and remediation activities at 23 additional areas of the overall site
- EPA supervised GE's cleanup of a one-half mile section of the Housatonic River This included the removal of 18,000 cubic yards of PCB-contaminated sediment and bank soil
- EPA has completed one-third of the cleanup activities associated with the next 1.5 mile stretch of the Housatonic, River To date, over 35,000 cubic yards of PCB-contaminated soil and sediment have been removed
- EPA is in the process of completing a comprehensive study of the Housatonic River downstream of the two miles currently being remediated to determine if additional cleanup activities are required A decision on future cleanup actions is currently scheduled for 2006
- EPA is working with GE, the Massachusetts DEP, the City of Pittsfield and PEDA on redevelopment activities on 52 acres of land being transferred from General Electric to the PEDA/the City of Pittsfield Numerous buildings have been demolished and the land transfer from GE to PEDA is scheduled to begin in the summer of 2004.

Additional information on this site is available on the GE-Pittsfield/Housatonic website at www.epa gov\ne\qe

MASSACHUSETTS MILITARY RESERVATION

Cape Cod, Massachusetts April 2004

Lead Federal Facility NPL Listing November 1989

Site Description:

- The Massachusetts Military Reservation (MMR) consists of the Impact Area and Otis Air Force Base. The site overlies the Upper Cape Cod sole source aquifer MMR covers approximately 22,000 acres. The southern portion of MMR (Otis AFB) was placed on the National Priorities. List in 1989. Cleanup continues on this portion of the base under Superfund. A Federal Facility Agreement (FFA) governing the work to be performed by the Department of Defense pursuant to Superfund did not cover active training ranges or the Impact Area.
- Contamination from numerous, historic source areas has resulted in the identification of over a dozen groundwater plumes in relation to the Otis AFB Superfund project. Several of these plumes underlie nearby residential neighborhoods, and some have affected cranberry bogs and municipal water supply wells.
- More than 70 source areas were identified on Otis AFB Investigations were completed and decisions have been made regarding those that require cleanup Cleanup of most of the source areas identified as requiring action has been completed or is underway
- For the Impact Area, routine training (firing of artillery, mortars and open detonation of explosives) is the primary source of contamination. Explosive compounds and perchlorate have been detected in soil and groundwater at numerous areas across the northern portion of MMR Large areas of dense Unexploded Ordnance (UXO) next to residential areas have been cleared and several caches of buried munitions have been found.
- EPA issued a series of Administrative Orders under the Safe Drinking Water Act starting in 1997 These orders require the investigation and cleanup of contamination at the training ranges and impact area
- A 1997 Safe Drinking Water Act Order halted training activities using explosives, propellents and pyrotechnics pending completion of investigations
- Removal actions for soil and groundwater contaminated with explosives and perchlorate have been completed and/or are being planned for a few of the worst sites Remedial plans are progressing for the larger, more complex sites
- Perchlorate has migrated off-base in a number of areas Perchlorate has been detected in municipal water supply wells in the neighboring town of Bourne. The town voluntarily shut down three of the four supply wells based on the detections which were below the Commonwealth of Massachusetts advice level issued for Bourne. Two of these wells remain offline.
- There is strong community interest in the investigation and cleanup of MMR. There are several community panels that meet on a regular basis to review the progress of work

U.S. EPA New England **Sites of Special Interest**



Current Site Status and Cleanup Actions to Date:

Superfund Portion

- On Otis AFB and under the Superfund program, soil cleanup at more than 25 separate source areas have been completed Cleanup technologies include excavation and off-site disposal, and soil vapor extraction/biosparging
- The Superfund cleanup of Otis AFB also includes the continued operation and maintenance of twelve groundwater treatment systems on eight different groundwater plumes. These treatment systems treat 12 million gallons of water per day Since 1993, approximately 18 billion gallons of contaminated groundwater have been treated and returned to the sole-source aquifer
- The extraction and treatment system(s) to address four additional plumes that have migrated off-base are currently being designed. Construction on this project will begin in late-summer 2004 This treatment system is anticipated to begin operation in July 2005 and will treat approximately 500 million gallons of water per day

MMR Impact Area.

- Under the Impact Area program, large areas of UXO, which act as continuing sources of contamination to soil and groundwater, are being cleared A Controlled Detonation Chamber is brought on base periodically for the destruction of "safe to move" UXO Several caches of buried munitions have been found on ranges used by defense contractors
- Large areas of contaminated soil and groundwater have been identified. Source areas and groundwater are moving toward remediation
- A source area Rapid Response Action (RRA), an interim action, has started for the Demolition Area 1 Soil Operable Unit More than 40,000 anomalies, which represented potential source items, have been excavated and removed Soil excavation of the area is ongoing Twenty-fivethousand tons of soil contaminated with explosives and perchlorate will be excavated Contaminated soil will be treated using a low temperature thermal desorption system that has been brought onsite temporarily Treatment should begin in May 2004
- An RRA to start extraction and treatment of the groundwater contamination migrating from Demolition Area 1 is under construction. This action is designed to address the highest concentrations of explosives and perchlorate contamination and the toe of the plume. The start-up of this groundwater treatment system is expected in September 2004
- Numerous additional source area RRAs are under development. These RRAs will address the excavation of contaminated soils from a number of source areas identified through the Impact Area project The excavated soils will be treated utilizing the treatment system brought onsite for the Demolition Area 1 soils Upon completion of this effort, 35,000 - 40,000 tons of contaminated soil, which represents a potential source of contamination for groundwater, will be remediated

Current Funding Status:

- Work on both the Otis AFB Superfund projects and the Impact Area program is fully funded by the Department of Defense
- EPA provides lead agency oversight work under both programs

- The Air Force Center for Environmental Excellence manages the Superfund work FY04 funding for this work is approximately \$31,000,000. The budget estimates for FY05 and FY06 are \$35,000,000 and \$22,000,000, respectively. To date, the Air Force has spent \$600 million under Superfund.
- The Army has recently taken over the project lead for the Impact Area program work. The FY04 budget for work deemed necessary by the Administrative Orders is \$51,000,000. Army estimates for FY05 and FY06 are approximately \$40,000,000 for each year.

Key Accomplishments:

- Since 1993, approximately 18 billion gallons of contaminated groundwater have been treated and returned to the sole-source aquifer
- Soil cleanup at more than 25 separate source areas has been completed
- Large areas of UXO, which act as continuing sources of contamination to soil and groundwater, have been cleared
- A source area RRA for the Demolition Area 1 Soil Operable Unit is underway This action, when completed will have removed more than 40,000 anomalies, which represented potential source items, and the excavation and treatment of 25,000 tons of explosive and perchlorate contaminated soil
- The first system to address groundwater contaminated with explosives and perchlorate is under construction and is expected to be operational by September 2004

U.S. EPA New England Sites of Special Interest



NEW BEDFORD HARBOR

New Bedford, Massachusetts

Lead Federal NPL Listing 1983

New Bedford Harbor has been on the NPL since 1983 and comprises an 18,000 acre urban estuary Roughly 880,000 cubic yards of highly PCB-contaminated sediment (175 football fields, each 3 feet deep) require removal. Two shoreline capacitor manufacturing facilities used PCBs from the 1930s until banned in 1977. Massachusetts has restricted fishing and lobstering in the 18,000 acres since 1979.

Human Health Risk.

- Seafood consumption risk is 40 times higher than Superfund action levels (or higher under worst case scenarios), subsistence fishing is a continual concern
- Dermal contact risk with shoreline soils is 4 times higher than Superfund action levels (or higher under worst case scenarios), public and private access is a continual concern

Ecological Risks:

- In-stream PCB concentration 30 times higher than Ambient Water Quality Criteria
- Sediment PCB levels 10,000 times higher than biologically safe levels

Cleanup Plan:

• Removal of the 880,000 cubic yards of contaminated sediment, including the excavation and restoration of surrounding residential properties and wetlands. The dredged sediment will be processed in a new 5 acre shoreline dewatering and transfer facility and then disposed at an offsite landfill or in one of three confined disposal facilities.

Reuse.

• The Superfund infrastructure (350 ft manne pier, 55,000 sq. ft shoreline warehouse, and rail spur) will become a multi-modal transportation facility once the cleanup is complete

Status:

• Fiscal Year 2003 funding supported cleanup and restoration of the entire 7 acre area north of Wood Street (residential/recreational use), business relocations and environmental dredging, archeology surveys, and construction of the dewatering facility's marine bulkhead and building

Total Project Costs to Date 1983 - January 2004: \$207.6 million (including obligated costs)

Hot Spot (ROD I) Design \$3.5 million
Hot Spot (ROD I) Construction \$40.9 million
ROD II Design \$41.4 million
ROD II Construction \$57.8 million
Pre-ROD Costs (Planning, field investigations,
feasibility studies, modeling, etc.) \$64 million

* does not include ROD III for outer harbor area (not likely to require extensive cleanup) • Settlement funds now exhausted Fiscal Year 2004 funding will complete the remaining dredging infrastructure (desanding facility, pipelines, water treatment and dewatering equipment) as well as the dredging and offsite disposal of approximately 30,000 cubic yards of highly PCB-contaminated sediment

SOUTH WEYMOUTH NAVAL AIR STATION

Weymouth, Massachusetts April 2004

Lead: Federal Facility NPL Listing: May 1994

Site Description:

The former NAS South Weymouth is located in the towns of Abington, Rockland and Weymouth, Massachusetts The land surrounding the base is suburban, with a mixture of residential, industrial, and commercial uses. In accordance with actions taken pursuant to the Defense Base Closure and Realignment Act of 1990 (BRAC law), NAS South Weymouth was included in the fourth round of BRAC (September 28, 1995) and operationally closed on September 30, 1997. This closure made the real property and facilities comprising the NAS South Weymouth available for community reuse.

In November 1999, the Navy entered into a Federal Facility Agreement (FFA) with USEPA because NAS South Weymouth was listed on the NPL. This agreement established the Navy as the lead agency for the environmental investigation and remediation of CERCLA-designated sites within the property. As the lead agency, the Navy maintains remedy selection authority (with USEPA concurrence), and USEPA (and MA DEP) provides oversight.

Historically, the main base of NAS South Weymouth consisted of approximately 1,400 acres. On the main base, several transfers have already occurred. Of the transferred main base property, 55 84 acres were transferred to the USCG for a family housing area (51 07 acres) and a buoy maintenance depot (4 77 acres), and a 0 52-acre parcel was transferred to the Federal Aviation Administration (FAA) for its continued use as a Terminal Doppler Weather Radar facility Environmental Summary documents (ESDs) were prepared for these federal agency-to-federal agency transfers. In addition, the Navy has transferred various parcels (approximately 550 acres) to the local redevelopment authority, the South Shore Tn-Town Development Corporation (STTDC), via Findings of Suitability to Transfer (FOSTs). Under DoD policy, a FOST is an essential step toward property conveyance in those cases where all necessary response actions have been taken prior to transfer.

Current Site Status and Cleanup Actions to Date:

The Navy is proposing to transfer the remaining portions of the property by deed to the SSTTDC Because all necessary remedial action has not been taken, the Navy is completing a Covenant Deferral Request (CDR) pursuant to CERCLA and applicable USEPA and Navy guidance for an "early transfer" Once approved by the EPA Regional Administrator and the Governor, the property would then be conveyed by quitclaim deed from the United States of America to the SSTTDC via economic development conveyance (EDC) (681–183 acres) and public benefit conveyance (PBC) (133–47 acres)

The SSTTDC and the Navy are expected to agree on a fixed price for the cleanup, and the SSTTDC (along with their master developer Lennar Partners) would assume all cleanup responsibilities once the property is conveyed. The SSTTDC and their contractors will also obtain insurance to cover certain cleanup costs above the fixed price. EPA will become the "lead agency" for the privatized cleanup. While this has been done at non-NPL sites, this is the first Superfund site in the country to go through both an early transfer and a privatized cleanup.



Although base-wide environmental investigation and cleanup activities have been ongoing since 1988, certain investigations or response activities to address potential or actual past hazardous substance releases remain to be completed on portions of the base. These investigations and response activities are currently ongoing under three major programs—the Navy's Environmental Baseline Survey (EBS) process to identify property suitable for transfer, the Installation Restoration (IR) Program, which the Navy is carrying out in accordance with CERCLA, as amended, and the Massachusetts Contingency Plan (MCP) program, which the Navy is carrying out under Massachusetts General Law, Chapter 21E, the Oil and Hazardous Material Release Prevention and Response Act

The United States Coast Guard (USCG) is the lead agency for the cleanup of the 4 77-acre USCG Buoy Depot CERCLA site, which was formerly a part of NAS South Weymouth. The property that contains the active facility was transferred to the USCG in October 2000 through a federal agency-to-federal agency transfer. The USCG has signed a separate FFA with the USEPA. The USCG's RI, completed in February 2001, indicated that the primary constituent of concern (lead) at the site has been detected at concentrations that warrant remediation of a drainage ditch and wetlands on Navy property in the CDR Parcel south of the Buoy Depot. The Coast Guard has proposed a removal action for this wetland and drainage ditch.

Current Funding Status:

- Work to date has been fully funded by the Navy
- EPA, with Navy funding, provides lead agency oversight work of all Navy work
- Privatized cleanup work will be funded by the developers utilizing Navy funds and/or insurance
- EPA's oversight of the privatized cleanups will be funded by the developer utilizing Navy funds and/or insurance

Key Accomplishments.

- The EPA team has successfully negotiated the documents necessary to allow for an early transfer and a privatized cleanup of more than 800 acres of the South Weymouth site. As stated above, this is the first of its kind nationally. The Covenant Deferral Request is expected to be released for public comment in May 2004.
- Under the Navy's Superfund cleanup program, the ROD for the Small Landfill has been signed and the required groundwater monitoring has been completed. Additionally, RODs have been signed for 2 other sites (the ABTFSA and AOCs 55A and 55B) documenting the decision that no further action under Superfund is warranted. A ROD has been signed for the Rubble Disposal Area requiring removal of PCB-contaminated soil and sediment and capping of the disposal area. At other Superfund areas of concern, removal actions and/or risk assessments have been completed to evaluate and mitigate potential risks to human health and the environment.
- The Navy has completed actions and has closed out 29 of 31 petroleum-related sites under the state MCP program
- Of the 135 areas identified basewide through the BRAC EBS process, 113 have been investigated and found to require no further action, or have been handled under other programs. All known underground storage tanks (USTs) have been removed, inactive aboveground storage tanks (ASTs) without potential reuse have been removed (remaining ASTs support interim use), and all known polychlorinated biphenyl (PCB)-containing transformers have been removed. Oil-water separators and hydraulic lifts across the base have been evaluated and removed as part of the Navy's removal program. Floor drains were also evaluated and removed if they failed leak tests.

MASSACHUSETTS WATCH LIST

EPA, in cooperation with the New England states, has developed a list of sites that we believe merit increased state-federal coordination and oversight. EPA calls the list of these sites the "Watch List". These sites are but a small subset of the several thousand active sites included in the EPA and New England state inventories of known and suspected hazardous waste disposal sites. Criteria for including sites on the Watch List are loosely defined. In general, the Watch List includes sites that warrant special monitoring because they are strong candidates for listing on the National Priorities List (NPL), are the subject of considerable public interest, are particularly large and/or complex, are requiring significant Agency or state resource expenditures, or are state-lead sites that may be referred to EPA. Watch List sites may be, but are not necessarily, listed in the federal CERCLIS inventory. Sites may be added or dropped as their status changes.

The purpose of the Watch List is to facilitate rapid information exchange between the states and EPA regarding the current status of these high profile sites, and to ensure both Agencies are kept abreast of key site issues. Both Agencies have agreed to share site information and to revise the status of sites as needed. At a minimum, however, the entire list is reviewed and revised, as appropriate, annually Following are the Massachusetts sites currently on the Watch List. Where applicable, EPA Identification. Numbers and MADEP Release Tracking. Numbers. (RTN) are included.

Andover REICHOLD CHEMICAL

MAD001000165 (RTN# 3-0028)

This site is a 45-acre former manufacturing facility for phenolic, urea formaldehyde and epoxy resins which operated on the site from 1930 until 1990. Wastes were disposed of in unlined leaching ponds onsite. Red chemical wastes were discovered leaching into the Shawsheen River in 1970. Several site investigations have been performed via the state waste site cleanup program and releases to groundwater and surface water are documented. The site has been identified as a state-lead site since July 2000, and is classified as Tier 2 (medium priority) in phase IV of investigation and cleanup under the state program. Most recently, an EPA contractor completed a site assessment for this site in 1996. This site was included in the General Accounting Office (GAO) report of sites awaiting NPL decisions. It is not a RCRA corrective action site.

Ashland FORMER THREE C ELECTRICAL MAD092195874 (RTN# 3-0219)

This is a 1 8-acre site that is currently used as a fellowship school with a playground and an adjacent commercial property. The site is located immediately to the south of the Nyanza NPL site. In 1976, the Three C Electrical Company bought the property from General Electric and repaired and maintained high voltage equipment onsite. In 1983, Three C moved to a new location a few blocks to the east. PCB contamination has been detected in the soils, and an EPA removal action was performed in 1995 to remove PCB soils in the playground area. A portion of the site requires further action under the Massachusetts Contingency Plan (MCP). In 2002, the state identified a potential Imminent Hazard condition due to PCBs in surface soil on the commercial property and required an Immediate Response Action by the current owner, Framingham Excavating Company. A fence has been installed to restrict access to the contaminated area and further soil sampling is scheduled for the spring of 2003. A Site Reassessment is currently underway by an EPA contractor. This site was included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site.



COLONIAL LACQUER & PAINT

MAD001025402 (RTN# 3-0221)

This site (a k a Cadillac Paint) is an abandoned paint and varnish manufacturing site that operated from 1937 to 1987. It is located on a 3-acre parcel in a residential area. VOCs have been detected in the soils and groundwater. Public water is available, however some residents in the area may still be using private wells. The EPA removal program conducted an assessment in 1996 and concluded that no action was required. This site has been identified as a state-lead site since July 2000, however no further assessment or cleanup work has been conducted since that time. An EPA contractor completed a site assessment at this site in 1996. This site was included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site.

Attleboro ATTLEBORO LANDFILL

MAD980501803 (RTN# 4-0006)

This site is located adjacent to the Shpack Superfund site on the Attleboro/Norton line

TEXAS INSTRUMENTS, INC.

MAD007325814 (RTN# 4-0022)

TI has produced metal products at this 270-acre site since the early 1900s VOCs were first detected in on-site process water production wells in 1983. A groundwater extraction system has operated intermittently since 1986. DNAPL is likely present in bedrock, groundwater is shallow and contains TCE breakdown products. The site has an acid neutralization pond that was filled in about 1966, and former sodium hydroxide and caustic sludge lagoons with elevated mercury levels, which were capped in 1981, that area is now a ball field. An on-site landfill for scrap metal contaminated with low-level radiation was remediated under NRC direction in 1992-1993. In 1996, during TI's nuclear decommissioning project, radioactive, solvent-contaminated soil was removed. MA DEP has no details of the soil removal. It is unknown whether radiation in groundwater was evaluated. Citizens have concerns about elevated cancer incidences in the area. Metals have been detected at concentrations above ambient water quality criteria in a NPDES outfall at the site. The 2000 NPDES Permit and 1998 EPA Site Inspection Prioritization report have raised concerns about metal contamination in Cooper's Pond, on site. Land near Cooper's Pond is reportedly a potential future school location.

The site has complex hydrogeology and reports on nearby sites conflict with information in the TI reports. Portions of the site have been sold while the company has been downsizing. The site has a NFRAP designation on CERCLIS because of a low HRS score. However, new conditions may warrant its reevaluation. A technical screen audit of the Class C. Response Action Outcome Statement submitted for the site in 2001 shows it to be inadequate. More comprehensive audit actions and/or enforcement procedures are planned, pending additional analysis.

This site was not included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site.

WALTON & LONSBURY

MAD001197755 (RTN# 4-0023)

This site was archived from CERCLIS in 1996, however, based on new information, MA DEP requested in July 2003 that it be reinstated. The site is an existing manufacturing facility that conducted limited chrome plating. Groundwater has been impacted with chlorinated solvents and metals and in some areas has a pH of approximately 2. Chlorinated solvents have impacted indoor air of approximately 7 homes, although at concentrations below No Significant Risk

levels The low-pH groundwater is impacted with high concentrations of chromium and is discharging into Bliss Brook. The concentration of chromium in the surface water exceeds Ambient Water Quality Criteria. In some areas of the residential property backyards, where the groundwater is shallow and possibly discharging to the ground surface, there are high concentrations of chromium in the soil. Additional investigation is needed to assess the potential for an Imminent Hazard.

Additional assessment and remediation of the chlorinated solvent plume, the surface water and possibly the soil at the residential property is necessary, and the company is not able to conduct the work MA DEP requested EPA assistance to address the metals/low pH groundwater discharging into the brook. To that end, EPA has assigned the site to a contractor for an investigation. Property access was formally requested in January 2004.

Beverly FORMER CASCO CHEMICAL

MAD002577617 (RTN# 3-0231)

The site is a former chemical company which operated on land which has since been incorporated into the Beverly Municipal Airport. The company operated onsite from the mid-1960s until 1985, mixing and repackaging detergents, oil spill containment chemicals and non-petroleum cutting oil. Casco also stored a variety of other chemicals including organic solvents, oils, acids, inorganic chemicals, and pesticides onsite. Soils, sediments and groundwater at the site are contaminated with substances associated with the site. The site is classified as a Tier 2 (lower priority, no direct oversight) site under the MCP, currently in phase II of assessment and cleanup and is designated as a state-lead site by the federal Superfund program. It is the subject of

scrutiny by local citizens concerned that contamination from the site may be migrating towards Lake Wenham, a drinking water resource. This site was included in the GAO report of sites

VITALE FLY ASH PROPERTY

MAD981068273 (RTN# 3-0235)

awaiting NPL decisions. It is not a RCRA corrective action site

This is an 18-acre sand and gravel pit that was used as an un-permitted landfill. Fly ash from the New England Power Company is known to have been disposed of at the landfill, and can be seen at the land surface and eroding into Airport Stream. The fly ash deposits are up to 36 feet deep, and much of the waste is saturated, lying below the groundwater table. Groundwater, surface water and soils are contaminated with hazardous wastes associated with the site. The City of Beverly acquired the site for back taxes in 1980. It is classified as a Tier 2 (lower priority, no direct oversight) site under the MCP, currently in phase II of assessment and cleanup and is designated as a state-lead site by the federal Superfund program. It is the subject of scrutiny by local citizens concerned that contamination from the site may be migrating towards Lake Wenham, a drinking water resource. This site was included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site.

BEVERLY AIRPORT SEPTIC SYSTEM

MAD981068273 (RTN# 3-0235)

The site is the former location of U.S. Army NIKE Missile Battery BO-15, now part of the Beverly Municipal Airport. The septic system was constructed by the Army in the 1950s, and later used by a nearby chemical manufacturing and storage company from the mid 1960s until 1985. Due to the nature of the operations historically conducted at the site, a variety of chemicals, including chlorinated solvents, may have been disposed of in the septic system, and hazardous substances have been detected in soils, wetland sediment, surface water, and groundwater samples at the site. This is a Tier 2 (lower priority, no direct oversight) site under the MCP,



currently in phase II of assessment and cleanup and is designated as a state-lead site by the federal Superfund program. It is the subject of scrutiny by local citizens concerned that contamination from the site may be migrating towards Lake Wenham, a drinking water resource. This site was included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site

Billerica (NERO)

ROY BROTHERS HAULERS

MAD009870643 (RTN# 3-0236)

The site is a chemical hauling operation transporting liquid and dry industrial chemicals Numerous hazardous waste disposal areas have been identified onsite, and historical waste handling practices have resulted in contamination of soil, groundwater and surface water sediments. The site has been assessed via the MCP and is classified as RAO-C, meaning investigations and/or remedial actions have been taken which temporarily achieve the condition of no significant risk to public health and the environment. The RAO statement is subject to audit by the state and pending completion of the audit, the site is designated as a state-lead site by the federal Superfund program An EPA contractor completed a site assessment for this site in 1996 This site was included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site

Burlington

FORMER RCA CORP.

MAD001060698 (RTN# 3-0265)

This site has been identified as a state-lead site since July 2000, and is a Tier 1B, Phase V (medium priority) site in the state program Between 1958-1994, this 158-acre property was used for the manufacture and testing of military electronics equipment. Numerous chemical and waste storage and disposal areas have been identified during investigations of the site, and soils, groundwater and surface water sediments have been impacted by releases of hazardous substances onsite EPA's most recent action was completion of a site assessment for this site in 1996 This site was included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site

Canton **RELIABLE ELEC. FINISH**

MAD001059815 (RTN# 3-0287)

This is an inactive electroplating facility that occupies 2 2 acres. Operation began in 1967 and ceased in 1985 Wastes generated include methanol, metal hydroxide sludge and other hazardous substances Wastes were pre-treated prior to being discharged into the MDC system Contamination has been detected in the soils and groundwater. There is concern that the groundwater will contaminate nearby condominium wells. This site has been identified as a state-lead site since July 2000, and is a Tier 1B (medium priority) site under the MCP The site has submitted a Class C (Temporary) Response Action Outcome statement EPA's most recent action was completion of a site assessment for this site in 1996. This site was included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site

Danvers CREESE & COOK

MAD001031574 (RTN# 3-0303)

The site is an abandoned tannery located on a 10.7-acre parcel along the Crane River. The tannery occupied the area from the 1930s until 1984. There have been recent proposals to develop the property for residential use. Two landfills and one lagoon are located on the site. Wastes from these sources were placed in a partially lined waste disposal cell in 1990. Elevated levels of Arsenic remain in surface soils and contaminants have also been detected in the groundwater and surface water. The site is a Tier 1C (no direct state oversight) site in phase IV of the MCP site evaluation and cleanup process. An EPA contractor completed a site assessment for this site in 1996, and the EPA removal program is evaluating the site for possible further action. This site was included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site.

East Bridgewater EASTERN STATES STEEL

MASFN0103006 (RTN# 4-12940, 4-13087)

This site is not currently listed in CERCLIS, but was referred to EPA by MA DEP for inclusion on the Watch List EPA has completed a response action (capping) at this site, as well as at the abutting properties (MBTA Railroad and Precise Engineering) MA DEP will be working with the Town to have this site redeveloped as a Brownfields site. The state will seek alternative funding sources for the initial groundwater assessment. The site is classified as a Tier 1B Default site by MA DEP. This site was not included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site.

PRECISE ENGINEERING

(RTN# 4-0594)

This site is not currently listed in CERCLIS, but was referred to EPA by the MA DEP for inclusion on the Watch List. EPA has completed a response action (capping) at this site, as well as at the abutting properties (MBTA Railroad and Eastern States Steel). MA DEP will be working with the Town to have this site redeveloped as a Brownfields site. Before exhausting all their resources, the PRP determined that site groundwater is impacted with chlorinated solvents. The site is within the zone of contribution to a public water supply well.

While installing a fence around the property, EPA discovered free-phase oil below the ground surface and next to a stream that is a tributary to the Canoe River Using Oil Spill Trust Fund funds, MA DEP hired a contractor to remove the oil-contaminated soil. During soil excavation it was determined that free-phase oil was present within the building foundation. A recovery trench with oil collection sumps was installed along the foundation. MA DEP is periodically monitoring and removing the oil when feasible. Additional assessment activities are being conducted to determine whether additional work is necessary to remove the oil.

The site is classified as a Tier 1A (top priority, direct state oversight) site under the MCP This site was not included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site



Everett

FORMER COAL GASIFICATION PLANT

MAD981063142 (RTN# 3-0039)

The site (also known as Eastern Gas & Fuel and Island End River) is a former coal far processing facility abutting the Island End River that operated from the 1890s to the late 1950s. It encompasses at least six properties over an area of 8 acres in Everett and Chelsea, MA Releases of coal tar wastes to groundwater and surface water are documented, and the site is currently classified as a Tier 1A (direct state oversight) under the MCP in Phase II of site investigation and clean up The US Coast Guard is involved with emergency actions to address releases of coal tar to the Island End River The site has a long and complicated history of investigation, and is designated as a state-lead site by the federal Superfund program. This site was included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site

Foxboro **COCASSET STREET**

MAN000103179

This is a Tier 1A (top priority, direct state oversight) site, technically in phase II of investigation and cleanup under the MCP, though work is not progressing as the property is currently the only asset of the estate which owns it. The site was formerly used for disposal of septic wastes in lagoons, apparently some of these wastes came from industrial facilities, including the Hatheway and Patterson site in Mansfield As a result, groundwater and soil in the area are contaminated with metals, VOCs and pentachlorophenols. Interested parties had been working on the possibility of redeveloping most of the site for residential use, however, recent sampling shows elevated dioxin concentrations in site soil. The Rumford River, which flows through the Hatheway and Patterson site and is impacted by dioxin from that site, also flows through this site. MA DEP has referred the site to EPA for further assessment. The Town may be interested in applying for an EPA Brownfields Grant to further evaluate and possibly clean up some of the contamination

<u>Framingham</u> **COMMONWEALTH GAS**

MAD980524151 (RTN# 3-0589)

The site is the former location of a manufactured gas plant that operated from the late 1800s until 1967. Contamination of the 35-acre property resulted from the disposal, induced infiltration, and spillage of process solid and liquid wastes and by-products generated during coal and oil gasification processes Releases to soils, groundwater and surface water are documented The site has been identified as a state-lead site since July 2000 and is classified under the MCP as a Tier 1B (no direct state oversight) in phase IV of site investigation and cleanup. An EPA contractor completed a site assessment at this site in 1996. This site was included in the GAO report of sites awaiting NPL decisions, and is not a RCRA corrective action site

Needham MICROWAVE DEVELOPMENT LABS MAD001004092 (RTN# 3-0386)

MDL is an active facility designing and manufacturing radar devices. It is located on a 2-4 acre parcel of land with a long industrial history dating back to the 1800s. Releases of hazardous wastes have occurred onsite and at least two groundwater plumes of VOC contamination have been identified which threaten area drinking water supplies VOCs have also been detected in Rosemary Brook The site has been identified as a state-lead site since July 2000, and is classified as a Tier 1A (direct state oversight) in phase III of assessment by the state EPA is providing

MASSACHUSETTS

technical assistance to the state in the use of groundwater modeling and a permeable reactive barrier to address the TCE plumes. A site assessment was completed for this site in 1996 by an EPA contractor. This site was included in the GAO report of sites awaiting NPL decisions, and is not a RCRA corrective action site.

Seekonk

FORMER RHUBARB FARM

MAD980910137 (RTN# 4-0157)

Sludge containing pesticides, polychlorinated biphenyls, volatile organic compounds, and semivolatile organic compounds has been disposed of at this site. MA DEP believes that cadmium, chromium and toluene detected in the soil at the former farm may pose a substantial endangerment to public health, and has requested EPA assistance through the removal program

Waltham

WALTHAM INDUSTRIAL LABS

MAD001014927 (RTN# 3-0585)

This site is located in the back portion of an active manufacturing building, in a residential area The Labs occupied 23,500 square feet of the first and basement floors of the former Waltham Watch building Several manufacturing companies have used the building since 1854. The Labs occupied the building from 1959 to 1984 and were involved with the electroplating of numerous metals. Wastes consisted of rinse waters, acids, alkaline cleaners and plating solutions. Contamination has been detected within the building, in soils and in the Charles River. The site is designated as a state-lead site by the federal Superfund program. An EPA contractor completed a site assessment in 1997. This site was included in the GAO report of sites awaiting NPL decisions. It is not a RCRA corrective action site.

Weymouth WEYMOUTH NECK

MAD985277870 and MAD980909543 (RTN# 3-1360)

The site is the location of a former fertilizer plant, which operated on the Neck from 1861 until 1966 A NIKE missile launcher facility was located onsite in the 1950s-1970s. The property has subsequently been redeveloped, and now includes William Webb Memorial State Park, two condominium complexes, and three undeveloped lots. Wastes associated with the fertilizer operations are documented onsite, along with groundwater, soil, and sediment contamination. This site has been the focus of considerable community interest and concern. The central portion of the Neck is a Tier 1A (direct state oversight) site under the MCP currently in phase II, and the Webb State Park portion is listed as remedial by the state. However, it was discovered during EPA sampling on Webb State Park that one of the capped areas has been significantly eroded. DEM has agreed to perform sampling on Webb State Park to assess the need for further remedial actions. EPA has performed additional sampling of adjacent properties to determine the extent of contamination. The site is designated as a state-lead site by the federal Superfund program. The site was not included in the GAO report of sites awaiting NPL decisions, and is not a RCRA corrective action site.



Wilmington OLIN CHEMICAL CO MAD001403104 (RTN # 3-0471)

The Olin Chemical site is a Tier 1A site under the Massachusetts Contingency Plan site classification system. It consists of a 53-acre parcel owned by Olin, and an large groundwater plume that extends from the Olin property into the Maple Meadow Brook Aquifer, which supports five water supply wells for the Town of Wilmington. The Olin site also includes contaminated sediments in a ditch system that transports surface water from the site into the Aberjana River watershed. The site is contaminated primarily from process wastewaters that were discharged into unlined lagoons from the 1950s until the 1970s. The principal constituents of the contaminant plume are ammonia, sulfates, chloride, chromium, and sodium. The manufacturing operations ceased in 1986. Olin has funded extensive studies of the contamination since that time, and has taken some remedial measures, including a groundwater pump-and-treat system to clean up an area of oil spillage, and excavations to clean up the sediments in the on-site ditches and to remove buried drums. A landfill for the disposal of calcium sulfate wastes also exists on the Olin property, and has been capped. This is a state lead site with direct supervision by a DEP project manager due to its status as a Tier 1A site. The site was not included in the GAO report of sites awaiting NPL decisions, and is not a RCRA corrective action site.

MASSACHUSETTS



EMERGENCY PLANNING AND RESPONSE PROGRAM

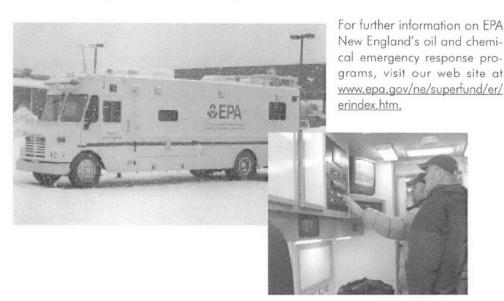
EPA New England's Emergency Planning and Response Program prepares for, and responds to oil and chemical spills to the environment, and supports and supplements local, state, and private parties' efforts to address emergencies.

EPA also oversees short-term cleanups across New England. Short-term cleanups, called "removal actions," reduce immediate threats to public health and the environment at sites that are typically less complex to cleanup than sites on the National Priorities List. Short-term cleanups may take anywhere from a few days to a few years to complete, depending on the type and extent of contamination.

An emergency occurs when hazardous or toxic chemicals are released into the environment causing potential health or environmental risks. EPA may need to respond within hours of the event.

Time-Critical Actions are those cleanups where, based on an evaluation of the site, EPA determines that on-site cleanup activities must be initiated within six months of determining that a short-term cleanup is appropriate. For time-critical actions, EPA conducts an investigation of the contamination and produces an "action memorandum" authorizing and outlining the cleanup process before beginning work.

Examples of the types of situations where EPA may be asked to respond immediately include those involving a fire, explosion or imminent, catastrophic contamination of a drinking water reservoir. In cases where an abandoned property has been identified with drums of toxic chemicals left behind, EPA may still assist in the cleanup but the timetable need not be as immediate. The following charts show the funds spent at each of the sites EPA has worked on in 2003.





SITES WITH SHORT-TERM CLEANUP ACTIVITIES COMPLETED IN 2003

Site Name	City	Date Completed	CERCLA Funds Expended
Connecticut			
American Thread Company	Willimantic	05/01/03	\$ 1,625,868 13
Inter Royal Corporation	Plainfield	07/22/03	\$ 239,058 25
Beany's Cleaners	Naugatuck	08/07/03	\$ 150,978.28
Chase Brass and Copper	Waterbury	08/10/03	\$ 3,772,999 14
Maine			•
Tuttle Estate	Lyman	09/16/03	\$ 87,519 64
Buckfield Trailers	Buckfield	07/18/03	\$ 224,113 02
Green Street Property	Houlton	10/24/03	\$ 216,558 08
One Market Square	Houlton	05/20/03	\$ 242,446 46
Massachusetts			
Sanborn Wood Factory	Winchendon	10/09/03	\$ 60,608.63
Evelyn Porter Estate	Foxboro	08/08/03	\$ 1,024,900 84
Hatheway & Patterson	Mansfield	10/17/03	\$ 1,026,640.02
Route 44	Taunton	05/27/03	\$ 1,353,466 33
Nuclear Metals	Concord	04/30/03	\$ 1,193,800 00
Coastal Metal Finishing	Merrimac	08/24/03	\$ 528,782 27
New Hampshire			
A. C Lawrence Leather	Winchester	12/12/03	\$ 240,784.88
Rhode Island			-
T D Mack East	Providence	06/30/03	\$ 543,715 79
Vermont			- ,
Buckley Drive Waterline	Bennington	04/30/03	\$ 629,813 80
Howe Cleaners	Barre	09/11/03	\$ 225,397 22
TLR Mill Complex	Bellows Falls	12/09/03	\$ 183,239 61

MASSACHUSETTS

SITES WITH ONGOING CLEANUP ACTIVITIES

Site Name	City	Date Started	CERCLA Funds Expended
Connecticut			
Bristol Franklin Street PCBs	Bristol	03/10/03	\$ 77,591 52
Brunswick Mill	Plainfield	04/09/03	\$ 151,144 35
Carvill Combing	Plainfield	04/09/03	\$ 104,556 32
EPAC	Waterbury	11/18/03	\$ 31,032.21
Chrome Engineering	Bridgeport	10/06/03	\$ 406,894 13
Massachusetts			
Sawyer Passway	Fitchburg	11/25/02	\$ 21,077.80
Temple-Stuart	Baldwinville	08/28/02	\$1,704,926 53
Fisherville Mill	Grafton	05/10/02	\$2,985,446 45
Sutton Lane Plating	Worcester	10/31/03	\$ 2,297 62
Oak Street	Taunton	06/12/02	\$ 614,945 27
Witchcraft Heights	Salem	09/26/02	\$1,977,199 05
Wells G&H	Woburn	03/28/03	\$ 59,038.00
Zımble Drum	Norwood	10/16/02	\$ 272,053 42
New Hampshire			
Spaulding Fibre	Milton	10/08/03	\$ 340,608 20
B & S Leasing	Plainfield	10/31/01	\$ 425 <i>,</i> 835 99
Eastern Parcel	Henniker	10/31/01	\$ 230,340 11
Grugnale Waste Disposal	Milford	11/11/03	\$ 431,642 79
Troy Mills Landfill	Troy	10/03/02	\$ 327,000 00
Rhode Island			
Centredale Manor			
Restoration Project	North Providence	10/22/03	\$ 65,000 00
20 Green Hill Road	Johnston	02/25/03	\$1,624,859.15
Vermont			
Elizabeth Mine	Strafford	03/19/03	\$1,266,366 00

U.S. EPA New England **Brownfields Overview**





EPA NEW ENGLAND BROWNFIELDS: RESTORING COMMUNITIES

Environmental contamination can rob a community of its economic potential and its social structure even when contamination is not severe enough for a Superfund designation. Any amount of contamination—or even the perception of possible contamination—can prevent the use

of valuable property Across New England, hundreds of properties are abandoned or underused because of the fear of environmental contamination, a contamination that may not even exist And at the same time these sites are left unused, development is consuming valuable open space elsewhere Although such idle properties, called brownfields, are usually urban warehouses or abandoned factories, they can also be found in rural areas. When mines are abandoned or fields host illegal dumping, the value of the property can plummet

EPA New England's Brownfields Program provides solutions by helping communities restore the value to these abandoned sites. The program focuses on providing grants and services to help communities assess contamination, plan for new uses, and clean sites to ready them for redevelopment

> "The term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant " (from the federal Brownfields Act of 2002)

Summary of Brownfields Program

Originally begun as an EPA initiative in January 1995, the US EPA National Brownfields Program has since evolved into a collaborative effort involving many federal, state and local partners In January 2002, the Small Business Liability Relief and Brownfields Revitalization Act ("the Brownfields law") was signed This law expanded potential federal assistance for Brownfields revitalization, including grants for assessment, cleanup, and job training. The law also includes provisions to establish and enhance state and tribal response programs, which will continue to play a critical role in the successful cleanup and revitalization of brownfields. Below is a summary of the US EPA Region 1 funding for each of the key Brownfields initiatives

Summary of Brownfields Funding in New England by State (1994-2003)

Program	СТ	ME	MA	NH	RI	VT
Assessment Grants	\$5,265,000	\$1,609,017	\$11,733,131	\$1,540,000	\$1,103,000	\$2,600,000
EPA TBA	\$1,582,343	\$362,181	\$2,542,782	\$242,533	\$305,000	\$250,000
Cleanup Grants	\$60,000	\$0	\$852,000	\$0	\$200,000	\$ 0
Revolving Loan Fund	\$5,750,000	\$2,650,000	\$10,468,000	\$2,450,000	\$4,700,000	\$1,000,000
Job Training	\$1,000,000	\$0	\$1,550,000	\$0	\$200,000	\$0
Showcase Communities	\$300,000	\$0	\$600,000	\$0	\$300,000	\$O
Voluntary Cleanup Program	\$2,175,667	\$750,892	\$2,729,974	\$1,908,369	\$1,338,820	\$307,030
State Site Assessments	\$714,960	\$519,545	\$781,000	\$1,255,293	\$598,115	\$458,000
TOTAL	\$16,847,970	\$5,891,635	\$31,256,887	\$7,369,195	\$8,744,935	\$4,615,030

Brownfields Assessment Program

The Brownfields Assessment Program consists of grants of up to \$400,000 initially to local, tribal and state governmental entities to conduct site assessment and related activities at brownfields sites. Funds can be utilized to assess properties contaminated with petroleum. Supplemental funds are available in later years.

Recipient	Funding
Boston	\$400,000
Brockton	\$750,000
Central Massachusetts Economic	5
Development Authority	\$293,710
Chelsea	\$200,000
Chicopee	\$200,000
Colrain	\$235,862
Fitchburg	\$200,000
Fitchburg Redevelopment Author	rity \$200,000
Franklin Regional Council	
of Governments	\$200,000
Gardner	\$200,000
Great Barrington	\$350,000
Greenfield	\$320,000
Holyoke	\$250,000
Lawrence	\$400,000
Lowell	\$600,000
Lynn	\$350,000
Mansfield	\$200,000
Marlborough	\$350,000
Mass Department of Environmer	ntal
Protection (Amesbury)	\$200,000
Merrimack Valley Planning	
Commission	\$400,000
Methuen	\$200,000
Montachusett Regional Planning	
Commission	\$350,000
Mystic Valley Development	
Commission	\$950,000
New Bedford	\$800,000
North Adams	\$140,770
Northhampton	\$200,000
Pioneer Valley Regional Planning	
Commission	\$200,000
Salem	\$200,000
Somerville	\$350,000
Springfield	\$800,000
Taunton	\$400,000
Walpole	\$200,000
Westfield	\$175,00
West Springfield	\$200,000
Worcester #1	\$106,289
Worcester #2	\$161,500
TOTAL	\$11,733,131

U.S. EPA New England **Brownfields Overview**

Targeted Brownfields Assessments

Under this initiative, EPA uses its contractors to conduct brownfields assessments at sites identified by the local entity as being a high-priority for reuse. Brownfields assessments typically involve a review of existing site records, site sampling and preparation of a preliminary clean-up cost estimate. The information gathered allows local government officials and developers to make informed decisions regarding the redevelopment potential of a site.

Site	City	Value
Site City Value		
54-67 Mill Street	Brookfield	\$75,000
Alden Corrugated	New Bedford	\$43,495
Amesbury Wharf	Amesbury	\$104,800
Assets Building	Lowell	\$75,000
Bargaineer	Brockton	\$45,847
Boston's Hope Dore	chester (Boston)	
Boston Specialty		•
Rehabilitation Hospital	Boston	\$75,000
City Pier	Fall River	\$75,000
Church Coal	Taunton	\$44,891
Coes Knife Property	Worcester	\$70,956
Davidson Street	Lowell	\$57,551
Draper Field	Hopedale	\$100,000
Essex Museum	Essex	\$153,000
Ferdinand Block/DHP	Boston	\$75,000
former Food & Fuel	Greenfield	\$100,000
former Tremont Villa	Everett	\$66,473
former Beacon Chevrolet	Lynn	\$9,915
former DPW Yard	Newburyport	\$63,473
former DPW Yard	Northhamptor	\$75,000
Gilbertville Woven Label Site		\$75,000
Hallmark Van Lines	Holyoke	\$69,886
Knapp Shoe	Brockton	\$50,025
Marine Railways Property	Gloucester	\$122,504
Modern Electroplating	Boston	\$78,311
Montello Auto Body	Brockton	\$67,315
Old Northhampton		
Fire Station	Northhampton	
Old Sewer Beds	Franklın	\$75,000
Omega Processing Site	Monson	\$75,000
Omniwave Electronica	Gloucester	\$89,501
Oxford Paper Mill	Lawrence	\$115,241
Pearl Street Mill	Bellington	\$100,000
Quarry Street		
Highpoint Property	Quincy	\$10,640
Roundhouse Parking Lot	Northhampton	
Setsam Property	Foxborough	\$100,000
Standard Times Field	New Bedford	\$60,175
TOTAL		2,542,782

Cleanup Grant Program

Under this initiative, EPA funds are awarded to eligible local, state, tribal and non-profit entities to conduct cleanup activities on eligible brownfields properties. Grants are for up to \$200,000 per property. Entities must own the property at the time of award to be eligible for funding

City	Site	Funding
Brockton		\$100,000
Worcester	Main South CC	\$200,000
Malden — Medford – Everett	Mystic Valley Development Corporation	\$80,000
New Bedford		\$220,000
Somerville		\$200,000
Taunton	Wier Economic Investment	\$52,000
	Revitalization Corporation	
TOTAL		\$852,000

Revolving Loan Fund Pilots

Under this initiative, pilots are awarded to eligible local, tribal and state entities to establish and capitalize revolving loan funds to assist private and public entities in cleaning up contaminated sites. Grants are for up to \$1,000,000 and eligible communities may team together to establish larger revolving loan funds pools

Recipient	Funding
Boston	\$1,000,000
Brockton	\$500,000
Central Massachusetts Economic	<u> </u>
Development Authority	\$18,000
Franklin Regional Council	
of Governments	\$1,000,000
Gloucester	\$500,000
Lawrence	\$500,000
Lowell	\$500,000
Lynn	\$450,000
Montachusett Regional	
Planning Commission	\$500,000
Mystic Valley Development	
Authority	\$1,000,000
New Bedford	\$500,000
Pioneer Valley Planning	
Commission	\$2,000,000
Somerville	\$500,000
Taunton	\$500,000
Worcester	\$1,000,000
TOTAL	\$10,468,000



Brownfields Job Training Pilots

The Brownfields Job Training Program funding is used to train workers in the field of hazardous waste assessment and remediation. To be eligible for these pilots, the applicants must be affiliated with an existing Brownfields-funded grant recipient.

Funding
\$200,000
\$200,000
\$200,000
\$475,000
\$275,000
\$200,000
\$1,550,000

Showcase Communities

As part of the multi-federal agency Brownfields National Partnership, sixteen communities were selected to receive Showcase Community designation following a national competition. The federal partners work with selected communities to revitalize brownfields properties EPA provided each with a \$200,000 Brownfields Demonstration Pilot and assigned an EPA employee to work full time in the designated community for two years

City	Funding
Lowell	\$300,000
Mystic Valley	
(Malden, Medford, Everett)	\$300,000
TOTAL	\$600,000

Financial Assistance to State Brownfields Programs

EPA also offers funding to directly support state brownfields activities including funds to establish and enhance state brownfields programs (also known as voluntary cleanup programs), to conduct site specific assessment and cleanup, to develop revolving loan fund programs and to develop insurance tools. Below is a summary of the type and amount of funding received in Massachusetts.

Program	Funding
Voluntary Clean-up Program	\$2,729,974
Brownfields Site Assessment and Cleanup.	\$781,000

Summary of EPA Brownfield Funding in Massachusetts (1994-2003)

Program	Funding
Assessment Pilots	\$11,733,131
Targeted Brownfields Assessment	\$2,542,782
Cleanup Grant Program	\$852,000
Revolving Loan Fund Pilots	\$10,468,000
Job Training Program	\$1,550,000
Showcase Communities	\$600,000
Voluntary Cleanup Program	\$2,729,974
State Brownfields Site Assessments	\$781,000
GRAND TOTAL	\$31,256,887