



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 Introduction

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. I 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

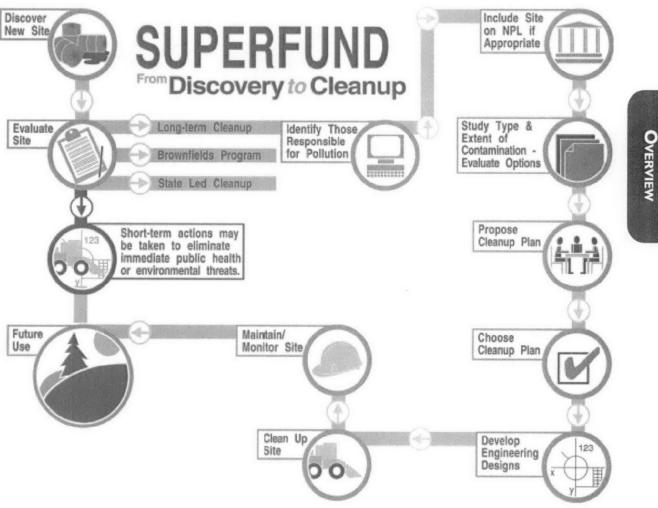
OSRR's Emergency Planning and Response branch prepares for and conducts responses to discharges of oil and releases of hazardous substances. In addition to planning and preparing for regional emergency responses, getting ready for counter-terrorism activities, inspecting oil storage facilities, cleaning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

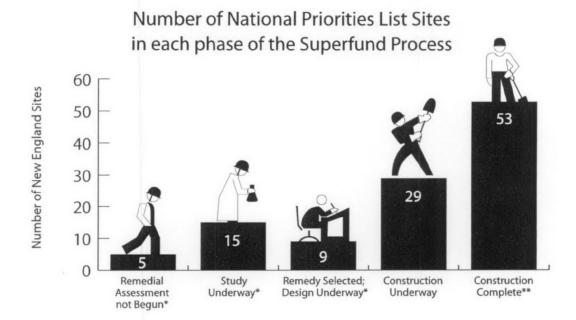
Short-term cleanups, also referred to as "removal actions," address immediate threats to public health and the environment Short-term cleanups may take anywhere from a few days to a few years, depending on the type and extent of contamination.

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







SUPERFUND SITE CLEANUP STATUS 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 ^ Hath & 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 r	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 NH 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 Western Sand & Gravel
VERMONT		Elizabeth Mine Ely Copper Mine		Parker Landfill Pine Street Canal 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

U.S. EPA New England **National Priorities List Sites**



2003 Superfund Fast Facts—New Hampshire

EPA has worked aggressively to clean up hazardous waste problems in New Hampshire In cooperation with the New Hampshire Department of Environmental Services, final cleanup activities are completed, underway, or in design at most of New Hampshire's 20 NPL sites.

- 80% of New Hampshire's Superfund sites on the National Priorities List - 16 of 20 sites have undergone or are undergoing cleanup construction, or are in final design.
- 11 Superfund sites have all cleanup construction completed, 5 Superfund sites have cleanup construction underway
- 1 site has been proposed to the National Priorities List; Mohawk Tannery in Nashua
- Region 1 has helped promote economic redevelopment by removing 146 New Hampshire sites from the CERCLIS waste list
- The Superfund Program has spent over \$156.2 million in New Hampshire to clean up Superfund National Priorities List sites
- EPA has spent over \$32.4 million on site assessment, investigation and cleanup at non-National Priorities List sites in New Hampshire.
- 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 Hampshire, via direct payments to the Superfund Trust Fund or via funding of studies and cleanup work, exceeds \$290.6 million, including \$2.6 million in 2003

Source EPA New England, January 1, 2004

Barrington

Tibbetts Road

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

NPL Status Listed in 1986 Cleanup Status. All Construction Completed in 1998 Superfund \$\$ Spent \$2 8 million

Conway

Kearsarge Metallurgical

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

NPL Status Listed in 1984 Cleanup Status All Construction Completed in 1993 Superfund \$\$ Spent \$9.9 million

Dover

Dover Municipal Landfill

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

NPL Status Listed in 1983 Cleanup Status Remedy Selected, Design Underway Superfund \$\$ Spent \$1 9 million

Epping

Keefe Environmental Services

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

NPL Status Listed in 1983 Cleanup Status All Construction Completed in 1993 Superfund \$\$ Spent \$6.9 million

Greenland/North Hampton

Coakley Landfill

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

NPL Status Listed in 1986 Cleanup Status All Construction Completed in 1999 Superfund \$\$ Spent \$3.9 million



Kingston

Ottati and Goss/Kingston Steel Drum

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

NPL Status Listed in 1983 Cleanup Status Construction Underway Superfund \$\$ Spent \$34 8 million

Londonderry

Auburn Road Landfill

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

NPL Status. Listed in 1983 Cleanup Status All Construction Completed in 1998 Superfund \$\$ Spent \$3.6 million

Tinkham's Garage

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

NPL Status Listed in 1983 Cleanup Status All Construction Completed in 1995 Superfund \$\$ Spent \$2 million

Town Garage/Radio Beacon

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

NPL Status Listed in 1989 Cleanup Status All Construction Completed in 1992 Superfund \$\$ Spent \$1.9 million

Merrimack

New Hampshire Plating

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

NPL Status Listed in 1992 Cleanup Status Wetlands Purchase Completed Site Cleanup Remedy Selected, Design Underway Superfund \$\$ Spent. \$12 million

Milford

Fletcher's Paint Works & Storage

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

NPL Status Listed in 1989 Cleanup Status Keyes Field Assessment Not Begun Other Areas Construction Underway Superfund \$\$ Spent: \$8 1 million

Savage Municipal Water Supply

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

NPL Status Listed in 1984 Cleanup Status OK Tool Area Construction Underway Extended Plume Remedy Selected, Design Underway Superfund \$\$ Spent \$19.1 million

Nashua

Mohawk Tannery

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

NPL Status Proposed in 2000 Cleanup Status Study Underway, Removal Activities Planned Superfund \$\$ Spent \$1.5 million

Sylvester/Gilson Road

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

NPL Status Listed in 1983 Cleanup Status All Construction Completed in 1992 Superfund \$\$ Spent \$19.5 million

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



Peterborough

South Municipal Water Supply Well

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

NPL Status Listed in 1984 Cleanup Status All Construction Completed in 1995 Superfund \$\$ Spent \$1.2 million

Plaistow

Beede Waste Oil

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

NPL Status Listed in 1996

Cleanup Status Remedy Selected, Design Underway, Removal Activities Ongoing Superfund \$\$ Spent \$18.4 million

Portsmouth, Newington, and Greenland

Pease Air Force Base

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

NPL Status Listed in 1990 Cleanup Status All Construction Completed in 2000 Superfund \$\$ Spent \$3.4 million

Raymond

Mottolo Pig Farm

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

NPL Status Listed in 1987 Cleanup Status All Construction Completed in 1993 Superfund \$\$ Spent \$3 million

Somersworth

Somersworth Sanitary Landfill

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

NPL Status Listed in 1983
Cleanup Status Construction Underway
Superfund \$\$ Spent \$1.5 million

Troy

Troy Mills Landfill

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

NPL Status Listed in 2003

Cleanup Status Remedial Assessment not begun, Removal Activities Ongoing
Superfund \$\$ Spent \$816,000

PAGE NOT

AVAILABLE

DIGITALLY

BEEDE WASTE OIL

Plaistow, New Hampshire April 2004

Lead Federal and State Listed on the NPL: 12/23/1996

Site Description:

The Beede Waste Oil Superfund site is located at 7 Kelley Road in Plaistow, New Hampshire The site occupies approximately 40 6 acres and is comprised of two parcels Parcel 1 (21 6 acres) is owned by Hampshire Realty Trust and has been the location of petroleum and waste oil storage/handling/recycling since the 1920s Parcel 2 (19 acres) is owned by Sun Realty Trust and has been used largely for commercial sand and gravel operations

Parcels 1 and 2 are both zoned as medium density residential property. The abutting properties in the vicinity of the site are primarily residential. The topography of Parcel 1 is relatively flat, except the northern boundary which slopes gently down to Parcel 2. The topography of Parcel 2 has been altered by former sand and gravel mining operations. The 10,000 square foot former operations building remains on Parcel 1. Most of the site is unpaved, except for a parking area adjacent to the building. A majority of the site is open and unvegetated, except for some wooded areas around the perimeter.

Current Site Status and Cleanup Actions to Date.

- EPA's \$48 million cleanup plan, announced in January 2004, requires the following
 - Excavate approximately 75,000 cubic yards of PCB and lead-contaminated shallow soil (between 0 and 10 feet) and treat or dispose of off-site,
 - Treat approximately 70,000 cubic yards of VOC-contaminated deep soil (greater than 10 feet) with soil vapor extraction,
 - Establish "Activity and Use Restrictions" to prevent the excavation of contaminated soils remaining in place deeper than 10 feet,
 - Excavate approximately 1,000 cubic yards of oil-saturated sediment in Kelley Brook and dispose of off-site,
 - Restore excavated areas,
 - Monitor surface water and sediment to evaluate the effectiveness of the remedy on remaining Kelley Brook sediments,
 - Pump and treat VOC-contaminated groundwater,
 - · Monitor groundwater to evaluate the effectiveness of the pump and treat system, and
 - Establish a "Groundwater Management Zone" the area of drinking water supply wells to prevent the use of groundwater until drinking water standards are met
- EPA anticipates that final cleanup activities will be performed and/or funded by the Potentially Responsible Parties (PRPs) and will begin around 2006
- In 1997, EPA and the New Hampshire Department of Environmental Services (NHDES) removed approximately 1.1 million gallons of waste oil, sludge, and water from over 100 above ground storage tanks and 800 drums formerly located on the property. In addition, EPA installed a 120 foot long trench to intercept oil seeping into Kelley Brook
- In 2000, EPA installed a vacuum extraction system to remove mobile floating oil from the ground-water table

- In 2001-2002, EPA and NHDES completed an investigation of the nature and extent of contamination in all media at the site, an evaluation of potential human health and environmental risks, and an evaluation of technologies and alternatives to fully address contamination and risks at the site
- In 2002, EPA awarded a \$99,350 Superfund Redevelopment Initiative grant to the town of Plaistow The town developed a reuse plan which calls for the site to be developed for residential and recreational reuse
- NHDES continues to sample groundwater from residential and on-site monitoring wells
- EPA continues to monitor the site to ensure there is no immediate threat to human health or the environment pending the start of long-term cleanup work

For more information on this site, please read the Fact Sheet on the Region I/New England Superfund Web site www epa gov/ne/superfund/sites/beede

Current Funding Status:

• EPA and NHDES have spent about \$19 million in investigation and interim cleanup work at the site EPA has raised \$6.2 million from three *de minimis* settlements with a total of 923 parties and is currently planning a fourth *de minimis* settlement with about 800 parties in 2004

Key Accomplishments:

- EPA has raised about \$6 3 million through three de minimis settlements to date
- From 1996 to 1997, EPA and NHDES removed approximately 1.1 million gallons of waste oil, sludge, and water from the site
- Since 2000, EPA has removed over 80,000 gallons of oil from the groundwater table
- EPA announced \$48 million cleanup plan in January 2004



MOHAWK TANNERY

Nashua, New Hampshire April 2004

Lead Federal and State NPL Status: Proposed 5/11/2000

Site Description:

The Mohawk Tannery site in Nashua, NH consists of two contiguous parcels that are each approximately 15 acres a developed "northern parcel," which was historically used for tannery manufacturing and waste disposal operations, and a "southern parcel" that is undeveloped. The site is bordered by the Nashua River to the west, the Fimbel Door Company to the north, and residential neighborhoods to the east and southeast. The former tannery facility produced tanned hides for leather from 1924 until it closed in 1984. During its operation, the tannery produced a number of waste streams, which initially were discharged into the adjacent Nashua River and later were disposed of onsite in unlined lagoons. Several of the onsite waste lagoons are located within the 100-year flood plain of the Nashua River. The site has been re-zoned for residential use by the City of Nashua and there is significant interest to see the site put back into productive use. There are approximately 5,000 residents located within four-square-miles of the site.

Current Site Status and Cleanup Actions to Date:

- In January of 2001, EPA completed a short-term response to characterize and dispose of drums and small containers containing hazardous substances, asbestos containing material, caustic wastes, and the contents of a clarifier tank. In addition, a number of gates were repaired and warning signs were posted to further secure the site.
- In July of 2002, EPA completed a cost/benefit analysis to further characterize the nature and extent of contamination in the unlined lagoons and several other disposal areas, and to evaluate potential removal options for these materials. The analysis identified a preferred cleanup approach, excavation of approximately 60,000 cubic yards of waste for disposal off-site at a cost of approximately \$15 million. This analysis underwent public comment in August 2002, and was favorably received by the community, city, and state.
- In July of 2002, the City of Nashua requested that finalization of the site on the NPL be delayed while the city pursued alternative means to fund the cleanup
- In June of 2003, the New Hampshire Department of Environmental Services (NHDES) initiated field investigation activities at the site as part of the long-term cleanup investigation being funded through a Cooperative Agreement with EPA. The investigation of the buildings, groundwater, and soil will cost approximately \$1 million and take approximately 18 months to complete
- A steering committee was formed by the City of Nashua in the Spring of 2003 to make a
 recommendation to the city on whether the site should be finalized on the NPL In July of 2003,
 the steering committee recommended that finalization of the site on the NPL be delayed to allow
 discussions with several private developers to continue to take place. The steering committee
 hopes that these discussions will lead to an expedited privately funded cleanup.
- EPA continues to monitor the site to ensure there is no immediate threat to human health or the environment pending the start of long-term cleanup work

United States Environmental Protection Agency New England

For more information on this site, please read the Fact Sheet on the Region 1/New England Superfund Web site: www.epa.gov/ne/superfund/sites/mohawk

Current Funding Status:

- As of March 2003, EPA has spent \$1.5 million in response costs at the site, primarily associated with the cleanup activities described above.
- EPA has determined that this site does not pose an immediate threat to human health, and 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

Key Accomplishments:

- EPA disposed of drums and small containers containing hazardous substances, asbestos containing material, caustic wastes, and the contents of a clarifier tank
- EPA completed an analysis to characterize the nature and extent of contamination in the unlined lagoons and several other disposal areas, and to evaluate potential removal options for these materials
- EPA completed field sampling and investigative activities to characterize the nature and extent of contamination in the groundwater, soil beneath the tannery buildings, and areas of the site outside of the disposal areas.

NEW HAMPSHIRE PLATING

Merrimack, New Hampshire April 2004

Lead Federal

Listed on the NPL: 10/14/1992

Site Description:

The New Hampshire Plating Company (NHPC) Superfund site, located in Merrimack, New Hampshire, was an electroplating facility from 1962 to 1985. A 13 acre site, it is surrounded by light industry, commercial businesses, and a few private residential dwellings. During operation, the facility discharged electroplating wastes to a series of four lagoons, contaminating the soil and groundwater with a variety of metals, cyanide, and a variety of chlorinated organic solvents including trichloroethylene (TCE) and tetrachloroethylene (PCE). Drinking water wells are located within four miles of the site and are a source of drinking water for an estimated 39,000 people. The immediate area is served by a public water supply.

Current Site Status and Cleanup Actions to Date:

- EPA's cleanup plan, published in September 1998, will do the following
 - Treat approximately 60,000 yards³ of metals contaminated soil via chemical fixation (a process through which the soil composition is chemically altered to bind toxic metals to the soil so they will no longer leach to groundwater). The treated soil will be consolidated under a two foot soil cover on-site. The Town plans to develop recreational fields following the clean-up.
 - Remove chlorinated organic solvents and metals in the groundwater using natural attenuation. EPA will continue to test and monitor the groundwater and surface water throughout the cleanup process,
 - Establish systems to prevent the consumption of groundwater and the removal of treated soils, and
 - Alter the terrain of the site to help the community reuse the site for recreational purposes
- In 1987, the New Hampshire Department of Environmental Services (NHDES) stabilized the lagoon system, removed contaminated debris, and gave the NHPC building a superficial cleaning
- From 1990 to 1991, EPA stabilized approximately 18,600 tons of contaminated sludge and disposed of an additional 5,000 tons of soil off-site. A fence was also installed around the site to completely eliminate unauthorized access.
- •In 1994, EPA
 - Placed laboratory waste into secure containers and shipped off-site for disposal,
 - Removed asbestos-containing materials,
 - Demolished the building, floor slab, and foundation,
 - Removed an underground storage tank, and
 - Identified the contaminants in the soil and covered the ground where the building once stood
- The lagoon system sits in a wetland area, and in 2002, EPA completed the necessary compensatory wetland acquisitions. The Grassy Pond wetland area was purchased in 1998 and the Green's Pond wetland area was purchased in 2002 at a combined cost of \$1.4 million.

U.S. EPA New England Sites of Special Interest



- In 2001, EPA awarded a \$99,050 Superfund Redevelopment Initiative grant to the town of Merrimack. The town developed a reuse plan which calls for the site to be developed into a recreational area consisting of two or three soccer or ball fields with associated parking areas.
- EPA, through the (NHDES), continues to sample groundwater from about 30 monitoring wells on and around the site, as well as surface water from Horseshoe Pond and the Merrimack River Three supply wells in the adjacent town of Litchfield are also monitored annually and remain safe for use The entire impacted area is served by a public water supply system
- EPA continues to monitor the site to ensure there is no immediate threat to human health or the environment pending the start of long-term cleanup work

For more information on this site, please read the Fact Sheet on the Region I/New England Superfund Web site www epa gov/ne/superfund/sites/nhplating

Current Funding Status:

- EPA has spent \$12 million in response costs to date, primarily on removal and site characterization activities EPA continues to spend about \$50,000 per year to monitor the site for further contamination
- EPA has determined that this site does not pose an immediate threat to human health, and 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

Key Accomplishments:

- From 1990 to 1991, EPA stabilized approximately 18,600 tons of contaminated sludge and disposed of an additional 5,000 tons of soil off-site
- EPA awarded a \$99,050 Superfund Redevelopment Initiative grant to the town to develop and implement a reuse plan which calls for recreational use of the site property

TROY MILLS LANDFILL

Troy, New Hampshire April 2004

Lead. Federal Listed on the NPL: September 2003

Site Description:

The site, located in Troy, New Hampshire is a 10-acre inactive landfill. In a two-acre portion of the landfill 6,000 to 10,000. 55-gallon drums are buried. Historical information shows that from 1967 until 1978, Troy Mills, Inc., used the area as a landfill for the disposal of solid and liquid wastes generated at their facility in town. Analytical results of the drum contents revealed liquids and sludges consisting of flammable substances, inorganic, volatile and semi-volatile organic compounds. Analytical results of surface and subsurface soil samples, as well as surface water samples collected down gradient from the drum burial areas, confirm that the drum contents are leaking and have contaminated groundwater and surface water posing a public health threat. An estimated 3,886 people reside within four radial miles of the site. Sensitive environments located within this area include 2,173 acres of wetlands, a CWA-protected water body, and habitats for eight state-listed endangered or threatened species.

Current Site Status and Cleanup Actions to Date:

- EPA Region I funded and completed the construction of a 300-foot interceptor trench system to significantly reduce the migration of hazardous substances from the site and is currently in the process of making modifications to the system. During the installation process the following activities were performed.
 - Re-graded the access road and built additional access roads for the installation of eight additional monitoring wells
 - Installed booms at several locations to temporarily contain leachate outbreaks from the landfill
 - Installed eight piezometers to delineate groundwater contours at the site
 - Constructed a berm along the access road upgradient of the trenches to divert storm water runoff, and repaired the bridge leading into the site

For more information on this site, visit www epa gov/ne/superfund/sites/troy

Current Funding Status:

- EPA received \$8 million in supplemental site-specific funding through EPA's National Prioritization Panel process to remove the buried drums. Work is expected to begin in the summer of 2004 with the goal of completing most activities prior to the end of the construction season.
- EPA has spent \$500,000 for the removal action through April 2004
- EPA awarded a \$75,000 for a Targeted Brownfields Assessment of the Troy Mills facility



NEW HAMPSHIRE WATCH LIST

Sites included on the "Watch List" are those that both the state and EPA Site Assessment programs agree merit increased state-federal coordination and oversight. These sites are but a small subset of the several thousand "active" sites included in the EPA Region 1 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 NPL candidates, 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 will be reviewed and revised, as appropriate, annually.

CHLOR-ALKAI FACILITY (FORMER), BERLIN NHN000103313

The Chlor-Alkali property is an approximately 5-acre parcel located on the eastern bank of the Androscoggin River. The Chlor-Alkali facility has operated at the site from 1898 until the 1950s when the facility ceased operation and was dismantled. At some point during the operation of the facility mercury cells were used to produce chlorine gas and sodium hydroxide for the adjacent paper mill.

Elemental mercury (i.e, liquid mercury) can be observed in the cracks and fissures in the bedrock along the Androscoggin River banks. To date approximately 130 pounds of mercury have been recovered from the riverbanks and sediments. Overburden on the property is contaminated with mercury and lead in the 1000s of ppm range. The groundwater is contaminated with mercury, lead and chlorinated VOCs.

The NHDES requested EPA assistance in December 2003. In subsequent discussions the NHDES confirmed that the property should be evaluated for potential addition to the NPL. An EPA contractor has been tasked to prepare a PA/SI report of the property and an EPA Headquarters contractor will be preparing the HRS package. The reports may be available as soon as the fall of 2004.

UPPER CONNECTICUT RIVER STUDY

(Special study area)

The Superfund Site Assessment program is coordinating with VT and NH in a "site screening" effort. Under the Superfund site screening effort approximately 100 potential hazardous waste sources will be evaluated for CERCLIS listing or further state remedial actions. EPA will coordinate with both states to select the study area, the sites to be evaluated and to select the decision for additional actions (if needed). In addition, the Superfund program will evaluate:

- a. the effectiveness of an area wide site discovery effort
- b. the potential for RCRA generators to be evaluated as CERCLIS/NPL sites
- c. the benefits of coordinating efforts with other EPA programs

Approximately 100 sediment samples from the upper 150 miles of the river were collected in late August. The sampling locations were coordinated with a concurrent fish tissue sampling study. An EPA contractor has started to load the data into the STORET system. Work continues on developing limited community profiles of potential problem areas within each of the 38 riverside communities. The final reports are expected to be available in the spring of 2004.



EMERGENCY PLANNING AND RESPONSE PROGRAM

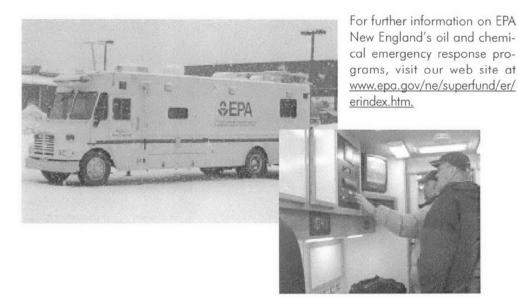
EPA New England's Emergency Planning and Response Program prepares for, and responds to oil and chemical spills to the environment, and supports and supplements local, state, and private parties' efforts to address emergencies.

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	-	<u> </u>	
T D Mack East	Providence	06/30/03	\$ 543,715.79
Vermont	-	<u></u>	
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

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	\$ 425,835 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





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)

ст	WE	MA	NH	RI	٧ī
\$5,265,000	\$1,609,017	\$11,733,131	\$1,540,000	\$1,103,000	\$2,600,000
\$1,582,343	\$362,181				\$250,000
\$60,000	\$0	\$852,000	\$0	\$200,000	\$0
\$5,750,000	\$2,650,000	\$10,468,000	\$2,450,000	\$4,700,000	\$1,000,000
\$1,000,000	\$0	\$1,550,000	\$0	\$200,000	\$0
\$300,000	\$ 0	\$600,000	\$0	\$300,000	\$0
\$2,175,667	\$750,892	\$2,729,974	\$1,908,369	\$1,338,820	\$307,030
\$714,960	\$519,545	\$781,000	\$1,255,293	\$598,115	\$458,000
\$16,847,970	\$5,891,635	\$31,256,887	\$7,369,195	\$8,744,935	\$4,615,030
	\$5,265,000 \$1,582,343 \$60,000 \$5,750,000 \$1,000,000 \$300,000 \$2,175,667 \$714,960	\$5,265,000 \$1,609,017 \$1,582,343 \$362,181 \$60,000 \$0 \$5,750,000 \$2,650,000 \$1,000,000 \$0 \$300,000 \$0 \$2,175,667 \$750,892 \$714,960 \$519,545	\$5,265,000 \$1,609,017 \$11,733,131 \$1,582,343 \$362,181 \$2,542,782 \$60,000 \$0 \$852,000 \$5,750,000 \$2,650,000 \$10,468,000 \$1,000,000 \$0 \$1,550,000 \$300,000 \$0 \$600,000 \$2,175,667 \$750,892 \$2,729,974 \$714,960 \$519,545 \$781,000	\$5,265,000 \$1,609,017 \$11,733,131 \$1,540,000 \$1,582,343 \$362,181 \$2,542,782 \$242,533 \$60,000 \$0 \$852,000 \$0 \$1,000,000 \$0 \$1,000,000 \$0 \$1,000,000 \$0 \$300,000 \$0 \$2,175,667 \$750,892 \$2,729,974 \$1,908,369 \$714,960 \$519,545 \$781,000 \$1,255,293	\$5,265,000 \$1,609,017 \$11,733,131 \$1,540,000 \$1,103,000 \$1,582,343 \$362,181 \$2,542,782 \$242,533 \$305,000 \$60,000 \$0 \$852,000 \$0 \$200,000 \$5,750,000 \$0 \$10,468,000 \$2,450,000 \$4,700,000 \$1,000,000 \$0 \$1,550,000 \$0 \$200,000 \$300,000 \$0 \$600,000 \$0 \$300,000 \$2,175,667 \$750,892 \$2,729,974 \$1,908,369 \$1,338,820 \$714,960 \$519,545 \$781,000 \$1,255,293 \$598,115

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
Claremont	\$200,000
Concord	\$90,000
NH Department of	
Environmental Services	\$350,000
Nashua	\$300,000
NH Office of State Planning	\$400,000
Southwest Regional	
Planning Commission	\$200,000
TOTAL	\$1,540,000

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
Ambargis Mill	Newport	\$75,000
Craig Supply	Durham	\$70,409
Former Tannery Site	Milton	\$50,655
Henry's Tire Property	Sutton	\$6,818
Lamont Labs	Londonderry	\$30,954
J P Stevens Mill	Franklın	\$8,697
TOTAL		\$242,533

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

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 clean-

Recipient	Funding
State of New Hampshire	\$2,450,000
TOTAL	\$2,450,000

ing up contaminated sites. Grants are for up to \$1,000,000 and eligible communities may team together to establish larger revolving loan funds pools.



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.

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.

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 New Hampshire.

Program	Funding
Voluntary Clean-up Program	\$1,908,369
Brownfields Site Assessment	
and Cleanup:	\$1,255,293
	\$1,255,293

Summary of EPA Brownfield Funding in New Hampshire (1994-2003)

Program	Funding
Assessment Pilots	\$1,540,000
Targeted Brownfields Assessment	\$242,533
Cleanup Grant Program	\$0
Revolving Loan Fund Pilots	\$2,450,000
Job Training Program	\$0
Showcase Communities	\$0
Voluntary Cleanup Program	\$1,908,369
State Brownfields Site Assessments	\$1,255,293
GRAND TOTAL	\$7,396,195