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Agency

Solid Waste And
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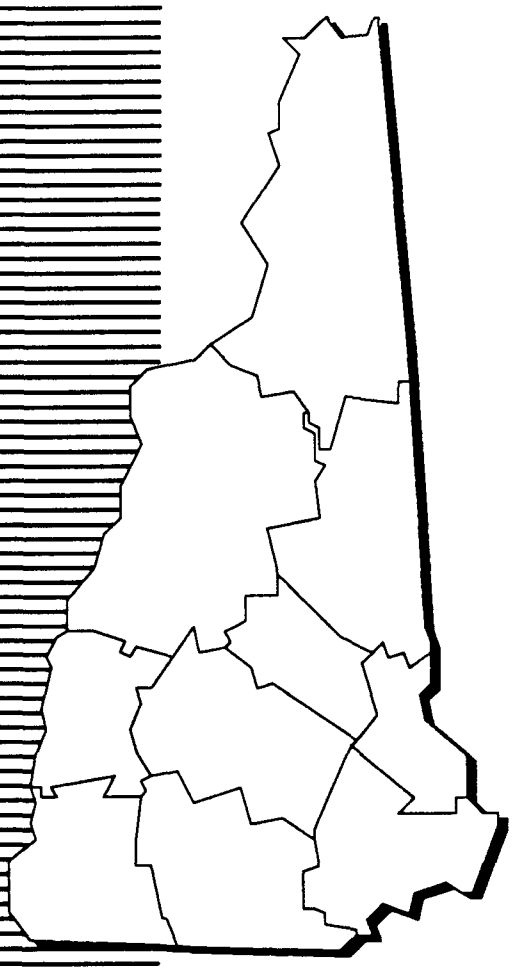
EPA

National Priorities List Sites:

New Hampshire



1991

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September 1991

NATIONAL PRIORITIES LIST SITES:
New Hampshire

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Emergency & Remedial Response
Office of Program Management
Washington, DC 20460

If you wish to purchase copies of any additional State volumes contact:

National Technical Information Service (NTIS)
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161
(703) 487-4650

The National Overview volume, **Superfund: Focusing on the Nation at Large (1991),** may be ordered as PB92-963253.

The complete set of the overview documents, plus the 49 state reports may be ordered as PB92-963253.

TABLE OF CONTENTS

A Brief Overview

WHY THE SUPERFUND PROGRAM?

As the 1970s came to a close, a series of headline stories gave Americans a look at the dangers of dumping industrial and urban wastes on the land. First there was New York's Love Canal. Hazardous waste buried there over a 25-year period contaminated streams and soil, and endangered the health of nearby residents. The result: evacuation of several hundred people. Then the leaking barrels at the Valley of the Drums in Kentucky attracted public attention, as did the dioxin-tainted land and water in Times Beach, Missouri.

In all these cases, human health and the environment were threatened, lives were disrupted, and property values were reduced. It became increasingly clear that there were large numbers of serious hazardous waste problems that were falling through the cracks of existing environmental laws. The magnitude of these emerging problems moved Congress to enact the Comprehensive Environmental Response, Compensation, and Liability Act in 1980. CERCLA — commonly known as Superfund — was the first Federal law established to deal with the dangers posed by the Nation's hazardous waste sites.

After Discovery, the Problem Intensified

Few realized the size of the problem until the Environmental Protection Agency (EPA) began the process of site discovery and site evaluation. Not hundreds, but thousands of potential hazardous waste sites existed, and they presented the Nation with some of the most complex pollution problems it had ever faced.

Since the Superfund program began, hazardous waste has surfaced as a major environmental concern in every part of the United States. It wasn't just the land that was contaminated by past disposal practices. Chemicals in the soil were spreading into the groundwater (a source of drinking water for many) and into streams, lakes, bays, and wetlands. Toxic vapors contaminated the air at some sites, while improperly disposed or stored wastes threatened the health of the surrounding community and the environment at others.

The EPA Identified More than 1,200 Serious Sites

The EPA has identified 1,245 hazardous waste sites as the most serious in the Nation. These sites comprise the National Priorities List; sites targeted for cleanup under Super-fund. But site discoveries continue, and the EPA estimates that, while some will be deleted after lengthy cleanups, this list, commonly called the NPL, will continue to grow by approximately 50 to 100 sites per year, potentially reaching 2,100 sites by the year 2000.

THE NATIONAL CLEANUP EFFORT IS MUCH MORE THAN THE NPL

From the beginning of the program, Congress recognized that the Federal government could

not and should not address all environmental problems stemming from past disposal practices. Therefore, the EPA was directed to set priorities and establish a list of sites to target. Sites on the NPL (1,245) thus are a relatively small subset of a larger inventory of potential hazardous waste sites, but they do comprise the most complex and compelling cases. The EPA has logged more than 35,000 sites on its national inventory of potentially hazardous waste sites and assesses each site within one year of being logged.

THE EPA IS MAKING PROGRESS ON SITE CLEANUP

The goal of the Superfund program is to tackle immediate dangers first and then move through the progressive steps necessary to eliminate any long-term risks to public health and the environment.

Superfund responds immediately to sites posing imminent threats to human health and the environment at both NPL sites and sites not on the NPL. The purpose is to stabilize, prevent, or temper the effects of a release of hazardous substances, or the threat of one, into the environment. These might include tire fires or transportation accidents involving the spill of hazardous chemicals. Because they reduce the threat a site poses to human health and the environment, immediate cleanup actions are an integral part of the Superfund program.

Immediate response to imminent threats is one of Superfund's most noted achievements. Where imminent threats to the public or environment were evident, the EPA has initiated or completed emergency actions that attacked the most serious threats of toxic exposure in more than 2,700 cases.

The ultimate goal for a hazardous waste site on the NPL is a permanent solution to an environmental problem that presents a serious threat to the public or the environment. This often requires a long-term effort. The EPA has aggressively accelerated its efforts to perform these long-term cleanups of NPL sites. More cleanups were started in 1987, when the Superfund law was amended, than in any previous year. By 1991, construction had started at more than four times as many sites as in 1986! Of the sites currently on the NPL, more than 500 — nearly half — have had construction cleanup activity. In addition, more than 400 more sites presently are in the investigation stage to determine the extent of site contamination and to identify appropriate cleanup remedies. Many other sites with cleanup remedies selected are poised for the start of cleanup construction activity. In measuring success by "progress through the cleanup pipeline," the EPA clearly is gaining momentum.

THE EPA MAKES SURE CLEANUP WORKS

The EPA has gained enough experience in cleanup construction to understand that environmental protection does not end when the remedy is in place. Many complex technologies — like those designed to clean up groundwater — must operate for many years in order to accomplish their objectives.

The EPA's hazardous waste site managers are committed to proper operation and maintenance of every remedy constructed. No matter who has been delegated responsibility for monitoring the cleanup work, the EPA will assure that the remedy is carefully followed and that it continues to do its job.

Likewise, the EPA does not abandon a site even after the cleanup work is done. Every five years, the Agency reviews each site where residues from hazardous waste cleanup still remain to ensure that public and environmental

health are being safeguarded. The EPA will correct any deficiencies discovered and will report to the public annually on all five-year reviews conducted that year.

CITIZENS HELP SHAPE DECISIONS

Superfund activities also depend upon local citizen participation. The EPA's job is to analyze the hazards and to deploy the experts, but the Agency needs citizen input as it makes choices for affected communities.

Because the people in a community where a Superfund site is located will be those most directly affected by hazardous waste problems and cleanup processes, the EPA encourages citizens to get involved in cleanup decisions. Public involvement and comment does influence EPA cleanup plans by providing valuable information about site conditions, community concerns, and preferences.

The State and U.S. Territories volumes and the companion National overview volume provide general Superfund background information and descriptions of activities at each NPL site. These volumes clearly describe what the problems are, what the EPA and others participating in site cleanups are doing, and how we, as a Nation, can move ahead in solving these serious problems.

USING THE STATE AND NATIONAL VOLUMES TOGETHER

To understand the big picture on hazardous waste cleanup, citizens need to hear about both environmental progress across the country and the cleanup accomplishments closer to home. Citizens also should understand the challenges involved in hazardous waste cleanup and the decisions we must make, as a Nation, in finding the best solutions.

The National overview, *Superfund: Focusing on the Nation at Large (1991)*, contains important information to help you understand the magnitude and challenges facing the Superfund program, as well as an overview of the National cleanup effort. The sections describe the nature of the hazardous waste problem nationwide, threats and contaminants at NPL sites and their potential effects on human health and the environment, vital roles of the various participants in the cleanup process, the Superfund program's successes in cleaning up the Nation's serious hazardous waste sites, and the current status of the NPL. If you did not receive this overview volume, ordering information is provided in the front of this book.

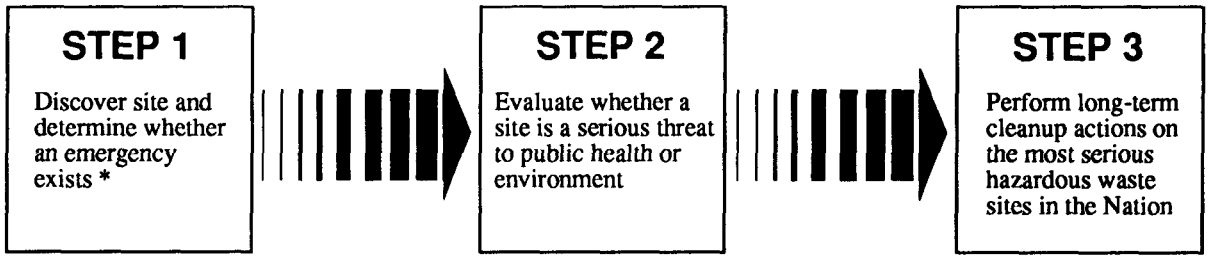
This volume compiles site summary fact sheets on each State or Territorial site being cleaned up under the Superfund program. These sites represent the most serious hazardous waste problems in the Nation and require the most complicated and costly site solutions yet encountered. Each book gives a "snapshot" of the conditions and cleanup progress that has been made at each NPL site. Information presented for each site is current as of April 1991. Conditions change as our cleanup efforts continue, so these site summaries will be updated annually to include information on new progress being made.

To help you understand the cleanup accomplishments made at these sites, this volume includes a description of the process for site discovery, threat evaluation, and long-term cleanup of Superfund sites. This description, *How Does the Program Work to Clean Up Sites?*, will serve as a reference point from which to review the cleanup status at specific sites. A glossary defining key terms as they apply to hazardous waste management and site cleanup is included as Appendix A in the back of this book.

How Does the Program Work to Clean Up Sites?

The diverse problems posed by hazardous waste sites have provided the EPA with the challenge to establish a consistent approach for evaluating and cleaning up the Nation's most serious sites. To do this, the EPA has had to step beyond its traditional role as a regulatory agency to develop processes and guidelines for each step in these technically complex site cleanups. The EPA has established procedures to coordinate the efforts of its Washington, D.C. Headquarters program offices and its front-line staff in ten Regional Offices, with the State and local governments, contractors, and private parties who are participating in site cleanup. An important part of the process is that any time during cleanup, work can be led by the EPA or the State or, under their monitoring, by private parties who are potentially responsible for site contamination.

THREE-STEP SUPERFUND PROCESS



** Emergency actions are performed whenever needed in this three-step process.*

The process for discovery of the site, evaluation of threat, and the long-term cleanup of Superfund sites is summarized in the following pages. The phases of each of these steps are highlighted within the description. The flow diagram above provides a summary of the three-step process.

Although this book provides a current "snapshot" of site progress made only by emergency actions and long-term cleanup actions at Superfund sites, it is important to understand the discovery and evaluation process that leads to identifying and cleaning up these most serious uncontrolled or abandoned hazardous

waste sites in the Nation. The discovery and evaluation process is the starting point for this summary description of Superfund involvement at hazardous waste sites.

STEP 1: SITE DISCOVERY AND EMERGENCY EVALUATION

How does the EPA learn about potential hazardous waste sites?

Site discovery occurs in a number of ways. Information comes from concerned citizens. People may notice an odd taste or foul odor in their drinking water or see half-buried leaking barrels; a hunter may come across a field where waste was dumped illegally. There may be an explosion or fire, which alerts the State or local authorities to a problem. Routine investigations by State and local governments and required reporting and inspection of facilities that generate, treat, store, or dispose of hazardous waste also help keep the EPA informed about actual or potential threats of hazardous substance releases. All reported sites or spills are recorded in the Superfund inventory (CERCLIS) for further investigation to determine whether they will require cleanup.

What happens if there is an imminent danger?

As soon as a potential hazardous waste site is reported, the EPA determines whether there is an emergency requiring an immediate cleanup action. If there is, they act as quickly as possible to remove or stabilize the imminent threat. These short-term emergency actions range from building a fence around the contaminated area to keep people away, or temporarily relocating residents until the danger is addressed, to providing bottled water to residents while their local drinking water supply is being cleaned up or physically removing wastes for safe disposal.

However, emergency actions can happen at any time an imminent threat or emergency warrants them. For example, if leaking barrels are found when cleanup crews start digging in the ground or if samples of contaminated soils or air show that there may be a threat of fire or explosion, an immediate action is taken.

STEP 2: SITE THREAT EVALUATION

If there isn't an imminent danger, how does the EPA determine what, if any, cleanup actions should be taken?

Even after any imminent dangers are taken care of, in most cases, contamination may remain at the site. For example, residents may have been supplied with bottled water to take care of their immediate problem of contaminated well water, but now it's time to determine what is contaminating the drinking water supply and the best way to clean it up. The EPA may determine that there is no imminent danger from a site, so any long-term threats need to be evaluated. In either case, a more comprehensive investigation is needed to determine if a site poses a serious, but not imminent, danger and whether it requires a long-term cleanup action.

Once a site is discovered and any needed emergency actions are taken, the EPA or the State collects all available background information not only from their own files, but also from local records and U.S. Geological Survey maps. This information is used to identify the site and to perform a preliminary assessment of its potential hazards. This is a quick review of readily available information to answer the questions:

- Are hazardous substances likely to be present?

- How are they contained?
- How might contaminants spread?
- How close is the nearest well, home, or natural resource area such as a wetland or animal sanctuary?
- What may be harmed — the land, water, air, people, plants, or animals?

Some sites do not require further action because the preliminary assessment shows that they do not threaten public health or the environment. But even in these cases, the sites remain listed in the Superfund inventory for record-keeping purposes and future reference. Currently, there are more than 35,000 sites maintained in this inventory.

If the preliminary assessment shows a serious threat may exist, what's the next step?

Inspectors go to the site to collect additional information to evaluate its hazard potential. During this *site inspection,* they look for evidence of hazardous waste, such as leaking drums and dead or discolored vegetation. They may take some samples of soil, well water, river water, and air. Inspectors analyze the ways hazardous materials could be polluting the environment, such as runoff into nearby streams. They also check to see if people (especially children) have access to the site.

How does the EPA use the results of the site inspection?

Information collected during the site inspection is used to identify the sites posing the most serious threats to human health and the environment. This way, the EPA can meet the requirement that Congress gave them to use Superfund monies only on the worst hazardous waste sites in the Nation.

To identify the most serious sites, the EPA developed the Hazard Ranking System (HRS). The HRS is the scoring system the EPA uses to assess the relative threat from a release or a potential release of hazardous substances from a site to surrounding groundwater, surface water, air, and soil. A site score is based on the likelihood that a hazardous substance will be released from the site, the toxicity and amount of hazardous substances at the site, and the people and sensitive environments potentially affected by contamination at the site.

Only sites with high enough health and environmental risk scores are proposed to be added to the NPL. That's why 1,245 sites are on the NPL, but there are more than 35,000 sites in the Superfund inventory. Only NPL sites can have a long-term cleanup paid for from Superfund, the national hazardous waste trust fund. Superfund can, and does, pay for emergency actions performed at any site, whether or not it's on the NPL.

Why are sites proposed to the NPL?

Sites proposed to the NPL have been evaluated through the scoring process as the most serious problems among uncontrolled or abandoned hazardous waste sites in the U.S. In addition, a site will be proposed to the NPL if the Agency for Toxic Substances and Disease Registry issues a health advisory recommending that people be moved away from the site. The NPL is updated at least once a year, and it's only after public comments are considered that these proposed worst sites officially are added to the list.

Listing on the NPL does not set the order in which sites will be cleaned up. The order is influenced by the relative priority of the site's health and environmental threats compared to other sites, and such factors as State priorities, engineering capabilities, and available tech-

nologies. Many States also have their own list of sites that require cleanup; these often contain sites that are not on the NPL and are scheduled to be cleaned up with State money. And, it should be noted again that any emergency action needed at a site can be performed by the Superfund, whether or not a site is on the NPL.

A detailed description of the current progress in cleaning up NPL sites is found in the section of the 1991 National overview volume entitled *Cleanup Successes: Measuring Progress.*

How do people find out whether the EPA considers a site a national priority for cleanup under the Superfund Program?

All NPL sites, where Superfund is responsible for cleanup, are described in the State and Territorial volumes. The public also can find out whether other sites, not on the NPL, are being addressed by the Superfund program by calling their Regional EPA office or the Superfund Hotline at the numbers listed in this book.

STEP 3: LONG-TERM CLEANUP ACTIONS

After a site is added to the NPL, what are the steps to cleanup?

The ultimate goal for a hazardous waste site on the NPL is a permanent, long-term cleanup. Since every site presents a unique set of challenges, there is no single all-purpose solution. A five-phase "remedial response" process is used to develop consistent and workable solutions to hazardous waste problems across the Nation:

1. *Remedial Investigation*: investigate in detail the extent of the site contamination
2. *Feasibility Study*: study the range of possible cleanup remedies
3. *Record of Decision or ROD*: decide which remedy to use
4. *Remedial Design*: plan the remedy
5. *Remedial Action*: carry out the remedy

This remedial response process is a long-term effort to provide a permanent solution to an environmental problem that presents a serious threat to the public or environment.

The first two phases of a long-term cleanup are a combined *remedial investigation and feasibility study* (RI/FS) that determine the nature and extent of contamination at the site and identify and evaluate cleanup alternatives. These studies may be conducted by the EPA or the State or, under their monitoring, by private parties.

Like the initial site inspection described earlier, a remedial investigation involves an examination of site data in order to better define the problem. However, the remedial investigation is much more detailed and comprehensive than the initial site inspection.

A remedial investigation can best be described as a carefully designed field study. It includes extensive sampling and laboratory analyses to generate more precise data on the types and quantities of wastes present at the site, the type of soil and water drainage patterns, and specific human health and environmental risks.

The result of the remedial investigation is information that allows the EPA to select the cleanup strategy that is best suited to a particular site or to determine that no cleanup is needed.

Placing a site on the NPL does not necessarily mean that cleanup is needed. It is possible for

a site to receive an HRS score high enough to be added to the NPL, but not ultimately require cleanup actions. Keep in mind that the purpose of the scoring process is to provide a preliminary and conservative assessment of *potential* risk. During subsequent site investigations, the EPA may find either that there is no real threat or that the site does not pose significant human health or environmental risks.

How are cleanup alternatives identified and evaluated?

The EPA or the State or, under their monitoring, private parties identify and analyze specific site cleanup needs based on the extensive information collected during the remedial investigation. This analysis of cleanup alternatives is called a *feasibility study*.

Since cleanup actions must be tailored exactly to the needs of each individual site, more than one possible cleanup alternative is always considered. After making sure that all potential cleanup remedies fully protect human health and the environment and comply with Federal and State laws, the advantages and disadvantages of each cleanup alternative are compared carefully. These comparisons are made to determine their effectiveness in the short and long term, their use of permanent treatment solutions, and their technical feasibility and cost.

To the maximum extent practicable, the remedy must be a permanent solution and must use treatment technologies to destroy principal site contaminants. Remedies such as containing the waste on site or removing the source of the problem (like leaking barrels) often are considered effective. Often, special pilot studies are conducted to determine the effectiveness and feasibility of using a particular technology to clean up a site. Therefore, the combined remedial investigation and feasibility study can take between 10 and 30 months to complete, depending on the size and complexity of the problem.

Does the public have a say in the final cleanup decision?

Yes. The Superfund law requires that the public be given the opportunity to comment on the proposed cleanup plan. Their concerns are considered carefully before a final decision is made.

The results of the remedial investigation and feasibility study, which also point out the recommended cleanup choice, are published in a report for public review and comment. The EPA or the State encourages the public to review the information and take an active role in the final cleanup decision. Fact sheets and announcements in local papers let the community know where they can get copies of the study and other reference documents concerning the site. Local information repositories, such as libraries or other public buildings, are established in cities and towns near each NPL site to ensure that the public has an opportunity to review all relevant information and the proposed cleanup plans. Locations of information repositories for each NPL site described in this volume are given in Appendix B.

The public has a minimum of 30 days to comment on the proposed cleanup plan after it is published. These comments can be written or given verbally at public meetings that the EPA or the State are required to hold. Neither the EPA nor the State can select the final cleanup remedy without evaluating and providing written answers to specific community comments and concerns. This "responsiveness summary" is part of the EPA's write-up of the final remedy decision, called the Record of Decision, or ROD.

The ROD is a public document that explains the cleanup remedy chosen and the reason it

was selected. Since sites frequently are large and must be cleaned up in stages, a ROD may be necessary for each contaminated resource or area of the site. This may be necessary when contaminants have spread into the soil, water, and air and affect such sensitive areas as wetlands, or when the site is large and cleaned up in stages. This often means that a number of remedies, using different cleanup technologies, are needed to clean up a single site.

If every cleanup action needs to be tailored to a site, does the design ofthe remedy need to be tailored, too?

Yes. Before a specific cleanup action is carried out, it must be designed in detail to meet specific site needs. This stage of the cleanup is called the *remedial design*. The design phase provides the details on how the selected remedy will be engineered and constructed.

Projects to clean up a hazardous waste site may appear to be like any other major construction project but, in fact, the likely presence of combinations of dangerous chemicals demands special construction planning and procedures. Therefore, the design of the remedy can take anywhere from six months to two years to complete. This blueprint for site cleanup includes not only the details on every aspect of the construction work, but a description of the types of hazardous wastes expected at the site, special plans for environmental protection, worker safety, regulatory compliance, and equipment decontamination.

Once the design is completed, how long does it take to actually clean up the site, and how much does it cost?

The time and cost for performing the site cleanup, called the *remedial action*, are as varied as the remedies themselves. In a few cases, the only action needed may be to remove drums of hazardous waste and to decontaminate them, an action that takes limited time and money. In most cases, however, a remedial action may involve different and expensive cleanup measures that can take a long time.

For example, cleaning polluted groundwater or dredging contaminated river bottoms can take several years of complex engineering work before contamination is reduced to safe levels. Sometimes the selected cleanup remedy described in the ROD may need to be modified because of new contaminant information discovered or difficulties that were faced during the early cleanup activities. Taking into account these differences, each remedial cleanup action takes an average of 18 months to complete and ultimately costs an average of $26 million to complete all necessary cleanup actions at a site .

Once the cleanup action is completed, is the site automatically "deleted" from the NPL?

No. The deletion of a site from the NPL is anything but automatic. For example, cleanup of contaminated groundwater may take up to 20 years or longer. Also, in some cases, *long-term monitoring* of the remedy is required to ensure that it is effective. After construction of certain remedies, operation and maintenance (e.g., maintenance of ground cover, groundwater monitoring, etc.), or continued pumping and treating of groundwater may be required to ensure that the remedy continues to prevent future health hazards or environmental damage and ultimately meets the cleanup goals specified in the ROD. Sites in this final monitoring or operational stage of the cleanup process are designated as "construction complete."

It's not until a site cleanup meets all the goals and monitoring requirements of the selected

remedy that the EPA can officially propose the site for *deletion* from the NPL, and it's not until public comments are taken into consideration that a site actually can be deleted from the NPL. All sites deleted from the NPL and sites with completed construction are included in the progress report found later in this book.

Can a site be taken off the NPL if no cleanup has taken place?

Yes. But only if further site investigation reveals that there are no threats present at the site and that cleanup activities are not necessary. In these cases, the EPA will select a "no action" remedy and may move to delete the site when monitoring confirms that the site does not pose a threat to human health or the environment.

In other cases, sites may be "removed" from the NPL if new information concerning site cleanup or threats show that the site does not warrant Superfund activities.

A site may be removed if a revised HRS scoring, based on updated information, results in a score below the minimum for NPL sites. A site also may be removed from the NPL by transferring it to other appropriate Federal cleanup authorities, such as RCRA, for further cleanup actions.

Removing sites for technical reasons or transferring sites to other cleanup programs preserves Superfund monies for the Nation's most pressing hazardous waste problems where no other cleanup authority is applicable.

Can the EPA make parties responsible for the contamination pay?

Yes. Based on the belief that "the polluters should pay," after a site is placed on the NPL, the EPA makes a thorough effort to identify and find those responsible for causing contamination problems at a site. Although the EPA is willing to negotiate with these private parties and encourages voluntary cleanup, it has the authority under the Superfund law to legally force those potentially responsible for site hazards to take specific cleanup actions. All work performed by these parties is closely guided and monitored by the EPA and must meet the same standards required for actions financed through the Superfund.

Because these enforcement actions can be lengthy, the EPA may decide to use Superfund monies to make sure a site is cleaned up without unnecessary delay. For example, if a site presents an imminent threat to public health and the environment or if conditions at a site may worsen, it could be necessary to start the cleanup right away. Those responsible for causing site contamination are liable under the law (CERCLA) for repaying the money the EPA spends in cleaning up the site.

Whenever possible, the EPA and the Department of Justice use their legal enforcement authorities to require responsible parties to pay for site cleanups, thereby preserving Superfund resources for emergency actions and for sites where no responsible parties can be identified.

How to Use the State Book

The site fact sheets presented in this book are comprehensive summaries that cover a broad range of information. The fact sheets describe hazardous waste sites on the NPL and their locations, as well as the conditions leading to their listing ("Site Description"). The summaries list the types of contaminants that have been discovered and related threats to public and ecological health ("Threats and Contaminants"). "Cleanup Approach" presents an overview of the cleanup activities completed, underway, or planned. The fact sheets conclude with a brief synopsis of how much progress has been made in protecting public health and the environment. The summaries also pinpoint other actions, such as legal efforts to involve polluters responsible for site contamination and community concerns.

The fact sheets are arranged in alphabetical order by site name. Because site cleanup is a dynamic and gradual process, all site information is accurate as of the date shown on the bottom of each page. Progress always is being made at NPL sites, and the EPA periodically will update the site fact sheets to reflect recent actions and will publish updated State volumes. The following two pages show a generic fact sheet and briefly describe the information under each section.

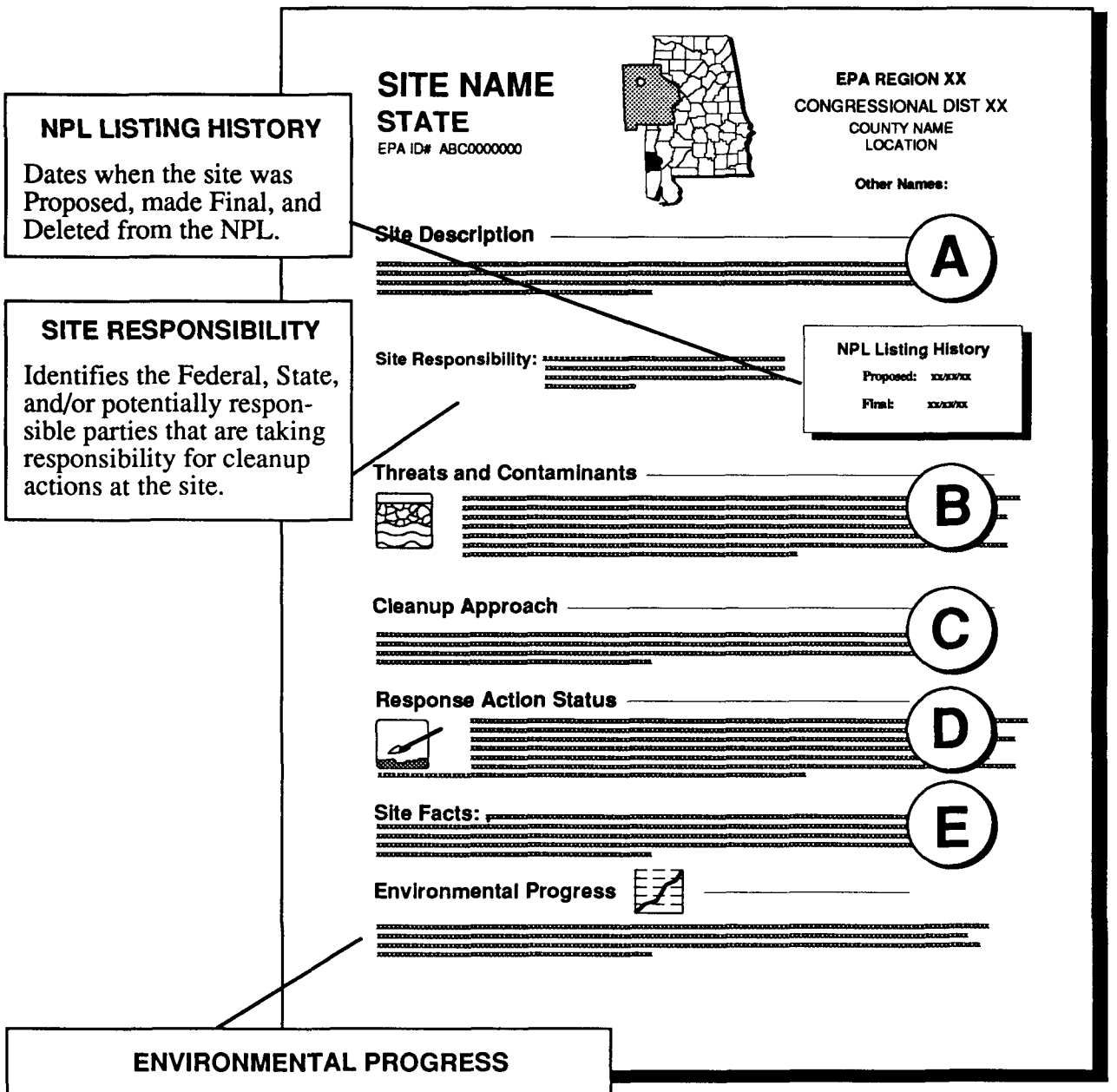
HOW CAN YOU USE THIS STATE BOOK?

You can use this book to keep informed about the sites that concern you, particularly ones close to home. The EPA is committed to involving the public in the decision making process associated with hazardous waste cleanup. The Agency solicits input from area residents in communities affected by Superfund sites. Citizens are likely to be affected not only by hazardous site conditions, but also by the remedies that combat them. Site cleanups take many forms and can affect communities in different ways. Local traffic may be rerouted, residents may be relocated, temporary water supplies may be necessary.

Definitive information on a site can help citizens sift through alternatives and make decisions. To make good choices, you must know what the threats are and how the EPA intends to clean up the site. You must understand the cleanup alternatives being proposed for site cleanup and how residents may be affected by each one. You also need to have some idea of how your community intends to use the site in the future, and you need to know what the community can realistically expect once the cleanup is complete.

The EPA wants to develop cleanup methods that meet community needs, but the Agency only can take local concerns into account if it understands what they are. Information must travel both ways in order for cleanups to be effective and satisfactory. Please take this opportunity to learn more, become involved, and assure that hazardous waste cleanup at "your" site considers your community's concerns.

THE VOLUME



NPL LISTING HISTORY

Dates when the site was Proposed, made Final, and Deleted from the NPL.

SITE RESPONSIBILITY

Identifies the Federal, State, and/or potentially responsible parties that are taking responsibility for cleanup actions at the site.

ENVIRONMENTAL PROGRESS

A summary of the actions to reduce the threats to nearby residents and the surrounding environment; progress towards cleaning up the site and goals of the cleanup plan are given here.

A

SITE DESCRIPTION

This section describes the location and history of the site. It includes descriptions of the most recent activities and past actions at the site that have contributed to the contamination. Population estimates, land usages, and nearby resources give readers background on the local setting surrounding the site.

B

THREATS AND CONTAMINANTS

The major chemical categories of site contamination are noted, as well as which environmental resources are affected. Icons representing each of the affected resources (may include air, groundwater, surface water, soil, and contamination to environmentally sensitive areas) are included in the margins of this section. Potential threats to residents and the surrounding environments arising from the site contamination also are described.

C

CLEANUP APPROACH

This section contains a brief overview of how the site is being cleaned up.

D

RESPONSE ACTION STATUS

Specific actions that have been accomplished or will be undertaken to clean up the site are described here. Cleanup activities at NPL sites are divided into separate phases, depending on the complexity and required actions at the site. Two major types of cleanup activities often are described: initial, immediate, or emergency actions to quickly remove or reduce imminent threats to the community and surrounding areas; and long-term remedial phases directed at final cleanup at the site. Each stage of the cleanup strategy is presented in this section of the summary. Icons representing the stage of the cleanup process (initial actions, site investigations, EPA selection of the cleanup remedy, engineering design phase, cleanup activities underway, and completed cleanup) are located in the margin next to each activity description.

E

SITE FACTS

Additional information on activities and events at the site are included in this section. Often details on legal or administrative actions taken by the EPA to achieve site cleanup or other facts pertaining to community involvement with the site cleanup process are reported here.

THE VOLUME

The "icons," or symbols, accompanying the text allow the reader to see at a glance which environmental resources are affected and the status of cleanup activities at the site.

Icons in the Threats and Contaminants Section

Contaminated *Groundwater* resources in the Contaminated *Groundwater* in the vicinity or underlying the site. (Groundwater is often used as a drinking water source.)

Contaminated *Surface Water and Sediments* on or near the site. (These include lakes, ponds, streams, and rivers.)

Contaminated *Air* in the vicinity of the site. (Air pollution usually is periodic and involves contaminated dust particles or hazardous gas emissions.)

Contaminated *Soil and Sludges* on or near the site. (This contamination category may include bulk or other surface hazardous wastes found on the site.)

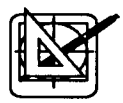
Threatened or contaminated *Environmentally Sensitive Areas* in the vicinity of the site. (Examples include wetlands and coastal areas or critical habitats.)

Icons in the Response Action Status Section

Initial Actions have been taken or are underway to eliminate immediate threats at the site.

Site Studies at the site to determine the nature and extent of contamination are planned or underway.

Remedy Selected indicates that site investigations have been concluded, and the EPA has selected a final cleanup remedy for the site or part of the site.

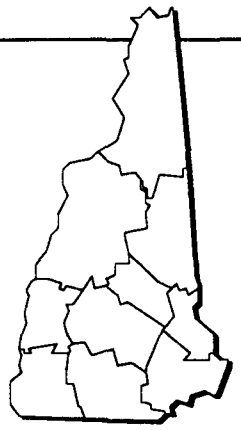


Remedy Design means that engineers are preparing specifications and drawings for the selected cleanup technologies.

Cleanup Ongoing indicates that the selected cleanup remedies for the contaminated site, or part of the site, currently are underway.

Cleanup Complete shows that all cleanup goals have been achieved for the contaminated site or part of the site.

Environmental Progress summarizes the activities taken to date to protect human health and to clean up site contamination.



The State of New Hampshire

The State of New Hampshire, within EPA Region 1, is located along the Canadian border by the Atlantic Ocean on its southwestern corner. The state covers 9,279 square miles consisting of a low, rolling coast, followed by hilly terrain and mountains rising out of a central plateau. New Hampshire experienced a 21% increase in population between 1980 and 1990, according to the 1990 Census, and currently has approximately 1,109,000 residents, ranking 40th in U.S. populations. Principal state industries include the manufacture of machinery, electrical and electronics products, plastics, fabricated metal products, and leather goods; as well as tourism, agriculture, trade, and mining of non-fuel minerals.

How Many NPL Sites Are in the State of New Hampshire?

Proposed	0
Final	16
Deleted	0
	16

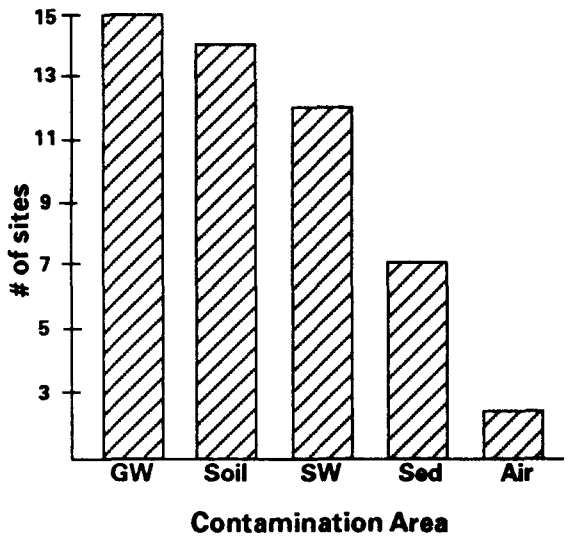
Where Are the NPL Sites Located?

Congressional District 1	12 sites
Congressional District 2	4 sites

What Type of Sites Are on the NPL in the State of New Hampshire?

# of sites	type of sites
4	Municipal & Industrial Landfills
3	Metals & Allied Products
3	Storage Facilities
2	Disposal Facilities
4	Others (Federal facility, recyclers, chemicals & allied products)

How Are Sites Contaminated and What Are the Principal* Chemicals?



Groundwater: Volatile organic compounds (VOCs) and heavy metals (inorganics).

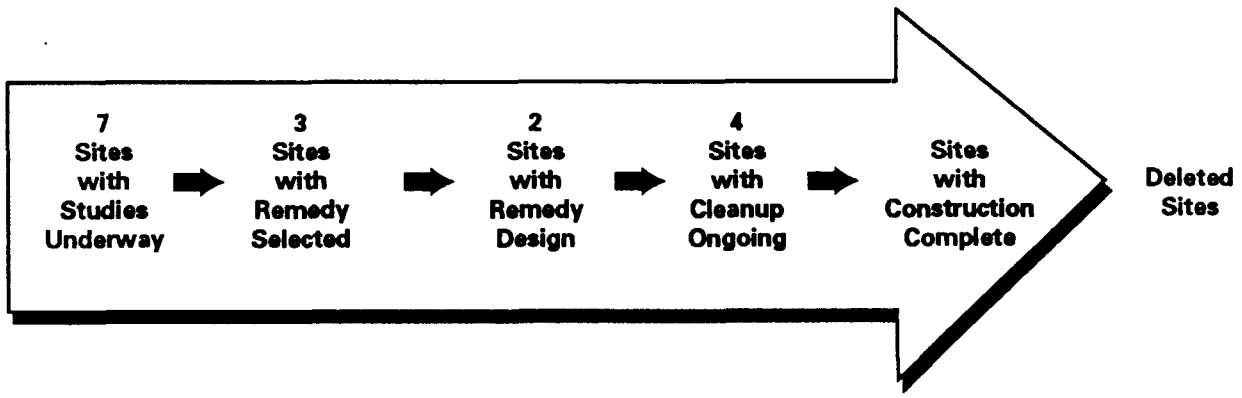
Soil: Volatile organic compounds (VOCs), heavy metals (inorganics), creosote (organics), and polychlorinated biphenyls (PCBs).

Surface Water and Sediments: Volatile organic compounds (VOCs), heavy metals (inorganics) and polychlorinated biphenyls (PCBs).

Air: Volatile organic compounds (VOCs).

*Appear at 20% or more sites

Where Are the Sites in the Superfund Cleanup Process?†



In addition to the activities described above, initial actions have been taken at 12 sites as interim cleanup measures.

†Cleanup status reflects phases of site activities rather than administrative accomplishments.

Progress To Date

The following Progress Report lists all sites currently on, or deleted from, the NPL and briefly summarizes the status of activities for each site at the time this report was prepared. The steps in the Superfund cleanup process are arrayed across the top of the chart, and each site's progress through these steps is represented by an arrow (⇨) indicating the current stage of cleanup.

Large and complex sites often are organized into several cleanup stages. For example, separate cleanup efforts may be required to address the source of the contamination, hazardous substances in the groundwater, and surface water pollution, or to clean up different areas of a large site. In such cases, the chart portrays cleanup progress at the site's *most advanced* stage, reflecting the status of site activities rather than administrative accomplishments.

- An arrow in the "Initial Response" category indicates that an emergency cleanup or initial action has been completed or currently is underway. Emergency or initial actions are taken as an interim measure to provide immediate relief from exposure to hazardous site conditions or to stabilize a site to prevent further contamination.

- A final arrow in the "Site Studies" category indicates that an investigation to determine the nature and extent of the contamination at the site currently is ongoing.

- A final arrow in the "Remedy Selection" category means that the EPA has selected the final cleanup strategy for the site. At the few sites where the EPA has determined that initial response actions have eliminated site contamination, or that any remaining contamination will be naturally dispersed without further cleanup activities, a "No Action" remedy is selected. In these cases, the arrows are discontinued at the "Remedy Selection" step and resume in the "Construction Complete" category.

- A final arrow at the "Remedial Design" stage indicates that engineers currently are designing the technical specifications for the selected cleanup remedies and technologies.

- A final arrow in the "Cleanup Ongoing" column means that final cleanup actions have been started at the site and currently are underway.

- A final arrow in the "Construction Complete" category is used only when all phases of the site cleanup plan have been performed, and the EPA has determined that no additional construction actions are required at the site. Some sites in this category currently may be undergoing long-term operation and maintenance or monitoring to ensure that the cleanup actions continue to protect human health and the environment.

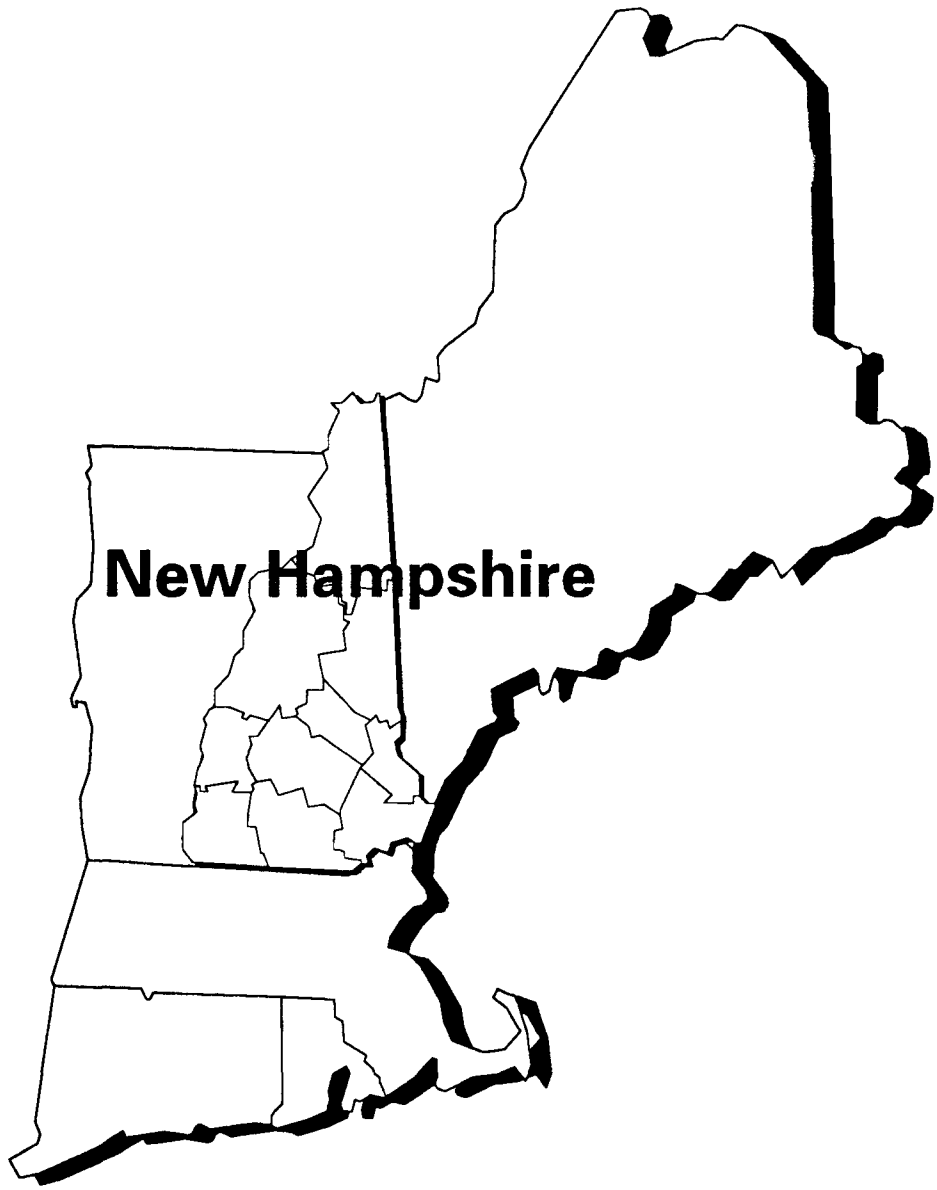
- A check in the "Deleted" category indicates that the site cleanup has met all human health and environmental goals and that the EPA has deleted the site from the NPL.

Further information on the activities and progress at each site is given in the site "Fact Sheets" published in this volume.

Progress Toward Cleanup at NPL Sites in the State of New Hampshire

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
23	AUBURN ROAD LANDFILL	ROCKINGHAM	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
25	COAKLEY LANDFILL	ROCKINGHAM	Final	06/01/86	⇨	⇨	⇨				
27	DOVER MUNICIPAL LANDFILL	STRAFFORD	Final	09/01/83		⇨					
29	FLETCHER'S PAINT WORKS & STORAGE	HILLSBOROUGH	Final	03/31/89	⇨	⇨					
31	HOLTON CIRCLE GROUND WATER CONT.	ROCKINGHAM	Final	03/31/89		⇨					
33	KEARSARGE METALLURGICAL CORP.	CARROLL	Final	09/01/84	⇨	⇨	⇨				
35	KEEFE ENVIRONMENTAL SERVICES	ROCKINGHAM	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
37	MOTTOLO PIG FARM	ROCKINGHAM	Final	07/01/87	⇨	⇨	⇨				
39	OTTATI & GOSS/KINGSTON STEEL DRUM	ROCKINGHAM	Final	09/01/83	⇨	⇨	⇨	⇨	⇨		
43	PEASE AIR FORCE BASE	ROCKINGHAM	Final	02/21/90	⇨	⇨					
45	SAVAGE MUNICIPAL WATER SUPPLY	HILLSBOROUGH	Final	09/01/84	⇨	⇨					
47	SOMERSWORTH SANITARY LANDFILL	STRAFFORD	Final	09/08/83		⇨					
49	SOUTH MUNICIPAL WATER SUPPLY WELL	HILLSBOROUGH	Final	09/01/84		⇨	⇨	⇨			
51	SYLVESTER	HILLSBOROUGH	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
53	TIBBETS ROAD	STRAFFORD	Final	06/01/86	⇨	⇨					
55	TINKHAM GARAGE	ROCKINGHAM	Final	09/01/83	⇨	⇨	⇨	⇨			

Summary of Site Activities



EPA REGION 1

Who Do I Call with Questions?

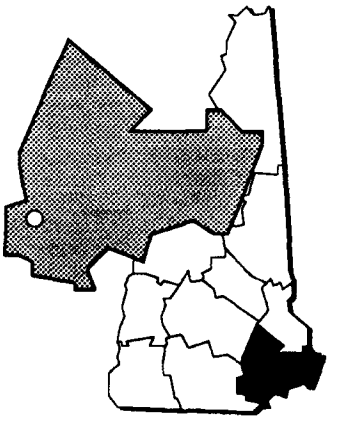
The following pages describe each NPL site in New Hampshire, providing specific information on threats and contaminants, cleanup activities, and environmental progress. Should you have questions, please call the EPA's Region 1 Office in Boston, Massachusetts or one of the other offices listed below:

EPA Region 1 Superfund Community Relations Office	(617) 565-3425
EPA Region 1 Superfund Office	(617) 573-9645
EPA Superfund Hotline	(800) 424-9346
EPA Headquarters Public Information Center	(202) 260-2080
New Hampshire Superfund Office	(603) 271-2908

AUBURN ROAD LANDFILL

NEW HAMPSHIRE

EPA ID# NHD980524086



EPA REGION 1
CONGRESSIONAL DIST. 01
Rockingham County
Londonderry
2 miles north of Route 28 on Auburn Road

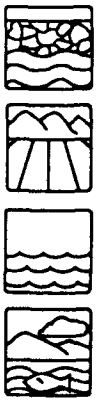
Site Description

The Auburn Road Landfill in Londonderry is a 200-acre site that consists of four separate disposal areas: the former Londonderry Town Dump, which operated during the 1960s and was the disposal site for over 1,000 drums of chemical waste; a tire disposal area, where tires and demolition debris and several hundred drums of chemical waste were dumped; a solid waste landfill, the largest disposal area, active until the entire site was closed in early 1980; and a septage lagoon, which is next to a mound of overflow waste from the tire dump. Most of the residents in the area depend on bedrock wells for their water supply. The State ordered the landfill closed early in 1980, after hazardous wastes were identified in soil, and toxic organics were found in surface water and groundwater. In 1986, the EPA determined that contaminated groundwater flowed off site toward the drinking water supply wells at the Whispering Pines Mobile Home Park, and potentially to other private residential wells. The area surrounding the landfill is residential and commercial, and the 300 homes and 270 mobile homes within a 1-mile radius use groundwater as a primary source of drinking water. Approximately 1,000 people live within 3 miles of the site. Two unnamed streams drain from the site and flow into Cohas Brook, which in turn empties into the Merrimack River.

Site Responsibility: The site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



The groundwater is contaminated with volatile organic compounds (VOCs), creosotes, and inorganic chemicals. The soil also is contaminated with VOCs, creosote compounds, and inorganics, as well as polychlorinated biphenyls (PCBs) and pesticides. Whispering Pines Pond and Cohas Brook are polluted with low levels of VOCs. The fencing of the town dump, the tire dump, and solid waste areas decreases the likelihood of exposure to contaminated soils, although the areas adjacent to the fences are used for riding dirt bikes and horses. Exposure to contaminated groundwater is eliminated at the present time because the municipal water supply has been extended to local residents, but bedrock fractures may promote migration of contaminants into off-site groundwater and present a potential threat to private wells outside the area. The site includes large areas of wetlands and ponds, which are environmentally sensitive.

Cleanup Approach

The site is being addressed in four stages: initial actions and three long-term remedial phases focusing on providing a water supply, cleanup of the groundwater contamination, and capping the site.

Response Action Status

Initial Actions: The Federal Emergency Management Agency (FEMA) temporarily relocated 17 families beginning in early 1986. At that time, the EPA excavated 1,666 drums in three locations and then restored two of the excavated areas. Drums were consolidated, covered, and sampled prior to their disposal off site. A 24-hour security guard was on duty prior to disposal. The owner fenced the four disposal areas from 1987 to 1988 and posted warning signs. In 1988, the EPA excavated 360 drums from the tire dump.

Water Supply Line: In late 1987, the Town of Londonderry extended the current water service provided by the Manchester Water Works to 17 homes along Auburn Road and to 260 mobile homes in the Whispering Pines mobile home village. Nine thousand linear feet of water line were installed. Londonderry constructed and paid for the water supply line under an agreement with the EPA.

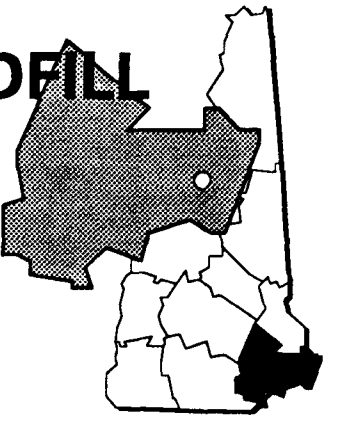
Groundwater: In 1989, the EPA selected cleanup technologies that specified the collection of contaminated groundwater through a series of shallow and deep bedrock wells and the use of groundwater collection trenches. Inorganic contamination is to be removed using chemical precipitation. Groundwater then will be treated for removal of organic contaminants using a combination of air stripping and, if necessary, carbon treatment. An engineering design for this remedy currently is underway and is planned for completion in 1992.

Cap: The EPA specified that a multi-layer cap be placed over the solid waste area, the town dump area, and the tire dump area to prevent the further spread of contaminants to the groundwater. A design for the cap currently is underway and is planned for completion in 1992.

Environmental Progress

The EPA, the FEMA, and the Town of Londonderry have acted to protect area residents from site contamination by relocating affected populations, erecting a fence to restrict site access, providing a safe water supply, and removing a large number of drums containing contaminants. The planned capping will prevent any further spread of contamination as the groundwater is cleaned up at the Auburn Road Landfill site.

COAKLEY LANDFILL
NEW HAMPSHIRE
EPA ID# NHD064424153



EPA REGION 1
CONGRESSIONAL DIST. 01
Rockingham County
Greenland and North Hampton

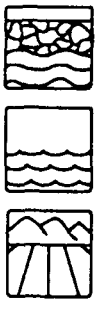
Site Description

The Coakley Landfill site is a 92-acre parcel of land within the towns of Greenland and North Hampton, and is owned and operated by several municipalities. The landfill area encompasses 27 acres in the southern portion of the site. The site accepted municipal and industrial wastes from the Portsmouth area between 1972 and 1982 and incinerator residue from the Incineration Recovery Plant Refuse to Energy Project between 1982 and 1985. The primary source of contamination is the landfill itself. Volatile organic compounds (VOCs) and metals are the predominant contaminants found. On- and off-site surface water and groundwater are contaminated. The site is located on a groundwater/surface water divide, and residential wells to the south, southeast, and northeast of the landfill are contaminated with low levels of VOCs. Public water service has been extended to the areas with contaminated wells by local communities. Approximately 79,300 people are served by wells within 3 miles of the site. There also are several small commercial facilities, motels, and restaurants nearby.

Site Responsibility: The site is being addressed through a combination of Federal, State and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/84
Final Date: 06/01/86

Threats and Contaminants



On-site groundwater is contaminated with arsenic, phenol, and methyl ethyl ketones; off-site groundwater is contaminated with heavy metals including arsenic, chromium, and lead and VOCs including benzene and methyl ethyl ketones. On-site sediments are contaminated with arsenic and lead. Stream sediments contain contamination from arsenic and VOCs. Leachate contamination at the site includes VOCs, tetrahydrofuran, and ketones. Potential use of groundwater as a water supply is the main threat to human health.

Cleanup Approach

The site is being addressed in three stages: initial actions and two long-term remedial phases focusing on source control and cleanup of off-site groundwater.

Response Action Status

Initial Actions: In 1989, North Hampton extended a municipal water line to residents who had been supplied by 13 private wells that were contaminated with VOCs. The State set up an early warning system to detect well contamination in the entire area. Most area residents now have uncontaminated water.

Source Control: An investigation was conducted by the State from 1986 to 1987. The goals of the field work were to characterize the hydrogeologic conditions at the site, including an estimate of the total area of the landfill and soil deposits, hydraulic properties of bedrock and selected surface streams, and to identify pathways for contaminant migration from the site. The State completed the study in 1990. Based on the results of the study, a cleanup remedy was selected, which includes consolidating approximately 2,000 cubic yards of wetland sediments; consolidating approximately 30,000 cubic yards of on-site solid waste; fencing and capping the landfill; collecting and treating landfill gases by thermal destruction; extracting groundwater and treating it with a combination of chemical, biological, and physical processes; and long-term monitoring and institutional controls. Design of these remedies is expected to begin in 1992.

Off-site Groundwater: The EPA began a study in 1990 on the migration of contaminants into off-site groundwater and the ecological effects of the site contamination. This study is scheduled for completion in 1993.

Site Facts: The State issued a Consent Order requiring the owner to accept only incinerator ash from the Refuse to Energy Project in 1983. As of February 1990, notices have been sent to 60 parties potentially responsible for the site contamination.

Environmental Progress

The provision of an alternate drinking water source has reduced the potential for exposure to contamination, making the Coakley Landfill safer while it awaits further cleanup activity.

DOVER MUNICIPAL LANDFILL

NEW HAMPSHIRE

EPA ID# NHD980520191

EPA REGION 1
CONGRESSIONAL DIST. 01
Strafford County
In Mallego Plains section of Dover

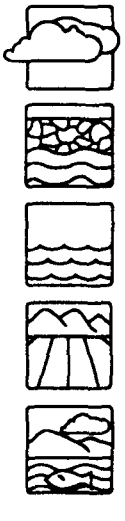
Site Description

The Dover Municipal Landfill is a 55-acre inactive landfill located on Tolend Road in the Mallego Plains section, in the western corner of Dover. Owned and operated by the City since 1960, the landfill initially accepted domestic refuse from Dover, but by the 1960s, it took in drums and loose trash from both Dover and Madbury. Buried materials include leather-tanning wastes, organic solvents, municipal trash, and sludge from the Dover wastewater plant. It is believed that drums were no longer accepted after 1975. In 1977, the State installed monitoring wells around the area and found that organic solvents were entering groundwater, posing a potential threat to public water supplies for Dover and Portsmouth. The State and the Dover City Council closed the landfill in 1980. The site is in a residential area; the nearest home is 100 yards to the southeast. A nursing home is 2,500 feet away, and a prison and work farm are located nearby. There are 50 homes within 1 mile of the landfill, and the surrounding area is used for hunting and berry picking. Two water supplies are at risk, but currently are not contaminated: the Calderwood municipal well, 1/2 mile north, which supplies 20% of Dover's water; and Bellamy Reservoir, 1/3 mile south, which supplies Portsmouth, Newington, New Castle, Greenland, and portions of Rye, Madbury, and Durham. Leachate from the landfill is entering the Cocheco River, 400 feet away from the site at the closest point. Wetlands also exist near the site.

Site Responsibility: The site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



Air is polluted with volatile organic compounds (VOCs), which have been detected above background levels near leachate streams on the site. The groundwater is contaminated with VOCs, acid and base/neutral extractable organic compounds, and heavy metals. Two residential wells have been contaminated with organics from the site; however, water currently is not being consumed from them. Sediments are contaminated with heavy metals including arsenic, chromium, and lead. Soil contamination includes polyaromatic hydrocarbons (PAHs) off site and heavy metals, including arsenic, chromium, and lead both on and off site. The Cocheco River receives leachate; VOCs have also been detected in the surface water. People on or near the site could be exposed to contaminants that have evaporated into the air. People using the site for recreational purposes could come in direct contact with, accidentally ingest, or inhale contaminated dust. Drinking contaminated groundwater and swimming or wading in the contaminated Cocheco River also could expose people to harmful chemicals. Nearby wetlands are potentially threatened by site contamination.

Cleanup Approach

The site is being addressed in a single long-term remedial phase aimed at cleanup of contamination at the entire site.

Response Action Status

Entire Site: In 1984, the State began a study of the site to assess the nature and extent of contamination. The parties potentially responsible for the site contamination have assumed responsibility for the study that will identify the alternate cleanup strategies. The EPA will evaluate the study findings and expects to select a final cleanup strategy for the site in 1991.

Site Facts: The State and City Council closed the landfill in 1980. The EPA and the potentially responsible parties entered into an Administrative Agreement to complete a feasibility study of site cleanup strategies.

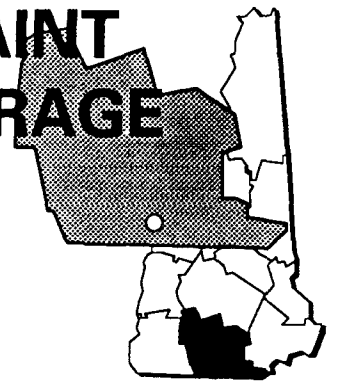
Environmental Progress

Following the listing of this site on the NPL, the EPA determined that the Dover Municipal Landfill site currently poses no immediate threat to public health or the environment while it awaits further cleanup activities.

FLETCHER'S PAINT WORKS & STORAGE

NEW HAMPSHIRE

EPA ID# NHD001079649



EPA REGION 1
CONGRESSIONAL DIST. 02
Hillsborough County
21 Elm Street in Milford

Other Names:
Fletcher Paint on Elm Street
Fletcher Storage Facility on Mill Street

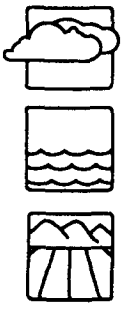
Site Description

This 2-acre site consists of two neighboring lots owned by Fletcher's Paint Works: a manufacturing plant/retail outlet on Elm Street and a storage area 700 feet south on Mill Street. Fletcher's has manufactured and sold paints and stains for residential use at its plant since 1949. Bulk paint pigments are stored at the warehouse. The owner stored several hundred drums behind the plant, and naphtha and mineral spirits are stored in unlined underground tanks. Contaminants from the storage facility were found in a drainage ditch on the adjoining Hampshire Paper Co. property, and this ditch was made a part of the site. The State inspected the facility in 1982 in response to a complaint and found 800 drums of alkyd resins and 21 drums of solvent. Leaking and open drums, as well as stained soil, were observed. EPA investigation of the site was prompted by discovery of contamination of the adjacent Keyes municipal water supply well. Drums were removed from the Elm Street facility, and a synthetic liner and clean fill have been placed over the high levels of polychlorinated biphenyls (PCBs) at the Mill Street and Elm Street locations. The site is situated in a densely populated residential/commercial area approximately 1/4 mile from the downtown area. Approximately 11,400 people within 3 miles obtain drinking water from public and private wells. There are three schools within 1/2 mile of the site. The site is adjacent to and upgradient from the Souhegan River, which is used for recreational activities.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 06/21/88
Final Date: 03/31/89

Threats and Contaminants



Air contaminants consist of volatile organic compounds (VOCs). Bagged asbestos is being stored on the site and the drummed wastes are contaminated with VOCs, base/neutral solids and liquids, and PCB liquids. Sediments from the Souhegan River, upgradient and adjacent to the site, and surface waters contain VOC contaminants, including benzene and toluene, as well as heavy metals including nickel and lead, and PCBs. Soil contamination consists of VOCs, heavy metals such as barium, lead, and nickel and PCBs in on-site soils, as well as organic solvents. The plant is easily accessible and is adjacent to a road leading to a popular recreation area. People on or near the site could risk exposure to contaminants by accidentally ingesting, coming into direct contact with, or inhaling chemicals in the air, water, soil, or sediments.

Cleanup Approach

The site is being addressed in two stages: initial actions and a single long-term remedial phase, with major attention being given to the soil and groundwater cleanup.

Response Action Status

Initial Actions: The EPA mounted an emergency removal effort at the site in 1988. Twelve bags of asbestos were contained and sent to an EPA approved landfill. Soil and air samples were taken. Air monitoring was conducted regularly during the cleanup activities. The EPA lined the surface of the PCB-contaminated lot with a synthetic liner, covered it with 6 to 8 inches of gravel and topped it with 1 1/2 inches of stone dust. Safe drummed materials were left on site, but hazardous ones were numbered, consolidated, packed in new containers, and sent to a federally approved landfill.

Soil and Groundwater: The EPA is conducting an intensive study of soil and groundwater contamination at the site and will recommend cleanup strategies. The investigation is expected to be completed in 1992, and a final remedy selection will be made at that time.

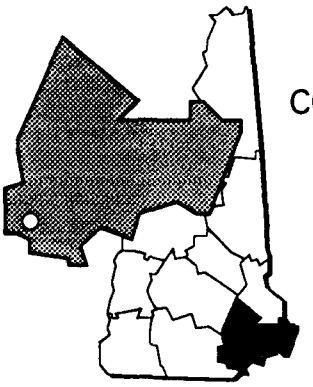
Environmental Progress

With the cleanup actions described above, the EPA has greatly reduced the potential for accidental soil and dust exposure at both Fletcher Paint Works locations. Upon completion of the soil and groundwater cleanup, contamination levels will be reduced to meet established health and ecological standards for the site.

HOLTON CIRCLE GROUND WATER CONTAMINATION

NEW HAMPSHIRE

EPA ID# NHD981063860



EPA REGION 1
CONGRESSIONAL DIST. 01
Rockingham County
Londonderry

Site Description

Holton Circle is a development of about 25 homes. The site has a series of residential wells and one commercial well, known as the Town Garage well. According to tests conducted in 1984 by the State, the wells are contaminated. The EPA and the State have been investigating the area since 1985 and have not yet verified a source of the contamination. The Department of Defense owned the Town Garage well, located 1,000 feet west of the Holton Circle, from the early 1940s to 1968 and operated a radio beacon there during World War II. The EPA also investigated a small auto repair shop about 1,000 feet south of Holton Circle. The shop uses 1 to 2 gallons of degreasing solvents annually. The area around the site consists of mixed rural and residential properties and is being actively developed. Approximately 7,400 people obtain drinking water from private wells within 3 miles of Holton Circle.

Site Responsibility: The site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 06/21/88
Final Date: 03/31/89

Threats and Contaminants

The groundwater in the wells is contaminated with volatile organic compounds (VOCs) including dichloroethylene and dichloroethane. People may be exposed to these VOCs by drinking the contaminated groundwater. The six residences with contaminated drinking water wells have been connected to a public water supply.

Cleanup Approach

The site is being addressed in a single long-term remedial phase focusing on groundwater cleanup.

Response Action Status

Groundwater: The EPA is conducting an investigation into the groundwater contamination at the site. The investigation will define the contaminants and will recommend alternatives for the final cleanup. The investigation is expected to be completed in 1992.

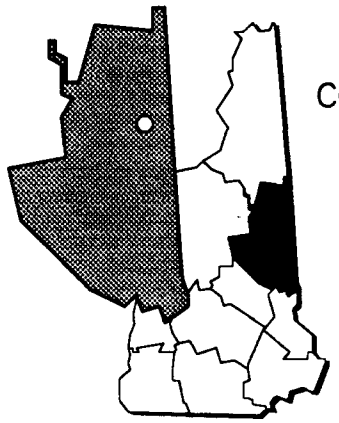
Environmental Progress

After adding this site to the NPL, the EPA assessed conditions and determined that, besides connecting six residences with contaminated wells to the public water supply, no further immediate actions are required to make the Holton Circle Ground Water Contamination site safe while waiting for cleanup actions to begin.

KEARSARGE METALLURGICAL CORP.

NEW HAMPSHIRE

EPA ID# NHD062002001



EPA REGION 1
CONGRESSIONAL DIST. 01
Carroll County
Conway

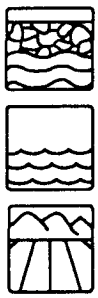
Site Description

Precision stainless castings were manufactured on this 9-acre site from 1964 until Kearsarge Metallurgical Corporation went out of business in 1982. Of the 9 acres, Kearsarge owned 5; the 4 remaining acres have different ownership but are included within the site boundaries. The wastes produced from the processes of making the casts (casting, cleaning, finishing, and pickling) initially were disposed of on site. During the 1970s and 1980s some of these wastes were drummed and stored on site. A large, 8-foot-high pile of approximately 4,250 cubic yards of solid wastes is located behind a foundry building is surrounded by a chain link fence. This waste pile contains ceramic sand, scrap metal, rusted drums, and various other refuse from foundry operations and extends across the Kearsarge property line. That is surrounded by a chainlink fence. A smaller pile of approximately 400 cubic yards of solid wastes is also located on the site. The closest drinking water wells are two wells that supply water for the municipality and a water supply well for the residential area across the Pequawket Pond. The municipal wells are approximately 3,000 feet north of the site and supply most of the water to the area. Pequawket Pond marks the southern boundary of the site and is used for recreational purposes. Approximately 8,100 people live within 3 miles of the site, and 2,700 people within 3 miles of the site use groundwater in the area for drinking purposes.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/83
Final Date: 09/01/84

Threats and Contaminants



The groundwater is contaminated with volatile organic compounds (VOCs) including trichloroethane. Sediment samples taken from Pequawket Pond indicated the presence of some heavy metals. The soils in the woodlands area east of the site and in the drainage way area are contaminated with low levels of VOCs, primarily trichloroethane. Samples taken from Pequawket Pond indicate the presence of heavy metals including chromium, copper, and nickel. VOCs were detected in off-site surface water, primarily in the swampy area to the east of the site and the catch basins. There is a potential for human exposure to VOCs by inhalation and ingestion of the dusts and dirt from the site. The potential exists for exposure to contaminants from the sediments and surface water in the swamp and drainage area, soils, the waste pile, and contaminated groundwater. The town's drinking water supply has not been shown to be contaminated; however, the

possibility exists that the site may contribute groundwater to the municipal wells during periods of low recharge and high pumping rates. Residents have the potential for exposure through contact with the contaminated soils and surface water in the swamp areas east of the site and with the soils in the waste pile.

Cleanup Approach

The site is being cleaned up in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Initial Actions: The site owner arranged for the removal of 300 drums from the site. In addition, 23 monitoring and observation wells were installed. The wells supplemented the 8 monitoring wells previously installed by the State of New Hampshire. Seventeen test pits were excavated and solid waste samples were collected from drums. Three rounds of groundwater samples were also collected. Surface water and sediment samples were collected from the Pequawket Pond. In 1991, six additional drums and two pails of hazardous materials were removed from the site.

Entire Site: Based on investigations performed by the EPA and Kearsarge Metallurgical Corp., the following remedy was selected: the removal of a septic tank and contents to an off-site incinerator for thermal destruction, excavation of approximately 250 cubic yards of contaminated leaching field soils, and excavation and off-site disposal of materials in the two waste piles. To control migration of contaminated groundwater, groundwater will be extracted and treated in a clarifier to remove heavy metals, then by air stripping to remove VOCs, followed by carbon adsorption of the airborne contaminants. Long-term monitoring of groundwater, soil, sediments, and surface water will be implemented to ensure the effectiveness of the remedy. The design for this remedy is scheduled to start in 1992.

Site Facts: The State of New Hampshire filed a Civil Action in the Superior Court of Carroll County in 1983, asking for civil penalties for disposal of hazardous waste and ordering the owner to conduct a hydrogeological study.

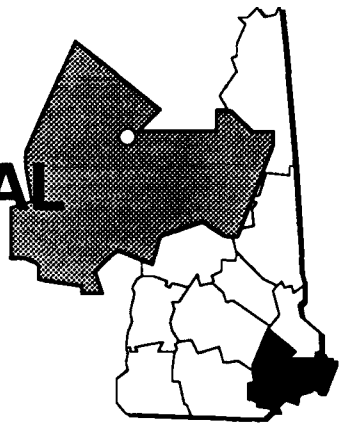
Environmental Progress

The initial cleanup actions to remove contaminated drums and soil have greatly reduced the potential of exposure to hazardous substances, making the Kearsarge area safer while it awaits final cleanup activities.

KEEFE ENVIRONMENTAL SERVICES

NEW HAMPSHIRE

EPA ID# NHD092059112



EPA REGION 1
CONGRESSIONAL DIST. 01
Rockingham County
Epping

Other Names:
KES

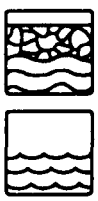
Site Description

The Keefe Environmental Services site, covering 7 acres in Rockingham County, was operated as a chemical waste storage facility from 1978 until 1981, when the company filed for bankruptcy. Waste storage containers that were present on site at that time included 4,100 drums, four 5,000-gallon and four 10,000-gallon aboveground storage tanks, and a 700,000-gallon synthetically lined lagoon. Solvents, acids, caustics, heavy metals, paint sludges, waste oils, and organic chemicals were disposed at the site. Soil and groundwater on and off site have been contaminated. The site is located in a State-protected watershed with wetland areas draining to the Piscassic River. The site is located in a semi-rural area. There are approximately 12 houses, with a population of 30 people, located along Exeter Road, south of the site. The groundwater aquifer is used as a water supply for ten residences located nearby and is the major source of drinking water for approximately 2,000 people within a 3-mile radius of the site. The Town of New Market has a water supply intake on the Piscassic River 7 miles downstream from the site.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/81
Final Date: 09/08/83

Threats and Contaminants



The groundwater at the site and off-site surface water are contaminated with volatile organic compounds (VOCs) including trichloroethane and benzene. The health threats to workers or others nearby consist of drinking the contaminated water or coming in direct contact with hazardous wastes left on the site.

Cleanup Approach

The site is being addressed up in three stages: initial actions to control site contamination and two long-term remedial phases focusing on cleanup of the lagoon and the groundwater.

Response Action Status

Initial Actions: In 1981, when the site operations ceased, the EPA declared an emergency at the site after determining that the waste lagoon was about to overflow. The EPA and the State initiated emergency actions that included drawing down the lagoon to lessen the threat of a spill. In continuing emergency actions during 1983 and 1984, the EPA and the State removed more than 4,000 drums, four 5,000-gallon aboveground tanks, and four 10,000-gallon aboveground tanks of hazardous waste.

Lagoon: The actions for cleanup of the lagoon included removal of the contents of the lagoon, lagoon liner, and the highly contaminated soil adjacent to the lagoon for disposal at a regulated facility. These cleanup activities were completed in 1984.

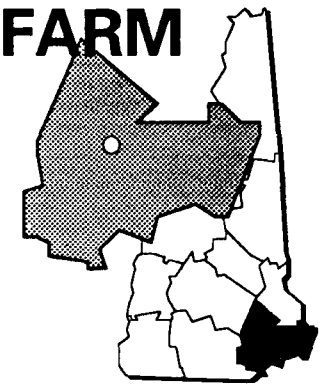
Groundwater: The cleanup activities chosen by the EPA for the groundwater include treatment by pumping the contaminated groundwater, filtering volatile contaminants by exposing the groundwater to air, and containing the airborne chemicals by carbon adsorption. Treated groundwater will be discharged to a groundwater recharge area adjacent to the wetland along the site border. The State completed the technical specifications and design for the selected remedy. Construction of the groundwater treatment facility is scheduled to be completed in 1992. Construction and operation and maintenance will be accomplished by the parties potentially responsible for site contamination under a Unilateral Administrative Order.

Site Facts: A Consent Agreement was entered into with 119 settling potentially responsible parties in 1986. The EPA filed suit against the non-settling parties in 1989. A Unilateral Administrative Order (UAO) was issued in 1990. One of the non-settling parties currently is in compliance with the UAO to clean up the site.

Environmental Progress

The health risks and environmental threats posed by the hazardous materials at the Keefe Environmental Services site are being eliminated as the cleanup work progresses, and all direct contact threats from contaminated soil have been eliminated.

MOTTOLO PIG FARM
NEW HAMPSHIRE
EPA ID# NHD980503361



EPA REGION 1
CONGRESSIONAL DIST. 01
Rockingham County
Off Blueberry Hill Road in Raymond

Other Names:
Raymond Hazardous Waste Site

Site Description

The 50-acre Mottolo Pig Farm site is an abandoned pig farm located in an undeveloped wooded area. From 1975 to 1979, Richard Mottolo, the owner of the property, disposed of chemical manufacturing wastes from two companies in a 1/4-acre fill area adjacent to the piggery buildings. During this 4-year period, over 1,600 drums and pails of wastes, including organic compounds such as toluene, xylene, and methyl ethyl ketone, were disposed of at the site. State studies showed that groundwater beneath the site was contaminated and that contaminants were seeping into a brook that empties into the Exeter River. The Exeter River is a drinking water supply for the nearby communities of Exeter, Hampton, and Stratham. An estimated 1,600 people depend on groundwater within 3 miles of the site as a source of drinking water. There are approximately 200 single family residences within 1 mile of the site, with the nearest residence located approximately 150 yards from the source area. Residential areas border the site property on three sides.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 04/01/85
Final Date: 07/01/87

Threats and Contaminants

Specific contaminants detected in groundwater include volatile organic compounds (VOCs) and heavy metals such as iron, manganese, arsenic, and zinc. Contaminated leachate from the site seeps into an adjacent brook. A small area of on-site soils contains VOCs. Threats to human health include drinking contaminated groundwater, direct contact with or accidental ingestion of contaminated surface water or soils and inhaling contaminated dusts.

Cleanup Approach

The site is being cleaned up in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Initial Actions: In 1980, under authority of the Clean Water Act, the EPA used emergency funds to excavate and store drums on site. From 1981 to 1982, the EPA removed drums and pails from the site along with 160 tons of contaminated soil, preventing further contamination of the soil and groundwater. EPA actions also included limiting site access, sampling and analysis, strengthening of berms, overpacking containers, and removing and disposing of materials. The EPA excavated observation pits to determine if surface water diversion was feasible.

Entire Site: Based on studies performed by the parties potentially responsible for contamination at the site, the EPA selected groundwater, surface water, and soil cleanup alternatives. The remedy selected consists of installation of a groundwater interceptor trench, sealing the ground surface in both the former drum disposal area and the southern boundary area with temporary caps, and installation and operation of a vacuum extraction system to remove air and vapor phase VOCs from the soil gas. Groundwater will clean itself naturally after the sources of contamination are removed. Additional measures include installation of a security fence to limit access to contaminated areas, continued monitoring of groundwater and surface water, and institutional controls, which will restrict the use of contaminated groundwater and prevent disturbance of cleanup activities. The technical specifications for this remedy are scheduled to get underway in 1992.

Site Facts: In 1988, the EPA and the K.J. Quinn Company signed an Administrative Consent Order, in which the company agreed to perform an investigation of the site under EPA monitoring. K.J. Quinn is one of several parties potentially responsible for contamination problems originating at the site.

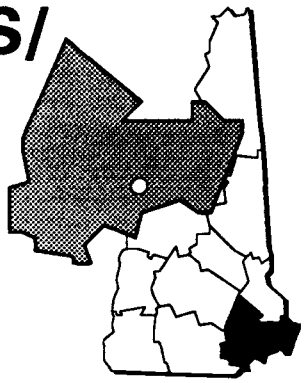
Environmental Progress

Initial actions to limit access to the site and to remove contaminated drums and soil have eliminated all direct contact threats from contaminated soil while the Mottolo Pig Farm site awaits final cleanup actions.

OTTATI & GOSS/ KINGSTON STEEL DRUM

NEW HAMPSHIRE

EPA ID# NHD990717647



EPA REGION 1
CONGRESSIONAL DIST. 01
Rockingham County
Kingston

Other Names:
Kingston Steel Drum/GRT Lakes Container

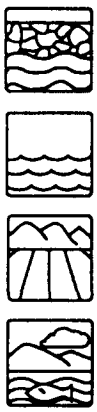
Site Description

The Ottati & Goss/Kingston Steel Drum site, situated on 35 acres, contains a 1-acre parcel in the southwestern portion that was leased and known as the Ottati & Goss (O&G) site and a 6-acre Great Lakes Container Corporation (GLCC) site consisting of a rectangular parcel bordered on the east by Route 125. From the late 1950s through 1967, Conway Barrel & Drum Company (CBD) owned the site and performed drum reconditioning operations on the parcel of land later owned by the Great Lakes Container Corporation. The reconditioning operations included caustic rinsing of drums and disposal of the rinse water in a dry well near South Brook. Kingston Steel Drum, the operator of the facility from 1967, continued the same operations as GLCC through 1973. South Brook and Country Pond became polluted, so CBD established leaching pits in an area removed from South Brook. The State's Water Supply and Pollution Control Commission reported on-site runoff and seepage from the leaching pits draining into South Brook and eventually into Country Pond, where fish kills occurred. Vegetation along South Brook died and swimmers experienced skin irritation. In 1973, International Mineral & Chemical Corporation (IMC), purchased the drum and reconditioning plant and operated it until 1976. In 1978, heavy sludges from the wash tank and from drainings, as well as residues from incinerator operations, were brought to the O&G site for processing. After O&G operations ceased in 1979, the New Hampshire Bureau of Solid Waste Management ordered the owners and operators not to restart operations and to remove approximately 4,400 drums that were at various stages of deterioration and were spilling organic compounds onto the ground. Approximately 450 people live within a 1-mile radius of the site. Most of these residents rely on bedrock wells for their water supply. An estimated 4,500 people live within 3 miles of the site. A marshy area lies downgradient of the site. The Powwow River and Country Pond, located nearby, are used for swimming and fishing.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/01/81
Final Date: 09/01/83

Threats and Contaminants



The groundwater, surface water, and soils are contaminated with volatile organic compounds (VOCs). The on-site soil also contains polychlorinated biphenyls (PCBs), metals, and acids and base/neutral compounds. Sampling conducted in 1989 indicated no current public threat was likely at the site; however, there is a potential for future threat due to contaminated groundwater off site. The overburden and bedrock aquifers are contaminated, but residential water supply wells show no contamination. Some PCBs have migrated into South Brook; however, no PCBs have been detected in the marsh or Country Pond water or sediments. Adjacent marshland is considered an environmentally sensitive area and could become contaminated.

Cleanup Approach

The site is being addressed in five stages: initial actions and four long-term remedial phases concentrating on soil excavation, groundwater cleanup at two separate areas, and soil cleanup.

Response Action Status

Initial Actions: Beginning in 1980, several actions were taken: the site was secured by fencing, leaking drums were packed and removed, and contaminated soils and debris were removed. About 12,800 tons of soil, drums, and metals were removed, plus 101,700 tons of flammable sludge, 6,000 cubic yards of flammable liquid, and other materials.

Soil Excavation: Based on the results of the site investigation conducted by the EPA, the selected remedy was to excavate and treat the contaminated soil on the Ottati & Goss portion of the site. The parties potentially responsible for the site contamination excavated approximately 4,700 cubic yards of contaminated soil and sediments, which were treated by low temperature thermal aeration. The remedial action was completed in 1989.

Kingston Steel Groundwater Treatment: Extraction and treatment of contaminated groundwater, with eventual discharge of treated groundwater, is planned for the cleanup of the groundwater on the site. One of the potentially responsible parties is designing the groundwater extraction and treatment system. Design of this system is expected to be completed in 1993, with cleanup work to commence shortly thereafter.

Ottati & Goss Groundwater Remediation: Based on the results of the site investigation, the EPA has selected extraction and treatment of contaminated groundwater with the eventual discharge of treated groundwater on the site. Design of the cleanup remedy is expected to be completed in 1993.

Kingston Steel Soil Remediation: The EPA-selected cleanup at the Kingston Steel area and the remainder of the site is similar to soil excavations and cleanups previously performed at the site and also includes cleanup of adjacent stream sediment.

Site Facts: The Justice Department, on behalf of the EPA, brought a civil action suit against several potentially responsible parties in 1980. The court found the defendants liable for contamination on and off site. The EPA settled with a group of potentially responsible parties during the trial and they, under a Consent Decree, have completed the soil remedy on the Ottati & Goss portion of the site.

Environmental Progress 

Although some direct contact threats remain, the EPA has determined that the removal of contaminated soils and sediments has greatly reduced the potential for exposure to contamination at the Ottati & Goss/Kingston Steel Drum site. These completed actions and other site cleanup will continue to reduce site contamination levels, making the site safer as it approaches final cleanup.

PEASE AIR FORCE BASE
NEW HAMPSHIRE
EPA ID# NH7570024847

EPA REGION 1
CONGRESSIONAL DIST. 01
Rockingham County
Portsmouth, Newington, and Greenland

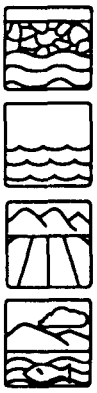
Site Description

The Pease Air Force Base site maintained aircraft from the 1950s on a 4,365-acre parcel of land until 1991 when the base closed. A 1990 study identified 22 waste disposal areas on the base, 13 of which received hazardous wastes including organic solvents, pesticides, paint strippers, and other industrial wastes. Of these disposal areas, 6 were used as landfills, 2 were areas where waste oil and solvents were burned for firefighting exercises, and 4 were areas where solvents and other liquid wastes were discharged. All hazardous wastes generated on the base now are disposed of off site at EPA-regulated facilities. In 1977, a well supplying drinking water to 8,700 people on the base was found to be contaminated and was closed. In 1984, the Air Force installed an aeration system to remove contaminants from all water supply wells. Surface water and sediments are contaminated by runoff from one of the landfills. An estimated 30,000 people obtain drinking water from public and private wells that are within 3 miles of hazardous substances on the base. Shellfish are harvested from Great Bay and Little Bay, which are within 3 miles downstream of the base. The bays also are used for recreational activities. Because the bays and Piscataqua River are connected to the Atlantic Ocean, tides may move any contamination into the ocean. The base abuts Great Bay, which is a tidal estuary. Both coastal and freshwater wetlands are along surface water migration pathways from the disposal areas.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 07/14/89
Final Date: 02/21/90

Threats and Contaminants



The groundwater is contaminated with trichloroethylene (TCE). Sediments of three drainage ditches are contaminated with heavy metals including lead and zinc. The soil is contaminated with organic solvents and fuel oils. Surface water runoff from one landfill is contaminated with heptachlor and lindane. People who live on the base may be threatened by accidentally ingesting contaminated groundwater, surface water, sediments, or soil. Some disposal areas on the base are not fenced, making it possible for people and animals to come into direct contact with hazardous substances. In addition, eating contaminated fish or waterfowl poses a health threat. A nearby estuary and coastal freshwater wetlands could be affected by contamination. Potential threats also exist for the bald eagles that nest in the area.

Cleanup Approach

This site is being addressed in six stages: initial actions and five long-term remedial phases focusing on cleanup of the landfills, fire training areas; Buildings 113, 119, and 222; burn areas/rubble dumps; and any remaining areas.

Response Action Status

Initial Actions: Since beginning site studies, the Air Force has removed 50 drums from the landfill area and has removed contaminated soil and installed a groundwater pre-treatment system in the five training areas to begin reducing levels of contamination. Soil removal also is underway at Buildings 113, 119, and 122.

Landfills: The Air Force is conducting an investigation into the contamination of several landfills at the site. The investigation, which started in 1989, will recommend alternatives for the final cleanup.

Fire Training Areas: The Air Force also started an investigation in 1989 into the contamination of the two fire training areas. The investigation, expected to be completed in 1992, will define the contaminants at these areas and will recommend alternatives for the final cleanup.

Buildings 113, 119, and 222: The Air Force began conducting an investigation into contamination from TCE and petroleum product releases at several buildings on site. The investigation will define the contaminants at the site and will recommend alternatives for the final cleanup.

Burn Areas/Rubble Dumps: The Air Force is studying possible contamination at several former fire training burn areas and construction rubble dumps.

Remaining Areas: The Air Force is conducting an investigation to identify any remaining areas of contamination at the site.

Site Facts: The EPA issued a Special Notice Letter to the Air Force in 1989 to initiate an Interagency Agreement (IAG) negotiation among the EPA, the Air Force, and the State of New Hampshire. In 1990, the Air Force signed an IAG with the EPA and the State outlining cleanup responsibilities at the site. Pease Air Force Base is participating in the Installation Restoration Program, a specially funded program by the Department of Defense (DoD). The Pease Air Force Base closed in early 1991 and is now in the process of being transferred by the Air Force to the State. The Air Force will continue its program to clean up the entire Base.

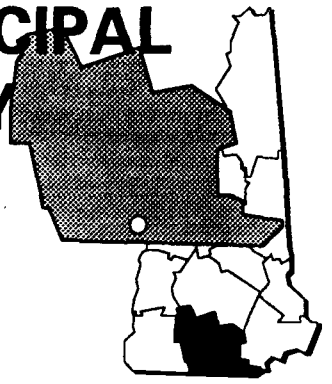
Environmental Progress

The removal of drums and contaminated soils is making the Pease Air Force Base safer while investigations leading to cleanup actions are underway.

SAVAGE MUNICIPAL WATER SUPPLY

NEW HAMPSHIRE

EPA ID# NHD980671002



EPA REGION 1
CONGRESSIONAL DIST. 02
Hillsborough County
2 miles west of Milford

Other Names:
Milford Well and Trailer Park

Site Description

The Savage Municipal Water Supply site covers about 30 acres west of the center of Milford and consists of a municipal well and the underlying aquifer, the water-bearing layer of rock and gravel from which the Town of Milford gets its water. The Savage Municipal Well operated from 1960 to 1983, during which time it supplied 40% to 45% of Milford's water. The remainder of the water came from the Keyes and Kokko Wells. During Savage's years of operation, several metal industries opened plants near the well, along the Souhegan River. Investigations at the site began in 1983, as part of a statewide water sampling program. Sampling detected contamination, and the well was closed. Following the closing of the well, the State began investigations to locate the source of contaminants, which also were present in water samples taken at nearby industries. The land surrounding the Savage Well is planted with feed corn intended for silage. A stream that receives discharge from two industries, Hendrix Wire and Cable and Hitchner Manufacturing, flows through the farmland prior to discharging to the Souhegan River. Hitchner Manufacturing has purchased the well from the Town of Milford.

Site Responsibility: The site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/83
Final Date: 09/01/84

Threats and Contaminants

The groundwater is contaminated with volatile organic compounds (VOCs), including trichloroethylene (TCE) and vinyl chloride and heavy metals, including lead, chromium, and mercury. The soil is contaminated with VOCs. The stream on site is contaminated with VOCs and lead. Trespassers who come in direct contact with or accidentally ingest contaminated groundwater, surface water, or soil are potentially at risk.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: In 1983, the EPA provided bottled water to the 75 residents of the Milford Mobile Home Park affected by contaminated well water and then connected the park to the municipal water supply.

Entire Site: The parties potentially responsible for the site contamination are conducting an investigation into the nature and extent of the contamination at the site. The investigation will define the contaminants of concern and will recommend effective alternatives for the final cleanup. The investigation is planned to be completed in 1991.

Site Facts: In 1987, the EPA and the parties potentially responsible for the contamination of the site signed a Consent Order to conduct an investigation at the site.

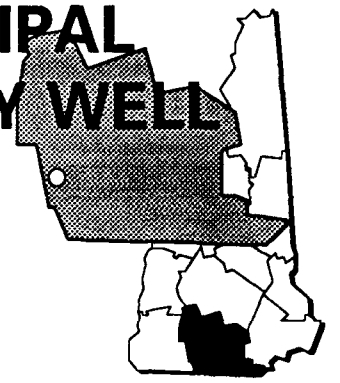
Environmental Progress

The provision of an alternate drinking water source has reduced the potential for exposure to hazardous materials at the Savage Municipal Water site while the investigation is being completed and cleanup activities begin.

SOUTH MUNICIPAL WATER SUPPLY WELL

NEW HAMPSHIRE

EPA ID# NHD980671069



EPA REGION 1
CONGRESSIONAL DIST. 02
Hillsborough County
Sharon Road, 2 miles south of Peterborough

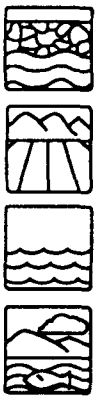
Site Description

The South Municipal Water Supply Well site covers 250 acres in a rural portion of the Contoocook River Valley. The well was installed in 1952 and provided water to the Town of Peterborough for nearly 30 years. The well served approximately 4,600 people. In 1982, the State conducted a routine sampling of the water supply and found contaminants in the South Well, at which time it was shut down. The source of the contamination was thought to be the New Hampshire Ball Bearings (NHBB) facility, located 1,200 feet west of the well, which has manufactured precision ball bearings at the site since 1946. In 1955, the company purchased the 24 acres it now occupies. Major source areas include discharges from three drainage outfalls, an inactive leachfield, and drainage from a tank truck used to haul waste from the facility. A brook 200 feet from the plant drains into a wetland area and Noone Pond before emptying into the Contoocook River. Discharges to the leachfield and sump ceased in 1972 with the connection of the town sewer line. Periodic on-site dumping of a 275-gallon tank truck containing waste solvents ceased in the late 1970s. Floor drains in the plant were sealed in 1983. The population of the Town of Peterborough is over 5,000. Less than 100 single-family residences are located within a mile of NHBB, and the nearest private residence is located approximately 1,000 feet from the facility.

Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/01/83
Final Date: 09/01/84

Threats and Contaminants



The groundwater, soils, and surface water are contaminated with volatile organic compounds (VOCs) including chloroform, benzene, and toluene. Sediments also are contaminated with VOCs and polychlorinated biphenyls (PCBs). People who accidentally ingest or come in direct contact with contaminated groundwater, surface water, soil, or sediments may be at risk. Included within the site area is the Contoocook River/ Noone Pond system and a wetlands area that could be at risk from contamination.

Cleanup Approach

The site is being addressed in a single long-term remedial phase focusing on contamination at the entire site.

Response Action Status

Entire Site: The investigation to determine the nature and extent of contamination and to identify alternatives for cleanup was completed by New Hampshire Ball Bearings, and the final decision on the method to be used to clean up the site was reached in 1989. The methods of site cleanup selected by the EPA include: constructing a groundwater pump and treatment system, vacuum extraction for small areas of soils contaminated with VOCs, and excavation, with off-site disposal for sediments contaminated with PCBs. NHBB currently is designing the cleanup remedies and is expected to complete the design in 1992.

Site Facts: The EPA and New Hampshire Ball Bearings signed a Consent Order in 1989, in which the company agreed to conduct a study of the contamination at the site.

Environmental Progress

The EPA has conducted studies of the conditions at the South Municipal Water Supply Well site and has determined that there currently are no immediate actions needed to make the site safer while waiting for the selected cleanup actions to begin.

SOMERSWORTH SANITARY LANDFILL

NEW HAMPSHIRE

EPA ID# NHD980520225

EPA REGION 1
CONGRESSIONAL DIST. 01
Strafford County
1 mile southwest of
Somersworth

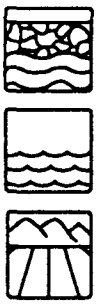
Site Description

The Somersworth Sanitary Landfill is located on 26 acres of land approximately 1 mile southwest of downtown Somersworth. The City operated a disposal site on the property from the mid-1930s until 1981. Originally, the City burned residential, commercial, and industrial wastes at the site. In 1958, the dump was converted to a landfill. Unknown quantities of sludges, solvents, acids, dyes, metals, laboratory or pharmaceutical wastes, and potash were disposed of at this site. Four groundwater monitoring wells installed as part of site closure plan activities indicated that volatile organic compounds (VOCs) and inorganic contaminants were present. The landfill is located in a predominantly residential area of Somersworth. Forest Glade Park, which was reclaimed as a recreational park in 1978, sits atop the eastern most 10 acres of the site. An apartment building for senior citizens, a fire station, and a National Guard Armory abut the property to the east, and an elementary school is located approximately 2,300 feet northeast. Approximately 11,000 people live in Somersworth. The former Somersworth Municipal Supply Well #3 is located approximately 2,300 feet from the landfill. This well was closed and dismantled because of historically high levels of iron and manganese. Previously, the well supplied approximately 10% of the town's total water supply and was used during peak periods. Most of the residences in the area obtain drinking water from the Somersworth municipal supply system; however, there are at least seven private wells in the area. Peter's Marsh Brook, located adjacent to the western edge of the landfill, is a tributary of Tate's Brook, which, in turn, is a tributary of the Salmon Falls River. Both the City of Somersworth and the City of Berwick, Maine, withdraw water from the river for their drinking water supplies. Water intakes are located approximately 1 1/2 miles from the landfill.

Site Responsibility: The site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/30/82
Final Date: 09/08/83

Threats and Contaminants



The groundwater is contaminated with VOCs. Sediments are contaminated with xylenes and heavy metals including arsenic, chromium, and lead. The on-site soil is contaminated with VOCs, polycyclic aromatic hydrocarbons (PAHs), and heavy metals. Peter's Marsh Brook and Tate's Brook have been shown to contain VOCs and heavy metals including arsenic and mercury. There are no barriers restricting access to the landfill from the park. Peter's Marsh Brook is considered to be the primary receptor of groundwater contamination. If private water supply wells were installed or reopened in this area or near Peter's Marsh Brook, long-term exposure to contaminated drinking water would pose health risks.

Cleanup Approach

This site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

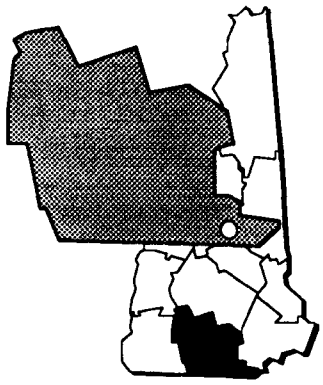
Entire Site: The parties potentially responsible for the site contamination currently are conducting an investigation into the nature and extent of contamination at the site. The investigation will define the contaminants of concern and will evaluate alternatives for the final cleanup. The investigation is planned to be completed in 1991.

Site Facts: The EPA entered into a Consent Agreement, requiring the parties potentially responsible for contamination at the site to conduct a study of site contamination. The settling parties also have agreed to pay past State and Federal costs for the site and future oversight costs, as well.

Environmental Progress

Following listing of the Somersworth Sanitary Landfill site on the NPL, the EPA determined that the site contamination does not pose an immediate threat to public health or the environment. Currently, no actions are needed to make the site safer while waiting for final cleanup actions to begin.

SYLVESTER
NEW HAMPSHIRE
EPA ID# NHD099363541



EPA REGION 1
CONGRESSIONAL DIST. 02
Hillsborough County
Nashua

Other Names:
Gilson Road Site

Site Description

The 6-acre Sylvester hazardous waste dump site was used as a sand borrow pit for an undetermined number of years. During the late 1960s, after much of the sand had been removed from the property, the operator of the pit began an unapproved and illegal waste disposal operation, apparently intending to fill the excavation. Household refuse, demolition materials, chemical sludges, and hazardous liquid chemicals were dumped at the site. The household refuse and demolition materials usually were buried, while the hazardous liquids were allowed to percolate into the ground adjacent to the old sand pit or were stored in steel drums that were placed on the ground. The illegal solid waste activity at the site first was discovered in late 1970. The first indication that hazardous wastes also were being dumped occurred in 1978, when State personnel observed drums being stored at the site. A court order was issued in 1979 prohibiting all further disposal of hazardous wastes on the site. The site is in a residential area, with approximately 1,000 people living in an adjoining mobile home park, and there are five private water wells within 1/4 mile of the site. The site is about 680 feet from Lyle Reed Brook, which flows through the trailer park and enters the Nashua River, a source of drinking water. The Merrimack River is 11 miles downstream and also is a source of drinking water.

Site Responsibility: The site is being addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 12/30/82
Final Date: 09/08/83

Threats and Contaminants

Approximately 900,000 gallons of hazardous wastes were discharged to leachfields on site in 1979, contaminating hundreds of thousands of gallons of groundwater. The groundwater is contaminated with heavy metals and volatile organic compounds (VOCs). Lyle Reed Brook also is contaminated with VOCs and metals. The main health threat associated with the site is drinking or direct contact with contaminants in the groundwater and surface water. Groundwater currently is not used, since all residents are connected to a separate municipal supply. Contaminants may leach into the bedrock aquifer; however, capping the site has greatly reduced the likelihood of continued contamination of the surface water.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases to cap the site and to extract and treat the groundwater.

Response Action Status

Immediate Actions: In 1979, the State removed 1,000 drums from the site. In early 1980, the EPA constructed a fence around the dumping area and removed 1,314 accessible surface drums. The groundwater contaminant plume movement was monitored and an access road was built. Between 1981 and 1982, the EPA installed a groundwater interception and recirculation system to temporarily pump and recirculate the contaminated groundwater to prevent it from reaching Lyle Brook and from further contaminating the aquifer.

Capping: The State constructed a slurry wall surrounding a 20-acre area and built an impervious membrane cap to prevent any further contamination of on-site groundwater.

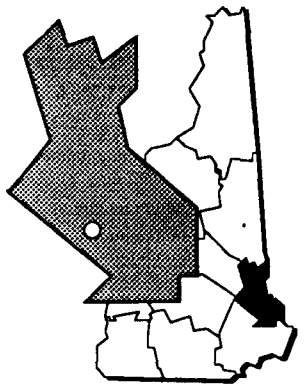
Groundwater Treatment: A 300-gallon-per-minute groundwater treatment facility was constructed to remove toxic substances in the groundwater. The treatment process consists of a combination of physical, chemical, and biological treatments. The process involves pumping the groundwater from within the slurry wall containment area and then exposing it to air to remove contaminants. Based on a review of the effectiveness of the treatment by the New Hampshire Department of Environmental Services, the EPA, in 1990, called for a continuation of groundwater treatment until 1994, and also ordered that new extraction wells be installed, and that the recharge trenches be repaired.

Site Facts: Several Consent Decrees were entered into by the EPA, the State, and numerous potentially responsible parties to provide for reimbursement of past costs and the undertaking of cleanup designs and actions.

Environmental Progress

The removal, fencing, capping, and groundwater containment activities described above have reduced the risk of exposure to hazardous materials at the Sylvester site. The threat of direct contact with contaminants in soil has been eliminated. Cleanup actions at the Sylvester site have reduced contamination levels, and additional cleanup is underway.

TIBBETS ROAD
NEW HAMPSHIRE
EPA ID# NHD989090469



EPA REGION 1
CONGRESSIONAL DIST. 01
Strafford County
Barrington

Site Description

The Tibbets Road site occupies approximately 2 acres. The site was used for storing drums collected from 1944 to 1958. Many of the drums were leaking and rusted and contained thinners, solvents, antifreeze, kerosene, motor and transmission oil, polychlorinated biphenyls (PCBs), grease, and brake fluid. The EPA removed all the deteriorating drums in 1984. Approximately 2,100 people living within 3 miles of the site depend on groundwater for drinking water. The New Hampshire Water Supply and Pollution Control Commission found drinking water wells serving approximately 20 people to be contaminated. The site is situated in a residential area upgradient from a lake used for recreational purposes.

Site Responsibility: The site is being addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 04/10/85
Final Date: 06/01/86

Threats and Contaminants

The groundwater and soils are contaminated with volatile organic compounds (VOCs) including benzene, trichloroethylene (TCE), toluene, and xylenes, according to tests conducted by the New Hampshire Water Supply and Pollution Control Commission. People who accidentally ingest or come in direct contact with contaminated groundwater or soil are at potential risk.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase to investigate the extent of soil and groundwater contamination and cleanup alternatives.

Response Action Status

Immediate Actions: In 1984, the EPA removed approximately 350 deteriorated and leaking drums stored within 50 yards of private residences and disposed of them at an approved disposal site. Residents were temporarily relocated while the drums were being removed. During the summer of 1985, the EPA and the State conducted an investigation to determine whether any additional materials needed to be removed from the site. Low levels of dioxin were detected in the soil and VOCs were found in the drinking water. The EPA and the State began a joint soil removal effort. Between 1985 and the summer of 1988, PCB- and dioxin-contaminated soil was incinerated, and the solvent-contaminated soil was excavated and disposed of by the State. A water supply system was constructed to provide drinking water to the 45 homes with contaminated wells.

Soil and Groundwater: An investigation currently is being conducted by the EPA to determine the extent of soil and groundwater contamination remaining at the site and alternative technologies for cleanup. This investigation is scheduled to be completed in late 1991.

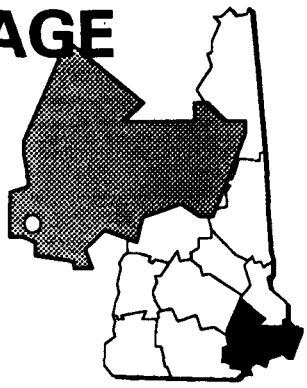
Environmental Progress

The removal of the drums and soil from the Tibbets Road site and the provision of a new water supply have reduced the potential for exposure to contamination. These actions have helped to protect the public health and the environment while the site awaits further cleanup action.

TINKHAM GARAGE

NEW HAMPSHIRE

EPA ID# NHD062004569



EPA REGION 1
CONGRESSIONAL DIST. 01
Rockingham County
Londonderry

Site Description

The Tinkham Garage site covers about 375 acres in Londonderry. During 1978 and 1979, oil, oily wastes, washings from septic tank trucks, and other substances were discharged at the site. In 1978, residents complained of foam and odors in a small unnamed brook, which then prompted an investigation revealing that improper waste disposal had occurred. The State ordered the site owner to prevent further degradation of surface water and groundwater. In early 1983, wells of the Londonderry Green Apartment complex and several other private wells were closed due to contamination, and residents were provided with municipal water. The open and wooded land that comprises the majority of the site is bordered by residential and agricultural land. Approximately 400 people reside within a condominium complex on the western boundary of the site. Additional residences include private, one-family homes within site boundaries to the north.

Site Responsibility: The site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/30/82
Final Date: 09/01/83

Threats and Contaminants

Volatile organic compounds (VOCs) were identified in the surface water and groundwater on site and in areas adjacent to the site. The soils located in the field behind Tinkham Garage and in some condominium complex leachfields also have been shown to contain VOC contamination. A potential threat to residential wells adjacent to the site may exist if the contaminated groundwater continues to be used as a water source. The contaminated area in the field behind the garage poses a threat if people accidentally ingest or come in direct contact with the soils, surface water, or groundwater.

Cleanup Approach

The site is being addressed in two stages: initial actions and a long-term remedial phase to conduct a study of cleanup alternatives.

Response Action Status

Initial Actions: The State issued a health order in early 1983, advising residents not to drink well water. Bottled water was provided, and a municipal water supply line was installed and operational by the fall of 1983.

Entire Site: In 1987, the EPA entered into an agreement with 23 of the parties potentially responsible for the site contamination to conduct a study before the cleanup technologies were designed. The following three areas of contamination were identified as needing attention: the soil in the garage area; the groundwater in the general area of the garage and the condominium complex; and a soil pile that contains soil removed during earlier excavations of leachfield soils. The remedies selected include: (1) excavation of approximately 10,800 cubic yards of contaminated soils behind Tinkham Garage; (2) field work and analytical modeling to determine the need for removal of additional potentially contaminated soils in the condominium complex; (3) on-site treatment of contaminated soils by vacuum extraction; (4) regrading and revegetation of excavated source areas after treated soils have been returned to their original locations; (5) reconstruction of any removed leachfields; (6) restoration of wetlands where contaminated soils are excavated; (7) extraction and off-site treatment of contaminated groundwater at the Town of Derry's wastewater treatment works, which may require off-site pretreatment; and (8) groundwater monitoring on and off site. Activities to plan the cleanup approach are underway. The cleanup is expected to begin in 1991 and is scheduled for completion in 1993.

Site Facts: The potentially responsible parties, under a Consent Decree, have agreed to undertake the cleanup design and activities at the site. This site is closely associated with the Sylvester's, Plymouth Harbor, and Cannon Engineering NPL sites.

Environmental Progress

The provision of an alternate drinking water source has reduced the potential for exposure to contamination at the Tinkham Garage site, and has protected the public health while it awaits planned cleanup activities.

Glossary: Terms Used in the Fact Sheets

Terms Used in the NPL Book

This glossary defines terms used throughout the NPL Volumes. The terms and abbreviations contained in this glossary apply specifically to work performed under the Superfund program in the context of hazardous waste management. These terms may have other meanings when used in a different context.

Acids: Substances, characterized by low pH (less than 7.0), that are used in chemical manufacturing. Acids in high concentration can be very corrosive and react with many inorganic and organic substances. These reactions possibly may create toxic compounds or release heavy metal contaminants that remain in the environment long after the acid is neutralized.

Administrative Order On Consent: A legal and enforceable agreement between the EPA and the parties potentially responsible for site contamination. Under the terms of the Order, the potentially responsible parties (PRPs) agree to perform or pay for site studies or cleanups. It also describes the oversight rules, responsibilities, and enforcement options that the government may exercise in the event of non-compliance by potentially responsible parties. This Order is signed by PRPs and the government; it does not require approval by a judge.

Administrative Order [Unilateral]: A legally binding document issued by the EPA, directing the parties potentially responsible to perform site cleanups or studies (generally, the EPA does not issue Unilateral Orders for site studies).

Aeration: A process that promotes breakdown of contaminants in soil or water by exposing them to air.

Agency for Toxic Substances and Disease Registry (ATSDR): The Federal agency within the U.S. Public Health Service charged with carrying out the health-related responsibilities of CERCLA.

Air Stripping: A process whereby volatile organic chemicals (VOCs) are removed from contaminated material by forcing a stream of air through it in a pressurized vessel. The contaminants are evaporated into the air stream. The air may be further treated before it is released into the atmosphere.

Ambient Air: Any unconfined part of the atmosphere. Refers to the air that may be inhaled by workers or residents in the vicinity of contaminated air sources.

Aquifer: An underground layer of rock, sand, or gravel capable of storing water within cracks and pore spaces, or between grains. When water contained within an aquifer is of sufficient quantity and quality, it can be tapped and used for drinking or other purposes. The water contained in the aquifer is called groundwater. A sole source aquifer supplies 50% or more of the drinking water of an area.

Artesian (Well): A well made by drilling into the earth until water is reached, which, from internal pressure, flows up like a fountain.

GLOSSARY

Attenuation: The naturally occurring process by which a compound is reduced in concentration over time through adsorption, degradation, dilution, and/or transformation.

Background Level: The amount of a substance typically found in the air, water, or soil from natural, as opposed to human, sources.

Baghouse Dust: Dust accumulated in removing particulates from the air by passing it through cloth bags in an enclosure.

Bases: Substances characterized by high pH (greater than 7.0), which tend to be corrosive in chemical reactions. When bases are mixed with acids, they neutralize each other, forming salts.

Berm: A ledge, wall, or a mound of earth used to prevent the migration of contaminants.

Bioaccumulate: The process by which some contaminants or toxic chemicals gradually collect and increase in concentration in living tissue, such as in plants, fish, or people, as they breathe contaminated air, drink contaminated water, or eat contaminated food.

Biological Treatment: The use of bacteria or other microbial organisms to break down toxic organic materials into carbon dioxide and water.

Bioremediation: A cleanup process using naturally occurring or specially cultivated microorganisms to digest contaminants and break them down into non-hazardous components.

Bog: A type of wetland that is covered with peat moss deposits. Bogs depend primarily on moisture from the air for their water source, are usually acidic, and are rich in plant residue [see Wetland].

Boom: A floating device used to contain oil floating on a body of water or to restrict the potential overflow of waste liquids from containment structures.

Borehole: A hole that is drilled into the ground and used to sample soil or groundwater.

Borrow Pit: An excavated area where soil, sand, or gravel has been dug up for use elsewhere.

Cap: A layer of material, such as clay or a synthetic material, used to prevent rainwater from penetrating and spreading contaminated materials. The surface of the cap generally is mounded or sloped so water will drain off.

Carbon Adsorption: A treatment system in which contaminants are removed from groundwater and surface water by forcing water through tanks containing activated carbon, a specially treated material that attracts and holds or retains contaminants.

Carbon Disulfide: A degreasing agent formerly used extensively for parts washing. This compound has both inorganic and organic properties, which increase cleaning efficiency. However, these properties also cause chemical reactions that increase the hazard to human health and the environment.

Carbon Treatment: [see Carbon Adsorption].

Cell: In solid waste disposal, one of a series of holes in a landfill where waste is dumped, compacted, and covered with layers of dirt.

CERCLA: [see Comprehensive Environmental Response, Compensation, and Liability Act].

Characterization: The sampling, monitoring, and analysis of a site to determine the

extent and nature of toxic releases. Characterization provides the basis for acquiring the necessary technical information to develop, screen, analyze, and select appropriate cleanup techniques.

Chemical Fixation: The use of chemicals to bind contaminants, thereby reducing the potential for leaching or other movement.

Chromated Copper Arsenate: An insecticide/herbicide formed from salts of three toxic metals: copper, chromium, and arsenic. This salt is used extensively as a wood preservative in pressure-treating operations. It is highly toxic and water-soluble, making it a relatively mobile contaminant in the environment.

Cleanup: Actions taken to eliminate a release or threat of release of a hazardous substance. The term "cleanup" sometimes is used interchangeably with the terms remedial action, removal action, response action, or corrective action.

Closure: The process by which a landfill stops accepting wastes and is shut down, under Federal guidelines that ensure the protection of the public and the environment.

Comment Period: A specific interval during which the public can review and comment on various documents and EPA actions related to site cleanup. For example, a comment period is provided when the EPA proposes to add sites to the NPL. There is minimum 3-week comment period for community members to review and comment on the remedy proposed to clean up a site.

Community Relations: The EPA effort to establish and maintain two-way communication with the public. Goals of community relations programs include creating an understanding of EPA programs and related actions, assuring public input into decision-making processes related to affected communities, and making certain that the Agency is aware of, and responsive to, public concerns. Specific community relations activities are required in relation to Superfund cleanup actions [see Comment Period].

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): Congress enacted the CERCLA, known as Superfund, in 1980 to respond directly to hazardous waste problems that may pose a threat to the public health and the environment. The EPA administers the Superfund program.

Confluence: The place where two bodies of water, such as streams or rivers, come together.

Consent Decree: A legal document, approved and issued by a judge, formalizing an agreement between the EPA and the parties potentially responsible for site contamination. The decree describes cleanup actions that the potentially responsible parties are required to perform and/or the costs incurred by the government that the parties will reimburse, as well as the roles, responsibilities, and enforcement options that the government may exercise in the event of non-compliance by potentially responsible parties. If a settlement between the EPA and a potentially responsible party includes cleanup actions, it must be in the form of a Consent Decree. A Consent Decree is subject to a public comment period.

Consent Order: [see Administrative Order on Consent].

Containment: The process of enclosing or containing hazardous substances in a structure, typically in a pond or a lagoon, to prevent the migration of contaminants into the environment.

GLOSSARY

Contaminant: Any physical, chemical, biological, or radiological material or substance whose quantity, location, or nature produces undesirable health or environmental effects.

Contingency Plan: A document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or other accident that releases toxic chemicals, hazardous wastes, or radioactive materials into the environment.

Cooperative Agreement: A contract between the EPA and the States, wherein a State agrees to manage or monitor certain site cleanup responsibilities and other activities on a cost-sharing basis.

Cost Recovery: A legal process by which potentially responsible parties can be required to pay back the Superfund program for money it spends on any cleanup actions [see Potentially Responsible Parties].

Cover: Vegetation or other material placed over a landfill or other waste material. It can be designed to reduce movement of water into the waste and to prevent erosion that could cause the movement of contaminants.

Creosotes: Chemicals used in wood preserving operations and produced by distillation of tar, including polycyclic aromatic hydrocarbons and polynuclear aromatic hydrocarbons [see PAHs and PNAs]. Contaminating sediments, soils, and surface water, creosotes may cause skin ulcerations and cancer through prolonged exposure.

Culvert: A pipe used for drainage under a road, railroad track, path, or through an embankment.

Decommission: To revoke a license to operate and take out of service.

Degradation: The process by which a chemical is reduced to a less complex form.

Degrease: To remove grease from wastes, soils, or chemicals, usually using solvents.

De minimis: This legal phrase pertains to settlements with parties who contributed small amounts of hazardous waste to a site. This process allows the EPA to settle with small, or *de minimis* contributors, as a single group rather than as individuals, saving time, money, and effort.

Dewater: To remove water from wastes, soils, or chemicals.

Dike: A low wall that can act as a barrier to prevent a spill from spreading.

Disposal: Final placement or destruction of toxic, radioactive, or other wastes; surplus or banned pesticides or other chemicals; polluted soils; and drums containing hazardous materials. Disposal may be accomplished through the use of approved secure landfills, surface impoundments, land farming, deep well injection, or incineration.

Downgradient: A downward hydrologic slope that causes groundwater to move toward lower elevations. Therefore, wells *downgradient* of a contaminated groundwater source are prone to receiving pollutants.

Effluent: Wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall. Generally refers to wastes discharged into surface waters.

Emission: Pollution discharged into the atmosphere from smokestacks, other vents, and surface areas of commercial or industrial facilities.

Emulsifiers: Substances that help in mixing materials that do not normally mix; e.g., oil and water.

Endangerment Assessment: A study conducted to determine the risks posed to public health or the environment by contamination at NPL sites. The EPA or the State conducts the study when a legal action is to be taken to direct the potentially responsible parties to clean up a site or pay for the cleanup. An endangerment assessment supplements an investigation of the site hazards.

Enforcement: EPA, State, or local legal actions taken against parties to facilitate settlements; to compel compliance with laws, rules, regulations, or agreements; and/or to obtain penalties or criminal sanctions for violations. Enforcement procedures may vary, depending on the specific requirements of different environmental laws and related regulatory requirements. Under CERCLA, for example, the EPA will seek to require potentially responsible parties to clean up a Superfund site or pay for the cleanup [see Cost Recovery].

Erosion: The wearing away of land surface by wind or water. Erosion occurs naturally from weather or surface runoff, but can be intensified by such land-related practices as farming, residential or industrial development, road building, or timber-cutting. Erosion may spread surface contamination to off-site locations.

Estuary (estuarine): Areas where fresh water from rivers and salt water from nearshore ocean waters are mixed. These areas may include bays, mouths of rivers, salt marshes, and lagoons. These water ecosystems shelter and feed marine life, birds, and wildlife.

Evaporation Ponds: Areas where sewage sludge or other watery wastes are dumped and allowed to dry out.

Feasibility Study: The analysis of the potential cleanup alternatives for a site. The feasibility study usually starts as soon as the remedial investigation is underway; together, they are commonly referred to as the RI/FS [see Remedial Investigation].

Filtration: A treatment process for removing solid (particulate) matter from water by passing the water through sand, activated carbon, or a man-made filter. The process is often used to remove particles that contain contaminants.

Flood Plain: An area along a river, formed from sediment deposited by floods. Flood plains periodically are innundated by natural floods, which can spread contamination.

Flue Gas: The air that is emitted from a chimney after combustion in the burner occurs. The gas can include nitrogen oxides, carbon oxides, water vapor, sulfur oxides, particles, and many chemical pollutants.

Fly Ash: Non-combustible residue that results from the combustion of flue gases. It can include nitrogen oxides, carbon oxides, water vapor, sulfur oxides, as well as many other chemical pollutants.

French Drain System: A crushed rock drain system constructed of perforated pipes, which is used to drain and disperse wastewater.

Gasification (coal): The conversion of soft coal into gas for use as a fuel.

Generator: A facility that emits pollutants into the air or releases hazardous wastes into water or soil.

Good Faith Offer: A voluntary offer, generally in response to a Special Notice letter, made by a potentially responsible party, consisting of a written proposal demonstrating a potentially responsible party's qualifications

and willingness to perform a site study or cleanup.

Groundwater: Underground water that fills pores in soils or openings in rocks to the point of saturation. In aquifers, groundwater occurs in sufficient quantities for use as drinking and irrigation water and other purposes.

Groundwater Quality Assessment: The process of analyzing the chemical characteristics of groundwater to determine whether any hazardous materials exist.

Halogens: Reactive non-metals, such as chlorine and bromine. Halogens are very good oxidizing agents and, therefore, have many industrial uses. They are rarely found by themselves; however, many chemicals such as polychlorinated biphenyls (PCBs), some volatile organic compounds (VOCs), and dioxin are reactive because of the presence of halogens.

Hazard Ranking System (HRS): The principal screening tool used by the EPA to evaluate relative risks to public health and the environment associated with abandoned or uncontrolled hazardous waste sites. The HRS calculates a score based on the potential of hazardous substances spreading from the site through the air, surface water, or groundwater and on other factors such as nearby population. The HRS score is the primary factor in deciding if the site should be on the NPL.

Hazardous Waste: By-products of society that can pose a substantial present or potential hazard to human health and the environment when improperly managed. It possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appears on special EPA lists.

Hot Spot: An area or vicinity of a site containing exceptionally high levels of contamination.

Hydrogeology: The geology of groundwater, with particular emphasis on the chemistry and movement of water.

Impoundment: A body of water or sludge confined by a dam, dike, floodgate, or other barrier.

Incineration: A group of treatment technologies involving destruction of waste by controlled burning at high temperatures, e.g., burning sludge to reduce the remaining residues to a non-burnable ash that can be disposed of safely on land, in some waters, or in underground locations.

Infiltration: The movement of water or other liquid down through soil from precipitation (rain or snow) or from application of wastewater to the land surface.

Influent: Water, wastewater, or other liquid flowing into a reservoir, basin, or treatment plant.

Injection Well: A well into which waste fluids are placed, under pressure, for purposes of disposal.

Inorganic Chemicals: Chemical substances of mineral origin, not of basic carbon structure.

Installation Restoration Program: The specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its hazardous waste sites and controlling the migration of hazardous contaminants from those sites.

Intake: The source from where a water supply is drawn, such as from a river or water body.

Interagency Agreement: A written agreement between the EPA and a Federal agency that has the lead for site cleanup activities,

setting forth the roles and responsibilities of the agencies for performing and overseeing the activities. States often are parties to interagency agreements.

Interim (Permit) Status: Conditions under which hazardous waste treatment, storage, and disposal facilities, that were operating when regulations under the RCRA became final in 1980, are temporarily allowed by the EPA to continue to operate while awaiting denial or issuance of a permanent permit. The facility must comply with certain regulations to maintain interim status.

Lagoon: A shallow pond or liquid waste containment structure. Lagoons typically are used for the storage of wastewaters, sludges, liquid wastes, or spent nuclear fuel.

Landfarm: To apply waste to land and/or incorporate waste into the surface soil, such as fertilizer or soil conditioner. This practice commonly is used for disposal of composted wastes and sludges.

Landfill: A disposal facility where waste is placed in or on land. *Sanitary* landfills are disposal sites for non-hazardous solid wastes. The waste is spread in layers, compacted to the smallest practical volume, and covered with soil at the end of each operating day. Secure *chemical* landfills are disposal sites for hazardous waste. They are designed to minimize the chance of release of hazardous substances into the environment [see Resource Conservation and Recovery Act].

Leachate [n]: The liquid that trickles through or drains from waste, carrying soluble components from the waste. **Leach, Leaching [v.t.]:** The process by which soluble chemical components are dissolved and carried through soil by water or some other percolating liquid.

Leachate Collection System: A system that gathers liquid that has leaked into a landfill or other waste disposal area and pumps it to the surface for treatment.

Liner: A relatively impermeable barrier designed to prevent leachate (waste residue) from leaking from a landfill. Liner materials include plastic and dense clay.

Long-term Remedial Phase: Distinct, often incremental, steps that are taken to solve site pollution problems. Depending on the complexity, site cleanup activities can be separated into several of these phases.

Marsh: A type of wetland that does not contain peat moss deposits and is dominated by vegetation. Marshes may be either fresh or saltwater and tidal or non-tidal [see Wetland].

Migration: The movement of oil, gas, contaminants, water, or other liquids through porous and permeable soils or rock.

Mill Tailings: [See Mine Tailings].

Mine Tailings: A fine, sandy residue left from mining operations. Tailings often contain high concentrations of lead, uranium, and arsenic or other heavy metals.

Mitigation: Actions taken to improve site conditions by limiting, reducing, or controlling toxicity and contamination sources.

Modeling: A technique using a mathematical or physical representation of a system or theory that tests the effects that changes on system components have on the overall performance of the system.

Monitoring Wells: Special wells drilled at specific locations within, or surrounding, a hazardous waste site where groundwater can be sampled at selected depths and studied to obtain such information as the direction in

which groundwater flows and the types and amounts of contaminants present.

National Priorities List (NPL): The EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term cleanup under Superfund. The EPA is required to update the NPL at least once a year.

Neutrals: Organic compounds that have a relatively neutral pH, complex structure and, due to their organic bases, are easily absorbed into the environment. Naphthalene, pyrene, and trichlorobenzene are examples of neutrals.

Nitroaromatics: Common components of explosive materials, which will explode if activated by very high temperatures or pressures; 2,4,6-Trinitrotoluene (TNT) is a nitroaromatic.

Notice Letter: A General Notice Letter notifies the parties potentially responsible for site contamination of their possible liability. A Special Notice Letter begins a 60-day formal period of negotiation during which the EPA is not allowed to start work at a site or initiate enforcement actions against potentially responsible parties, although the EPA may undertake certain investigatory and planning activities. The 60-day period may be extended if the EPA receives a good faith offer within that period.

On-Scene Coordinator (OSC): The predesignated EPA, Coast Guard, or Department of Defense official who coordinates and directs Superfund removal actions or Clean Water Act oil- or hazardous-spill corrective actions.

Operation and Maintenance: Activities conducted at a site after a cleanup action is completed to ensure that the cleanup or containment system is functioning properly.

Organic Chemicals/Compounds: Chemical substances containing mainly carbon, hydrogen, and oxygen.

Outfall: The place where wastewater is discharged into receiving waters.

Overpacking: Process used for isolating large volumes of waste by jacketing or encapsulating waste to prevent further spread or leakage of contaminating materials. Leaking drums may be contained within oversized barrels as an interim measure prior to removal and final disposal.

Pentachlorophenol (PCP): A synthetic, modified petrochemical that is used as a wood preservative because of its toxicity to termites and fungi. It is a common component of creosotes and can cause cancer.

Perched (groundwater): Groundwater separated from another underlying body of groundwater by a confining layer, often clay or rock.

Percolation: The downward flow or filtering of water or other liquids through subsurface rock or soil layers, usually continuing downward to groundwater.

Petrochemicals: Chemical substances produced from petroleum in refinery operations and as fuel oil residues. These include fluoranthene, chrysene, mineral spirits, and refined oils. Petrochemicals are the bases from which volatile organic compounds (VOCs), plastics, and many pesticides are made. These chemical substances often are toxic to humans and the environment.

Phenols: Organic compounds that are used in plastics manufacturing and are by-products of petroleum refining, tanning, textile, dye, and resin manufacturing. Phenols are highly poisonous.

Physical Chemical Separation: The treatment process of adding a chemical to a substance to separate the compounds for further treatment or disposal.

Pilot Testing: A small-scale test of a proposed treatment system in the field to determine its ability to clean up specific contaminants.

Plugging: The process of stopping the flow of water, oil, or gas into or out of the ground through a borehole or well penetrating the ground.

Plume: A body of contaminated groundwater flowing from a specific source. The movement of the groundwater is influenced by such factors as local groundwater flow patterns, the character of the aquifer in which groundwater is contained, and the density of contaminants [see Migration].

Pollution: Generally, the presence of matter or energy whose nature, location, or quantity produces undesired health or environmental effects.

Polycyclic Aromatic Hydrocarbons or Polyaromatic Hydrocarbons (PAHs): PAHs, such as pyrene, are a group of highly reactive organic compounds found in motor oil. They are a common component of creosotes and can cause cancer.

Polychlorinated Biphenyls (PCBs): A group of toxic chemicals used for a variety of purposes including electrical applications, carbonless copy paper, adhesives, hydraulic fluids, microscope immersion oils, and caulking compounds. PCBs also are produced in certain combustion processes. PCBs are extremely persistent in the environment because they are very stable, non-reactive, and highly heat resistant. Chronic exposure to PCBs is believed to cause liver damage. It also is known to bioaccumulate in fatty tissues. PCB use and sale was banned in 1979 with the passage of the Toxic Substances Control Act.

Polynuclear Aromatic Hydrocarbons (PNAs): PNAs, such as naphthalene, and biphenyls, are a group of highly reactive organic compounds that are a common component of creosotes, which can be carcinogenic.

Polyvinyl Chloride (PVC): A plastic made from the gaseous substance vinyl chloride. PVC is used to make pipes, records, raincoats, and floor tiles. Health risks from high concentrations of vinyl chloride include liver cancer and lung cancer, as well as cancer of the lymphatic and nervous systems.

Potable Water: Water that is safe for drinking and cooking.

Potentially Responsible Parties (PRPs): Parties, including owners, who may have contributed to the contamination at a Superfund site and may be liable for costs of response actions. Parties are considered PRPs until they admit liability or a court makes a determination of liability. PRPs may sign a Consent Decree or Administrative Order on Consent to participate in site cleanup activity without admitting liability.

Precipitation: The removal of solids from liquid waste so that the solid and liquid portions can be disposed of safely; the removal of particles from airborne emissions. Electrochemical precipitation is the use of an anode or cathode to remove the hazardous chemicals. Chemical precipitation involves the addition of some substance to cause the solid portion to separate.

Preliminary Assessment: The process of collecting and reviewing available information about a known or suspected waste site or release to determine if a threat or potential threat exists.

Pump and Treat: A groundwater cleanup technique involving the extracting of contaminated groundwater from the subsurface and the removal of contaminants, using one of several treatment technologies.

Radionuclides: Elements, including radium and uranium-235 and -238, which break down and produce radioactive substances due to their unstable atomic structure. Some are man-made, and others are naturally occurring in the environment. Radon, the gaseous form of radium, decays to form alpha particle radiation, which cannot be absorbed through skin. However, it can be inhaled, which allows alpha particles to affect unprotected tissues directly and thus cause cancer. Radiation also occurs naturally through the breakdown of granite stones.

RCRA: [See Resource Conservation and Recovery Act].

Recharge Area: A land area where rainwater saturates the ground and soaks through the earth to reach an aquifer.

Record of Decision (ROD): A public document that explains which cleanup alternative(s) will be used to clean up sites listed on the NPL. It is based on information generated during the remedial investigation and feasibility study and consideration of public comments and community concerns.

Recovery Wells: Wells used to withdraw contaminants or contaminated groundwater.

Recycle: The process of minimizing waste generation by recovering usable products that might otherwise become waste.

Remedial Action (RA): The actual construction or implementation phase of a Superfund site cleanup following the remedial design [see Cleanup].

Remedial Design: A phase of site cleanup, where engineers design the technical specifications for cleanup remedies and technologies.

Remedial Investigation: An in-depth study designed to gather the data necessary to determine the nature and extent of contamination at a Superfund site, establish the criteria for cleaning up the site, identify the preliminary alternatives for cleanup actions, and support the technical and cost analyses of the alternatives. The remedial investigation is usually done with the feasibility study. Together they are customarily referred to as the RI/FS [see Feasibility Study].

Remedial Project Manager (RPM): The EPA or State official responsible for overseeing cleanup actions at a site.

Remedy Selection: The selection of the final cleanup strategy for the site. At the few sites where the EPA has determined that initial response actions have eliminated site contamination, or that any remaining contamination will be naturally dispersed without further cleanup activities, a "No Action" remedy is selected [see Record of Decision].

Removal Action: Short-term immediate actions taken to address releases of hazardous substances [see Cleanup].

Residual: The amount of a pollutant remaining in the environment after a natural or technological process has taken place, e.g., the sludge remaining after initial wastewater treatment, or particulates remaining in air after the air passes through a scrubbing, or other, process.

Resource Conservation and Recovery Act (RCRA): A Federal law that established a regulatory system to track hazardous substances from the time of generation to disposal. The law requires safe and secure

procedures to be used in treating, transporting, storing, and disposing of hazardous substances. RCRA is designed to prevent new, uncontrolled hazardous waste sites.

Retention Pond: A small body of liquid used for disposing of wastes and containing overflow from production facilities. Sometimes retention ponds are used to expand the capacity of such structures as lagoons to store waste.

Riparian Habitat: Areas adjacent to rivers and streams that have a high density, diversity, and productivity of plant and animal species relative to nearby uplands.

Runoff: The discharge of water over land into surface water. It can carry pollutants from the air and land and spread contamination from its source.

Scrubber: An air pollution device that uses a spray of water or reactant or a dry process to trap pollutants in emissions.

Sediment: The layer of soil, sand, and minerals at the bottom of surface waters, such as streams, lakes, and rivers, that absorbs contaminants.

Seeps: Specific points where releases of liquid (usually leachate) form from waste disposal areas, particularly along the lower edges of landfills.

Seepage Pits: A hole, shaft, or cavity in the ground used for storage of liquids, usually in the form of leachate, from waste disposal areas. The liquid gradually leaves the pit by moving through the surrounding soil.

Septage: Residue remaining in a septic tank after the treatment process.

Sinkhole: A hollow depression in the land surface in which drainage collects; associated with underground caves and passages that facilitate the movement of liquids.

Site Characterization: The technical process used to evaluate the nature and extent of environmental contamination, which is necessary for choosing and designing cleanup measures and monitoring their effectiveness.

Site Inspection: The collection of information from a hazardous waste site to determine the extent and severity of hazards posed by the site. It follows, and is more extensive than, a preliminary assessment. The purpose is to gather information necessary to score the site, using the Hazard Ranking System, and to determine if the site presents an immediate threat that requires a prompt removal action.

Slag: The fused refuse or dross separated from a metal in the process of smelting.

Sludge: Semi-solid residues from industrial or water treatment processes that may be contaminated with hazardous materials.

Slurry Wall: Barriers used to contain the flow of contaminated groundwater or subsurface liquids. Slurry walls are constructed by digging a trench around a contaminated area and filling the trench with an impermeable material that prevents water from passing through it. The groundwater or contaminated liquids trapped within the area surrounded by the slurry wall can be extracted and treated.

Smelter: A facility that melts or fuses ore, often with an accompanying chemical change, to separate the metal. Emissions from smelters are known to cause pollution.

Soil Gas: Gaseous elements and compounds that occur in the small spaces between particles of soil. Such gases can move through

or leave the soil or rock, depending on changes in pressure.

Soil Vapor Extraction: A treatment process that uses vacuum wells to remove hazardous gases from soil.

Soil Washing: A water-based process for mechanically scrubbing soils in-place to remove undesirable materials. There are two approaches: dissolving or suspending them in the wash solution for later treatment by conventional methods, and concentrating them into a smaller volume of soil through simple particle size separation techniques [see Solvent Extraction].

Stabilization: The process of changing an active substance into inert, harmless material, or physical activities at a site that act to limit the further spread of contamination without actual reduction of toxicity.

Solidification/Stabilization: A chemical or physical reduction of the mobility of hazardous constituents. Mobility is reduced through the binding of hazardous constituents into a solid mass with low permeability and resistance to leaching.

Solvent: A substance capable of dissolving another substance to form a solution. The primary uses of industrial solvents are as cleaners for degreasing, in paints, and in pharmaceuticals. Many solvents are flammable and toxic to varying degrees.

Solvent Extraction: A means of separating hazardous contaminants from soils, sludges, and sediment, thereby reducing the volume of the hazardous waste that must be treated. It generally is used as one in a series of unit operations. An organic chemical is used to dissolve contaminants as opposed to water-based compounds, which usually are used in soil washing.

Sorption: The action of soaking up or attracting substances. It is used in many pollution control systems.

Stillbottom: Residues left over from the process of recovering spent solvents.

Stripping: A process used to remove volatile contaminants from a substance [see Air Stripping].

Sumps: A pit or tank that catches liquid runoff for drainage or disposal.

Superfund: The program operated under the legislative authority of the CERCLA and Superfund Amendments and Reauthorization Act (SARA) to update and improve environmental laws. The program has the authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health, welfare, or the environment. The "Superfund" is a trust fund that finances cleanup actions at hazardous waste sites.

Surge Tanks: A holding structure used to absorb irregularities in flow of liquids, including liquid waste materials.

Swamp: A type of wetland that is dominated by woody vegetation and does not accumulate peat moss deposits. Swamps may be fresh or saltwater and tidal or non-tidal [see Wetlands].

Thermal Treatment: The use of heat to remove or destroy contaminants from soil.

Treatability Studies: Testing a treatment method on contaminated groundwater, soil, etc., to determine whether and how well the method will work.

Trichloroethylene (TCE): A stable, colorless liquid with a low boiling point. TCE has many industrial applications, including use as

a solvent and as a metal degreasing agent. TCE may be toxic to people when inhaled, ingested, or through skin contact and can damage vital organs, especially the liver [see Volatile Organic Compounds].

Unilateral [Administrative] Order: [see Administrative Order].

Upgradient: An upward hydrologic slope; demarks areas that are higher than contaminated areas and, therefore, are not prone to contamination by the movement of polluted groundwater.

Vacuum Extraction: A technology used to remove volatile organic compounds (VOCs) from soils. Vacuum pumps are connected to a series of wells drilled to just above the water table. The wells are sealed tightly at the soil surface, and the vacuum established in the soil draws VOC-contaminated air from the soil pores into the well, as fresh air is drawn down from the surface of the soil.

Vegetated Soil Cap: A cap constructed with graded soils and seed for vegetative growth, to prevent erosion [see Cap].

Vitrification: The process of electrically melting wastes and soils or sludges to bind the waste in a glassy, solid material more durable than granite or marble and resistant to leaching.

Volatile Organic Compounds (VOCs): VOCs are manufactured as secondary petrochemicals. They include light alcohols, acetone, trichloroethylene, perchloroethylene, dichloroethylene, benzene, vinyl chloride, toluene, and methylene chloride. These potentially toxic chemicals are used as solvents, degreasers, paints, thinners, and fuels. Because of their volatile nature, they readily evaporate into the air, increasing the potential exposure to humans. Due to their low water solubility, environmental persistence, and widespread industrial use, they are commonly found in soil and groundwater.

Waste Treatment Plant: A facility that uses a series of tanks, screens, filters, and other treatment processes to remove pollutants from water.

Wastewater: The spent or used water from individual homes or industries.

Watershed: The land area that drains into a stream or other water body.

Water Table: The upper surface of the groundwater.

Weir: A barrier to divert water or other liquids.

Wetland: An area that is regularly saturated by surface or groundwater and, under normal circumstances, is capable of supporting vegetation typically adapted for life in saturated soil conditions. Wetlands are critical to sustaining many species of fish and wildlife. Wetlands generally include swamps, marshes, and bogs. Wetlands may be either coastal or inland. Coastal wetlands have salt or brackish (a mixture of salt and fresh) water, and most have tides, while inland wetlands are nontidal and freshwater. Coastal wetlands are an integral component of estuaries.

Wildlife Refuge: An area designated for the protection of wild animals, within which hunting and fishing are either prohibited or strictly controlled.

Information Repositories for NPL Sites in New Hampshire

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Information Repositories for NPL Sites in the State of New Hampshire

Repositories are established for all NPL sites so that the public can obtain additional information related to site activities. Some sites may have more than one repository location, however, the primary site repository is listed below. All public access information pertaining to the site will be on file at these repositories. The quantity and nature of the documentation found in the repositories depends on the extent of activity and cleanup progress for each site and may include some or all of the following: community relations plans, announcements for public meetings, minutes from public meetings, fact sheets detailing activities at sites, documents relating to the selection of cleanup remedies, press releases, locations of other public information centers, and any other documents pertaining to site activities.

Site Name	Site Repository
AUBURN ROAD LANDFILL SITE	Leach Library, 276 Mamouth Road, Londonderry, NH 03053
COAKLEY LANDFILL	North Hampton Public Library, 235 Atlantic Avenue, North Hampton, NH 03862
DOVER MUNICIPAL LANDFILL	Dover Public Library, Carnegie Building, 73 Locust Street, Dover, NH 03820
FLETCHER'S PAINT WORKS	Wadleigh Memorial Library, 49 Nashual Street, Milford, NH 03055
HOLTON CIRCLE	Leach Library, 276 Mamouth Road, Londonderry, NH 03053
KEARSARGE METALLURGICAL CORPORATION	Conway Public Library, Main Street, Conway, NH 03813
KEEFE ENVIRONMENTAL SERVICES	Harvey-Mitchell Memorial Library, 52 Main Street, Epping, NH 03042
MOTTOLO PIG FARM	Dudley-Tucker Library, 6 Epping Street, Raymond, NH 03077
OTTATI & GOSS/KINGSTON STEEL DRUM	Kingston Public Library, Main Street, Kingston, NH 03848
PEASE AIR FORCE BASE	Portsmouth Public Library, 8 Islington Street, Portsmouth, NH 03801
SAVAGE MUNICIPAL WATER SUPPLY	Wadleigh Memorial Library, 21 Nashua Street, Milford, NH 03055
SOMERSWORTH SANITARY LANDFILL	Somersworth Public Library, 27 Main Street, Somersworth, NH 03878
SOUTH MUNICIPAL WELL/WATER SUPPLY	Peterborough Town Library, Maine and Concord Streets, Peterborough, NH 03458
SYLVESTER SITE	NH Dept. of Environmental Protection Office, 6 Hoyden Drive, Concord, NH 03301
TIBBETTES ROAD SITE	Barrington Public Library, Star Route, Barrington, NH 03825
TINKHAM'S GARAGE	Leach Library, 276 Mamouth Road, Londonderry, NH 03053

* U.S. G.P.O.:1992-311-893:60636