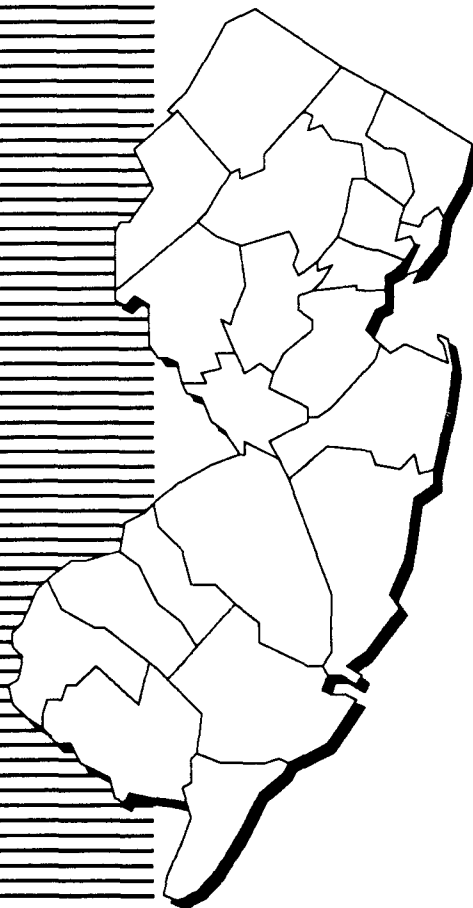




National Priorities List Sites:

N E W J E R S E Y



1 9 9 1



NATIONAL PRIORITIES LIST SITES: New Jersey

U.S. Environmental Protection Agency
Region 5, Library (P-1)
77 West Jackson Boulevard, 12th Floor
Chicago, IL 60604-3590

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.

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INTRODUCTION

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, hazard-

A Brief Overview

ous 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 Superfund. 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

INTRODUCTION

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 environ-

mental 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

INTRODUCTION

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.

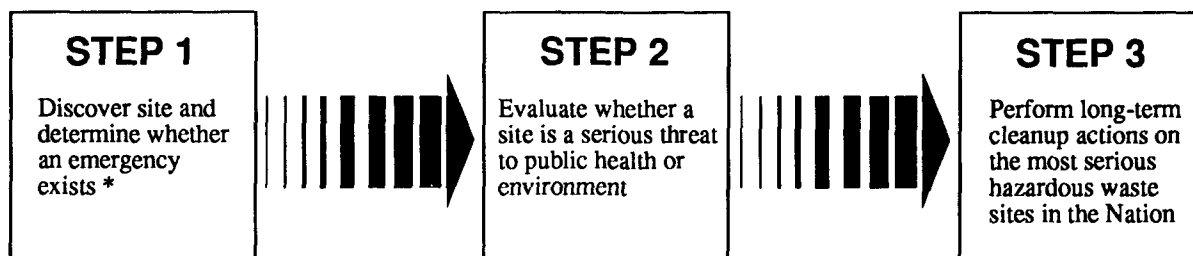
This volume compiles site summary fact sheets on each State or Territorial site being cleaned up under the Superfund program. These sites represent the most serious hazardous waste problems in the Nation and require the most complicated and costly site solutions yet encountered. Each book gives a "snapshot" 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.

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

How Does the Program Work to Clean Up Sites?

THREE-STEP SUPERFUND PROCESS



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

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.

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

SUPERFUND

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-

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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

SUPERFUND

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 of the 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.

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 clean-

How to Use the State Book

ups 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 NAME STATE EPA ID# ABC0000000		EPA REGION XX CONGRESSIONAL DIST XX COUNTY NAME LOCATION Other Names:
SITE RESPONSIBILITY Identifies the Federal, State, and/or potentially responsible parties that are taking responsibility for cleanup actions at the site.	Site Description	A	NPL Listing History Proposed: XX/XX/XX Final: XX/XX/XX
	Site Responsibility:		
	Threats and Contaminants 	B	
	Cleanup Approach		
	Response Action Status 	D	
Site Facts:	E		
Environmental Progress 			

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.)

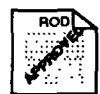
Icons in the Response Action Status Section



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.



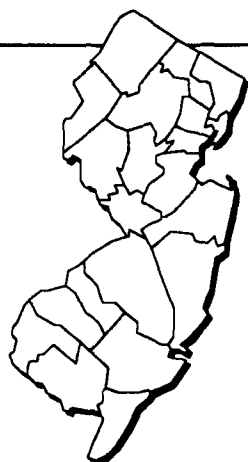
Cleanup Ongoing indicates that the selected cleanup remedies for the contaminated site, or part of the site, currently are underway.



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 Jersey

The Middle Atlantic state of New Jersey is located within EPA Region 2, which includes New York, Puerto Rico, and the Virgin Islands. The state covers 7,787 square miles and consists of the Appalachian Valley in the northwest, the Appalachian Highlands stretching from the northeast to the southwest, the Piedmont Plateau made of low plains and high ridges, and the coastal plains throughout the southeastern half of the state. New Jersey experienced a 5% increase in population between 1980 and 1990, according to the 1990 Census, and currently has approximately 7,730,000 residents, ranking 9th in U.S. populations. Principal state industries include services, trade, and the manufacture of chemicals, electronic and electrical equipment, non-electrical machinery, and fabricated metals.

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

Proposed	0
Final	109
Deleted	<u>3</u>
	112

Where Are the NPL Sites Located?

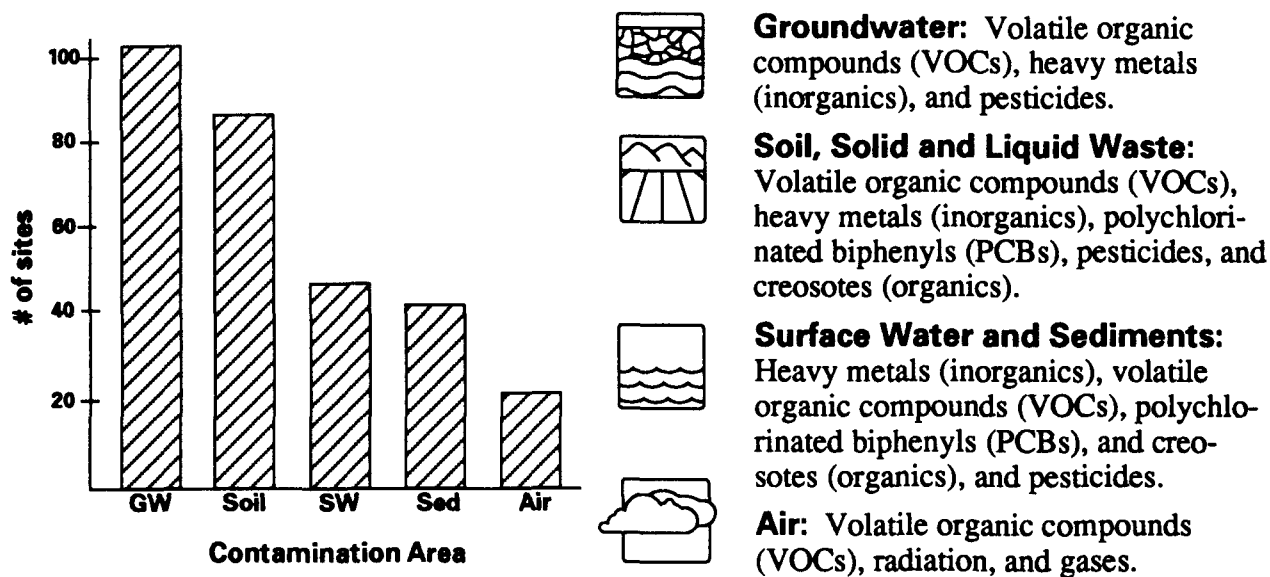
Congressional District 15	1 site
Congressional District 10, 14	2 sites
Congressional District 3, 7	4 sites
Congressional District 6, 8	5 sites
Congressional District 1, 5, 9	6 sites
Congressional District 11	9 sites
Congressional District 12	11 sites
Congressional District 4	14 sites
Congressional District 2	17 sites
Congressional District 13	20 sites

What Type of Sites are on the NPL in the State of New Jersey?

# of sites	type of sites
27	Municipal & Industrial Landfills
22	Chemical & Allied Products
15	Dumps
5	Federal Facilities
5	Storage/Treatment Facilities
5	Thorium/Radium Processing Facilities
5	Rubbers & Plastics
5	Metals & Allied Products
23	Other (Septic Tank, Recyclers, Dry Cleaners, Residential Plumbing, Salvage Yard, etc.)

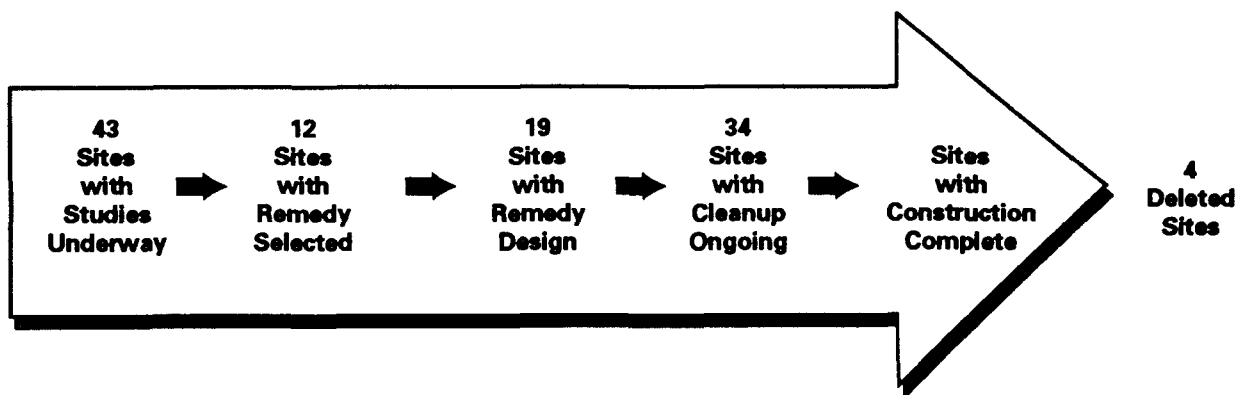
NPL SITES

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



*Appear at 10% or more sites

Where are the Sites in the Superfund Cleanup Process?†



In addition to activities described above, initial actions have been taken at 75 sites as interim cleanup measures.

†Cleanup status reflects phase 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 Jersey

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
27	A.O. POLYMER	SUSSEX	Final	09/01/83	↑	↑					
29	AMERICAN CYANAMID COMPANY	SOMERSET	Final	09/01/83		↑					
31	ASBESTOS DUMP	MORRIS	Final	09/01/83	↑	↑	↑				
33	BEACHWOOD/BERKELEY WELLS	OCEAN	Final	09/01/83	↑	↑	↑				
35	BOG CREEK FARM	MONMOUTH	Final	09/01/83	↑	↑	↑		↑		
37	BRICK TOWNSHIP LANDFILL	OCEAN	Final	09/01/83	↑	↑	↑		↑		
39	BRIDGEPORT RENTAL & OIL SERVICES	GLOUCESTER	Final	09/01/83	↑	↑	↑		↑		
43	BROOK INDUSTRIAL PARK	SOMERSET	Final	10/04/89	↑	↑	↑		↑		
45	BURNT FLY BOG	MONMOUTH/ MIDDLESEX	Final	09/01/83	↑	↑	↑		↑		
47	CALDWELL TRUCKING CO.	ESSEX	Final	09/01/83	↑	↑	↑		↑		
51	CHEMICAL CONTROL CORPORATION	UNION	Final	09/01/83	↑	↑	↑		↑		
53	CHEMICAL INSECTICIDE CORPORATION	MIDDLESEX	Final	08/30/90	↑	↑	↑		↑		
55	CHEMICAL LEAMAN TANK LINES, INC.	GLOUCESTER	Final	09/01/84	↑	↑	↑				
57	CHEMSOL, INC.	MIDDLESEX	Final	09/01/83	↑	↑	↑		↑		
59	CIBA-GEIGY CORP.	OCEAN	Final	09/01/83		↑	↑		↑		
61	CINNAMINSON GW CONTAMINATION	BURLINGTON	Final	06/01/86		↑	↑				
63	COMBE FILL NORTH LANDFILL	MORRIS	Final	09/01/83		↑	↑		↑		
65	COMBE FILL SOUTH LANDFILL	MORRIS	Final	09/01/83	↑	↑	↑		↑		
67	COOPER ROAD SITE	CAMDEN	Deleted	02/22/89		↑	↑		↑		✓
69	COSDEN CHEMICAL COATINGS CORP.	BURLINGTON	Final	07/01/87	↑	↑	↑				
71	CPS/MADISON INDUSTRIES	MIDDLESEX	Final	09/01/83	↑	↑	↑				
73	CURCIO SCRAP METAL, INC.	BERGEN	Final	07/01/87		↑	↑				
75	D'IMPERIO PROPERTY	ATLANTIC	Final	09/01/83	↑	↑	↑		↑		
77	DAYCO CORP./L. E. CARPENTER	MORRIS	Final	07/01/87	↑	↑	↑		↑		
79	DE REWAL CHEMICAL COMPANY	HUNTERDON	Final	09/01/84		↑	↑		↑		
81	DELLILAH ROAD	ATLANTIC	Final	09/01/84		↑	↑		↑		

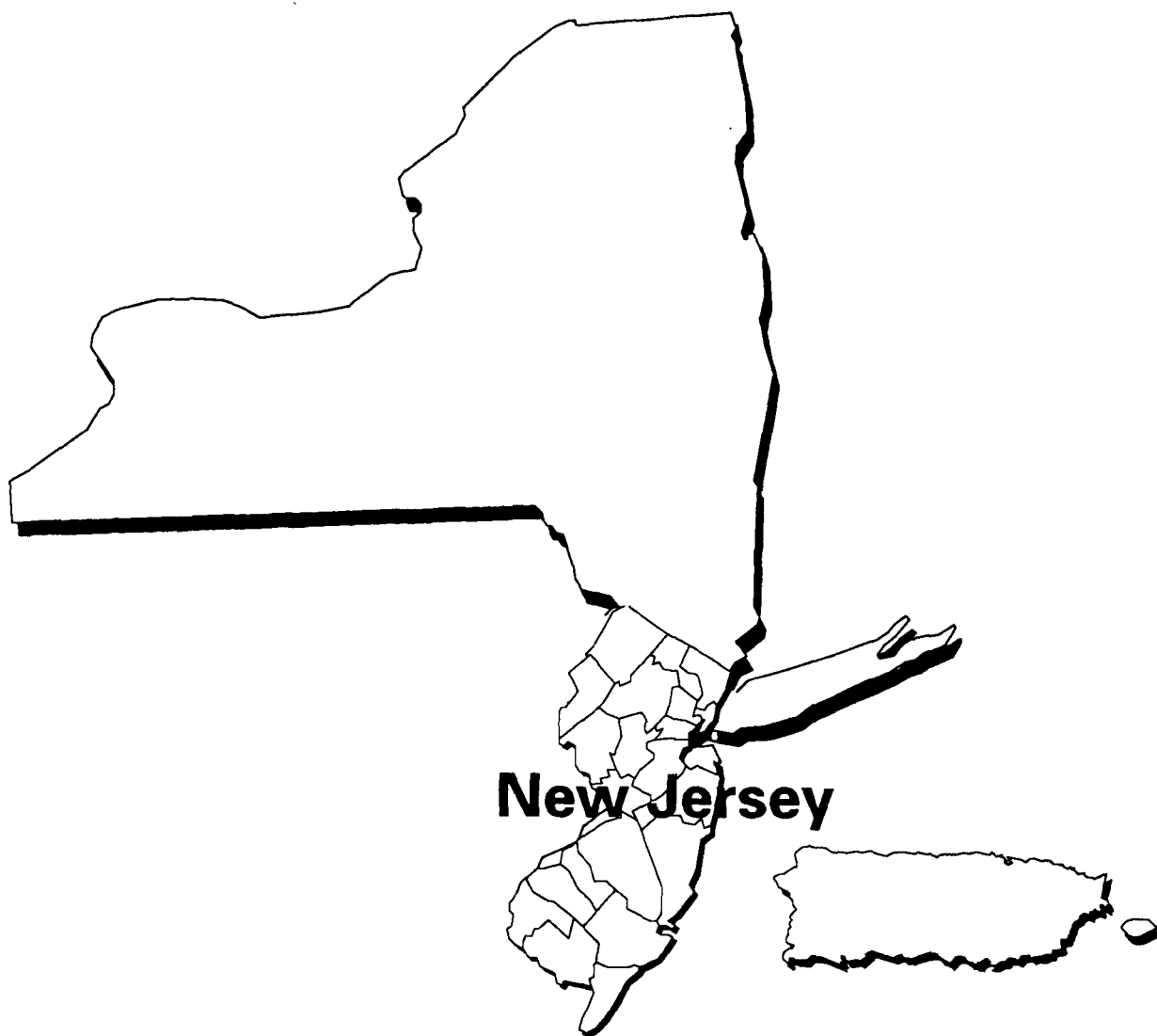
Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
83	DENZER & SCHAFER X-RAY COMPANY	OCEAN	Final	09/01/83		↑					
85	DIAMOND ALKALI CO.	ESSEX	Final	09/01/84	↑	↑	↑	↑			
87	DOVER MUNICIPAL WELL 4	MORRIS	Final	09/01/83		↑					
89	ELLIS PROPERTY	BURLINGTON	Final	09/01/83	↑	↑					
91	EVOR PHILLIPS LEASING	MIDDLESEX	Final	09/01/83	↑	↑					
93	EWAN PROPERTY	BURLINGTON	Final	09/01/84	↑	↑	↑	↑			
95	FAA TECHNICAL CENTER	ATLANTIC	Final	08/30/90	↑	↑	↑	↑			
97	FAIR LAWN WELL FIELD	BERGEN	Final	09/01/83	↑	↑	↑	↑	↑		
99	FLORENCE LAND RECONTOURING	BURLINGTON	Final	09/01/84	↑	↑	↑	↑			
101	FORT DIX (LANDFILL SITE)	BURLINGTON	Final	07/01/87		↑					
103	FRIED INDUSTRIES	MIDDLESEX	Final	06/01/86	↑	↑					
105	FRIEDMAN PROPERTY	MONMOUTH	Deleted	03/07/86		↑	↑		↑		✓
107	GARDEN STATE CLEANERS CO.	ATLANTIC	Final	03/30/89		↑					
109	GEMS LANDFILL	CAMDEN	Final	09/01/83	↑	↑	↑	↑	↑		
111	GLEN RIDGE RADIUM SITE	ESSEX	Final	02/01/85	↑	↑	↑	↑	↑		
113	GLOBAL SANITARY LANDFILL	MIDDLESEX	Final	03/30/89		↑					
115	GOOSE FARM	OCEAN	Final	09/01/83	↑	↑	↑	↑	↑		
117	HELEN KRAMER LANDFILL	GLOUCESTER	Final	09/01/83		↑	↑	↑	↑		
119	HERCULES, INC.	GLOUCESTER	Final	09/01/83		↑					
121	HIGGINS DISPOSAL	SOMERSET	Final	08/30/90	↑	↑					
123	HIGGINS FARM	SOMERSET	Final	03/30/89	↑	↑	↑				
125	HOPKINS FARM	OCEAN	Final	09/01/84		↑					
127	IMPERIAL OIL CO. INC./CHAMPION CHEM	MONMOUTH	Final	09/01/83		↑	↑				
129	INDUSTRIAL LATEX CORP.	BERGEN	Final	03/30/89	↑	↑					
131	JACKSON TOWNSHIP LANDFILL	OCEAN	Final	09/01/83	↑	↑					

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
133	JIS LANDFILL	MIDDLESEX	Final	09/01/83	↑	↑					
135	KAUFFMAN & MINTER, INC.	BURLINGTON	Final	03/30/89	↑	↑					
137	KIN-BUCLANDFILL	MIDDLESEX	Final	09/01/83	↑	↑	↑				
139	KING OF PRUSSIA	CAMDEN	Final	09/01/83	↑	↑	↑				
141	KRYOWATY FARM	SOMERSET	Deleted	02/22/89	↑	↑	↑	↑	↑		✓
143	LANDFILL AND DEVELOPMENT CO.	BURLINGTON	Final	09/01/84	↑	↑					
145	LANG PROPERTY	BURLINGTON	Final	09/01/83		↑	↑	↑	↑		
147	LIPARI LANDFILL	GLOUCESTER	Final	09/01/83	↑	↑	↑	↑	↑		
149	LODI MUNICIPAL WELL	BERGEN	Final	08/30/90	↑	↑					
151	LONE PINE LANDFILL	MONMOUTH	Final	09/01/83		↑	↑	↑	↑		
153	M & T DELISA LANDFILL	MONMOUTH	Deleted	03/06/91		↑	↑		↑		✓
155	MANNHEIM AVENUE DUMP	ATLANTIC	Final	09/01/83	↑	↑	↑				
157	MAYWOOD CHEMICAL COMPANY	BERGEN	Final	09/01/83	↑	↑	↑				
161	METALTEC/AEROSYSTEMS	SUSSEX	Final	09/01/83		↑	↑	↑	↑		
163	MONITOR DEVICES/INTERCIRCUITS INC.	MONMOUTH	Final	06/01/86		↑					
165	MONROE TOWNSHIP LANDFILL	MIDDLESEX	Final	09/01/83		↑	↑	↑	↑		
167	MONTCLAIR/WEST ORANGE RADIUM	ESSEX	Final	02/01/85	↑	↑	↑	↑	↑		
169	MONTGOMERY TOWNSHIP HOUSING	SOMERSET	Final	09/01/83	↑	↑	↑	↑	↑		
171	MYERS PROPERTY	HUNTERDON	Final	09/01/83	↑	↑	↑				
173	NASCOLITE CORPORATION	CUMBERLAND	Final	09/01/84	↑	↑	↑	↑			
175	NAVAL AIR ENGINEERING CENTER	OCEAN	Final	07/22/87		↑	↑	↑			
179	NAVAL WEAPONS STATION EARLE	MONMOUTH	Final	08/30/90		↑					
181	NL INDUSTRIES INC.	SALEM	Final	09/01/83	↑						
183	PEPE FIELD	MORRIS	Final	09/01/83		↑	↑	↑			
185	PICATINNY ARSENAL	MORRIS	Final	02/21/90		↑	↑	↑	↑	↑	
187	PIJAK FARM	OCEAN	Final	09/01/83		↑	↑	↑	↑	↑	

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
189	PJPLANDFILL	HUDSON	Final	09/01/83	↑	↑					
191	POHATCONG VALLEY GW CONTAMN.	WARREN	Final	03/30/89	↑	↑					
193	POMONA OAKS RESIDENTIAL WELLS	ATLANTIC	Final	06/01/86	↑	↑	↑				
195	PRICE LANDFILL	ATLANTIC	Final	09/01/83	↑	↑	↑	↑	↑		
197	RADIATION TECHNOLOGY, INC.	MORRIS	Final	09/01/84		↑					
199	REICH FARMS	OCEAN	Final	09/01/83	↑	↑	↑	↑			
201	RENORA, INC.	MIDDLESEX	Final	09/01/83	↑	↑	↑	↑	↑		
203	RINGWOOD MINES/LANDFILL	PASSAIC	Final	09/01/83	↑	↑	↑	↑	↑		
205	ROCKAWAY BOROUGH WELL FIELD	MORRIS	Final	09/01/83	↑	↑	↑				
207	ROCKAWAY TOWNSHIP WELLS	MORRIS	Final	09/01/83	↑	↑					
209	ROCKY HILL MUNICIPAL WELL	SOMERSET	Final	09/01/83		↑	↑	↑			
211	ROEBLING STEEL CO.	BURLINGTON	Final	09/01/83	↑	↑	↑	↑	↑		
215	SAYREVILLE LANDFILL	MIDDLESEX	Final	09/01/83	↑	↑	↑	↑			
217	SCIENTIFIC CHEMICAL PROCESSING	BERGEN	Final	09/01/83	↑	↑	↑	↑			
219	SHARKEY LANDFILL	MORRIS	Final	09/01/83		↑	↑	↑			
221	SHIELDALLOY CORP.	GLOUCESTER	Final	09/01/84	↑	↑					
223	SOUTH BRUNSWICK LANDFILL	MIDDLESEX	Final	09/01/83		↑	↑	↑	↑		
225	SOUTH JERSEY CLOTHING CO.	ATLANTIC	Final	10/04/89		↑					
227	SPENCE FARM	OCEAN	Final	09/01/83	↑	↑	↑	↑	↑		
229	SWOPE OIL & CHEMICAL CO.	CAMDEN	Final	09/01/83	↑	↑	↑	↑	↑		
231	SYNCON RESINS	HUDSON	Final	09/01/83	↑	↑	↑	↑	↑		
233	TABERNACLE DRUM DUMP	BURLINGTON	Final	09/01/84	↑	↑	↑	↑			
235	U.S. RADIUM CORP.	ESSEX	Final	09/01/83	↑	↑					
237	UNIVERSAL OIL PRODUCTS, INC.	BERGEN	Final	09/01/83	↑	↑					
239	UPPER DEERFIELD TOWNSHIP LANDFILL	CUMBERLAND	Final	09/01/84	↑	↑					
241	VENTRON/VELSICOL	BERGEN	Final	09/01/84		↑					

Page	Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
243	VINELAND CHEMICAL CO., INC.	CUMBERLAND	Final	09/01/84		↑	↑	↑			
247	VINELAND STATE SCHOOL	CUMBERLAND	Final	09/01/83	↑	↑	↑				
249	W.R. GRACE & CO.	PASSAIC	Final	09/01/84	↑	↑					
251	WALDICK AEROSPACE DEVICES, INC.	MONMOUTH	Final	06/01/86	↑	↑	↑	↑			
253	WILLIAMS PROPERTY	CAPE MAY	Final	09/01/83	↑	↑	↑	↑	↑		
255	WILSON FARM	OCEAN	Final	09/01/84	↑	↑					
257	WITCO CHEMICAL CORP.	BERGEN	Final	10/04/89	↑	↑					
259	WOODLAND ROUTE 72 DUMP	BURLINGTON	Final	09/01/84		↑	↑	↑	↑		
261	WOODLAND ROUTE 532 DUMP	BURLINGTON	Final	09/01/84	↑	↑	↑	↑	↑		

Summary of Site Activities



EPA REGION 2



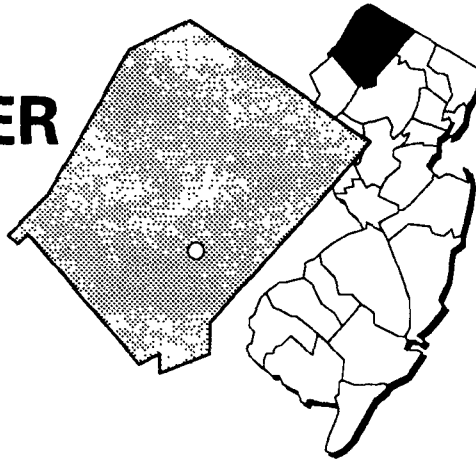
Who Do I Call with Questions?

The following pages describe each NPL site in New Jersey, providing specific information on threats and contaminants, cleanup activities, and environmental progress. Should you have questions, please call the EPA's Region 2 Office in New York, NY or one of the other offices listed below:

EPA Region 2 Superfund Community Relations Office	(212) 264-7054
EPA Region 2 Superfund Office	(212) 264-2858
EPA Superfund Hotline	(800) 424-9346
EPA Headquarters Public Information Center	(202) 260-2080
New Jersey Superfund Office	(609) 984-2902

A.O. POLYMER NEW JERSEY

EPA ID# NJD030253355



EPA REGION 2
CONGRESSIONAL DIST. 05
Sussex County
1 mile northeast of Sparta

Site Description

The 4-acre A.O. Polymer manufacturing plant, active since the early 1960s, produces resins, plastics, paper coatings, and specialty polymers. In the late 1970s, the New Jersey Department of Environmental Protection confirmed the contamination of soil, groundwater, and surface water in the area of the chemical plant, which allegedly resulted from substandard operational and waste disposal practices. Operators left hundreds of leaking and deteriorated drums on the site, and many had been buried unsealed or crushed. The site has been the focus of concern from local residents and regulatory authorities since the early 1970s. Citizens noticed odors in well water and the air in 1973, and reports intensified over the next few years. In 1978, the Sparta Health Department and the State found volatile organic compounds (VOCs) in three domestic water wells. The State cited the facility twice for improperly discharging plant wastewater and three times for air quality violations. The site is located near the Wallkill River, 1/4 mile from the commercial area of Sparta. Plumes of contaminated groundwater are moving toward both the Wallkill River and associated wetlands. Approximately 750 people live in the area. The site threatens the Allentown formation; groundwater that supplies drinking water to 700 people.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater is contaminated with various VOCs and freon from previous plant activities. The soil contains VOCs, phenols, and ketones from old waste burial lagoons and railroad fueling. Surface water and sediments are contaminated with various heavy metals. The plant's cooling lagoon contained xylenes. Possible health threats include drinking contaminated groundwater, drinking or swimming in polluted surface water, direct contact with or accidentally ingesting contaminated soil, or inhaling pollutants.

Cleanup Approach

This 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 1980 and 1981, the State undertook an extensive cleanup, removing 950 drums of hazardous wastes, 1,700 cubic yards of contaminated soils, and 120 cubic yards of crushed drums and debris. All liquids, solids, and buried materials were removed. In 1982, the State Division of Water Resources installed 11 monitoring wells. In 1984, the investigation was turned over to the State's Hazardous Site Mitigation division and, in 1986, an intensive site study began.



Entire Site: A State-led investigation of contamination at and around the site explored the nature and extent of soil and groundwater contamination. It was completed in spring 1991. The EPA is expected to select the strategies for final cleanup by mid-1991.

Environmental Progress

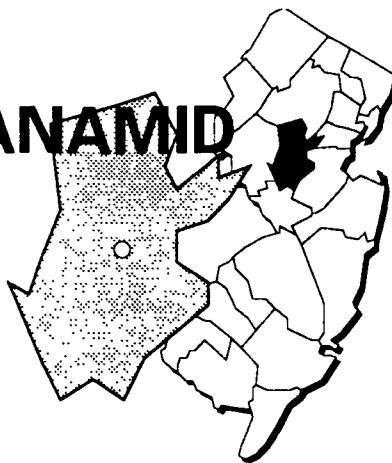


The removal of wastes, contaminated soils, drums, and debris has reduced the potential for exposure to hazardous substances at the A.O. Polymer site while cleanup activities are being planned.

AMERICAN CYANAMID COMPANY

NEW JERSEY

EPA ID# NJD002173276



EPA REGION 2
CONGRESSIONAL DIST. 07

Somerset County
Bound Brook

Other Names:
Bound Brook Plant

Site Description

The 575-acre American Cyanamid Company site was acquired in the early 1930s and has produced a variety of pharmaceutical chemicals, dyes, rubber chemicals, elastics, textile chemicals, and pigments. Currently, the major production is pharmaceutical chemicals. The site is located adjacent to the Raritan River and lies above the Brunswick Aquifer, New Jersey's second largest source of drinking water. On the site are 27 lagoons and impoundments, both active and inactive, which have been used for the disposal of various chemical sludges and other wastes, as well as for the treatment of wastewaters generated at the site. Investigations conducted by the New Jersey Department of Environmental Protection (NJDEP) and American Cyanamid have documented groundwater contamination. The site is fenced and restricted. Approximately 14,000 people live within a 3-mile radius of the site. The closest home is 2,000 feet away, and 30 private wells lie close to the site.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater underlying the area is contaminated with various volatile organic compounds (VOCs) from site production activities. Sludges and soils sampled in on-site impoundments contain heavy metals, cyanide, and VOCs. Drinking or accidentally coming in contact with contaminated groundwater could pose a threat to human health. Trespassers also may be exposed to contaminants in site sludges.

Cleanup Approach

This site is being addressed in four long-term remedial phases focusing on groundwater monitoring, cleanup of the lagoons, cleanup of the soils, and cleanup of the groundwater.

Response Action Status



Groundwater Monitoring: American Cyanamid installed about 150 monitoring wells to check on groundwater movement and to monitor contaminant levels. The company submits a quarterly report to the State on the quality of water pumped from the supply and monitoring wells. Analysis includes a priority pollutant scan. The ongoing groundwater pumping control system appears to have been effective in preventing contaminated seepage from moving off site through the groundwater.



Lagoons: Under State monitoring, American Cyanamid is conducting an intensive study of the lagoons and sludges. The company is currently screening various technologies for site cleanup. The technologies being considered include incineration, other thermal treatments, bioremediation using microorganisms, solidification, and in-place containment. The EPA is scheduled to select a remedy on the basis of all information in late 1991.



Soils: Under State monitoring, American Cyanamid began a study of contaminated soils in 1990. Once this study is completed, the EPA will evaluate the findings and select a final cleanup remedy for contaminated soils on the site.



Groundwater: An investigation determining the extent of groundwater contamination is expected to begin once the sources of the contamination, the lagoons and soils, are cleaned.

Site Facts: In 1981, American Cyanamid and the NJDEP signed an Administrative Order on Consent requiring the company to assess the contamination of the underlying groundwater from the on-site impoundments and to design and enforce a site cleanup plan. In 1988, the NJDEP signed a second Administrative Order on Consent with American Cyanamid covering cleanup activities at the entire facility.

Environmental Progress

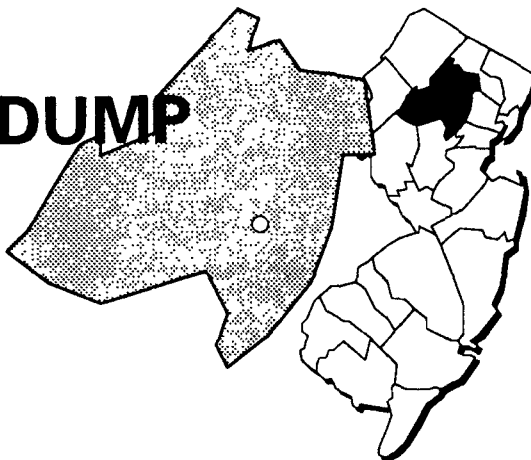


The groundwater monitoring and pumping activities described above have reduced migration of contaminants from the site and are protecting groundwater supplies from further contamination. Ongoing investigations at the American Cyanamid site will develop cleanup strategies for addressing the lagoon, soil, and groundwater contamination.

ASBESTOS DUMP

NEW JERSEY

EPA ID# NJD980654149



EPA REGION 2
CONGRESSIONAL DIST. 12

Morris County
Millington

Site Description

The Asbestos Dump is a 59-acre site consisting of the 11-acre Millington area and three satellite properties. Beginning in 1927, a succession of owners ran an asbestos products manufacturing plant at the Millington area. It contains the largest volume of asbestos wastes; more than 90% of this area contains such wastes. Erosion and weathering have exposed small areas of asbestos along the river bank. One satellite site, known as the Dietzman Tract or Great Swamp area, is located in the Great Swamp National Wildlife Refuge, about 2 miles southeast of the Township of New Vernon. This site was used as a refuse and asbestos disposal area for 40 years and is bordered by Great Brook and a woodland habitat. The New Vernon Road area, about a mile south of the Great Swamp area, consists of 30 acres in Meyersville. Broken asbestos tiles and siding, as well as loose fibers, were landfilled in this former corn and dairy farm during the late 1960s. The White Bridge Road area, covering 12 acres in Meyersville, is bounded by the Great Swamp National Wildlife Refuge and private residences. This property was a farm until 1969, when the current owner started landfilling asbestos waste from the Millington facility. The wastes are present on the site as subsurface fill or as part of an asbestos waste mound. Disposal continued from 1970 to 1975. Afterward, the owner graded and seeded the dumping areas and converted the property into a horse farm. The main site lies in a residential and commercial area. Approximately 650 people live within a mile of the Millington site, and the site itself currently employs approximately 200 people.

Site Responsibility: This 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



Groundwater and soil contain heavy metals, volatile organic compounds (VOCs), phthalates, phenols, and asbestos. Sediments contain low levels of VOCs, phthalates, and heavy metals including lead and mercury. Surface water contains phthalates and heavy metals including cadmium, chromium, and silver. Children playing on the unfenced site could inhale or accidentally ingest asbestos found in soils and dusts. One of the satellite sites is in the Great Swamp National Wildlife Refuge; tourists and wildlife at this refuge are threatened by site contaminants.

Cleanup Approach

This site is being addressed in four stages: immediate actions and three long-term remedial phases focusing on cleanup of the Millington area, New Vernon and White Bridge Roads, and the Dietzman Tract.

Response Action Status



Immediate Actions: In 1983, the parties potentially responsible for the site contamination restabilized the Passaic River bank, correcting erosion that took place during heavy spring rains. In 1990, the EPA fenced and covered contaminated areas, decontaminated homes, and instituted air monitoring.



Millington Cleanup: The remedies selected by the EPA for cleaning up the Millington area include: installing a soil cover on areas of exposed asbestos; building a chain-link security fence around all areas of known or suspected asbestos disposal; protecting and stabilizing the slope along the base of the asbestos mound embankment; building channels to divert surface runoff; conducting operations, maintenance, and long-term monitoring; restricting development of the asbestos fill areas and use of groundwater on site; and continuing studies of technologies that permanently will destroy or immobilize asbestos. In 1990, the potentially responsible parties submitted a work plan for the technical designs and specifications for the final cleanup at the site. The design field work is scheduled to begin in 1991, with cleanup scheduled to begin in 1992.



New Vernon and White Bridge Roads: The potentially responsible party has nearly completed a study to determine and identify the nature and extent of contamination at the New Vernon and White Bridge Roads area of the site. The investigation, along with recommendations for site cleanup alternatives, is expected to be completed in the summer of 1991.



Dietzman Tract: The potentially responsible party began a study in 1991, under EPA supervision, to determine the nature and extent of contamination, and to identify cleanup alternatives. The investigation is expected to be completed by 1992. Upon completion, the EPA will recommend a cleanup strategy.

Site Facts: The EPA and the potentially responsible parties signed an Administrative Order on Consent in 1985, under which the parties agreed to perform site studies. In 1989, the parties and the EPA signed a Unilateral Order for the cleanup activities.

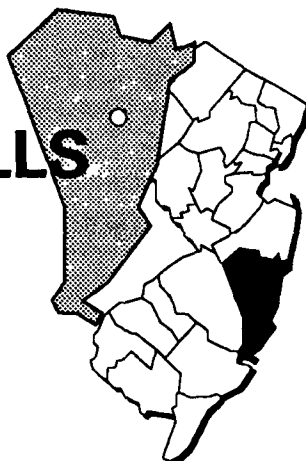
Environmental Progress



Fencing the site, decontaminating affected homes, and monitoring air in the site vicinity have protected nearby residents. The restabilization of the river bank also has reduced the potential for additional contamination of surface water at the Asbestos Dump site while further studies are being completed and cleanup activities are being planned.

BEACHWOOD/ BERKELEY WELLS NEW JERSEY

EPA ID# NJD980654123



EPA REGION 2
CONGRESSIONAL DIST. 13

Ocean County
Between the Garden State Parkway and Route 9

Other Names:
Beachwood Plaza Shopping Center

Site Description

The Beachwood/Berkeley Wells site lies in the New Jersey Pinelands region, which consists of reserved, protected, and preserved lands in Berkeley Township and Beachwood Borough. In 1982, a citizen's call prompted well analyses that discovered lead in 20% of the Beachwood wells and 4% of the Berkeley wells sampled. As of 1982, County health officials closed 128 residential wells served by the Cohansey Aquifer due to excessive levels of lead. This aquifer is the major source of drinking water for area residents. The source of the contamination is unknown; however, naturally corrosive water may be leaching lead from residential plumbing. The New Jersey Department of Environmental Protection immediately ordered Beachwood Borough to extend its public water supply to all homes within the Borough east of the Garden State Parkway and required all homes in that area to hook up to it. In 1986, the EPA studied Beachwood homes using public water and Berkeley homes using well water. The overall result of the investigation indicated that residential plumbing systems are the primary cause for lead contamination, with a minor contribution from the area's native groundwater. Beachwood Borough is densely populated and is located in an urban setting. Berkeley Township is more rural and not densely populated. Groundwater distributed through both public and private wells serves nearly 21,000 people.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater contains elevated levels of lead, copper, and manganese. Drinking water contaminated with lead is a health threat. The site lies in the New Jersey Pinelands region, a noted wildlife habitat and groundwater recharge area.



Cleanup Approach

This site is being addressed in two stages: an emergency action and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status



Emergency Action: In 1982, affected homes within Beachwood Borough were connected to a public water supply.



Entire Site: The EPA attributed contamination at this site to the local plumbing system and the natural corrosiveness of the aquifer and recommended no further cleanup action. The State took over future responsibility for the site. State and local health officials continue to educate local homeowners in how to minimize the effects of lead in the drinking water. The site is expected to be deleted from the NPL in the fall of 1991.

Site Facts: In 1982, an Administrative Order required Beachwood Borough to extend its water supply to all Borough homes east of the Garden State Parkway and required these homes to hook up to the system.

Environmental Progress

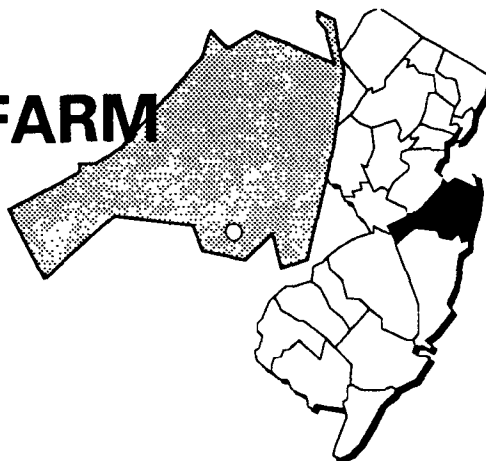


The emergency action described above eliminated the possibility of drinking contaminated groundwater at the Beachwood/Berkeley Wells site. Since the contamination at the site is due to natural conditions of the groundwater, the EPA has recommended that no further actions be taken. The safety of nearby residents is protected through connection to safe public drinking water supplies. The site is scheduled to be deleted from the NPL in 1991.

BOG CREEK FARM

NEW JERSEY

EPA ID# NJD063157150



EPA REGION 2
CONGRESSIONAL DIST. 04
Monmouth County
Howell Township

Site Description

A 4-acre disposal area lies on the 12-acre Bog Creek Farm and consists of an excavated pond, bog, and trench. Between 1973 and 1974, organic solvents and paint residues were dumped around a trench in the eastern part of the property. Waste sampling revealed a wide variety of volatile organic compounds (VOCs) and heavy metals. Some chemicals moved into the groundwater, which carried them to the pond and bog, as well as to the north branch of Squankum Brook. Contaminant levels in the north branch of Squankum Brook decrease markedly with distance from the site and do not appear to have an appreciable effect on the Manasquan River. The site lies in a rural, agricultural, and recreational area. Farms raising horses, nursery stock, vegetables, grain, sod, and flowers are situated nearby. The Allaire State Park is 1/2 mile east of the site and is used by golfers, fishermen, hunters, and equestrians. There are two homes on the site and several more about 500 feet to the northwest, on Squankum Park Road. Approximately 900 people live within 1 mile of the site. Farmingdale, 3 miles north of the site, has approximately 1,400 residents. Groundwater is the sole drinking water source for residents near the site and also is used for irrigation. Nearby surface waters are used for recreation.

Site Responsibility: This 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



On-site groundwater and surface water contain various VOCs. Sediments are contaminated with VOCs, phthalates, and pesticides. The soil is contaminated with pesticides, polychlorinated biphenyls (PCBs), and heavy metals. Sludges on site contain VOCs and heavy metals. People are at risk through the ingestion of and direct contact with contaminated groundwater, surface water, soil, and sediments.

Cleanup Approach

This site is being addressed in three stages: initial actions and two long-term remedial phases focusing on source control at the site and groundwater and sediment cleanup.

Response Action Status



Initial Actions: In 1984, the site owner pumped wastes from the disposal pits, hauled the wastes to an EPA-approved landfill, and backfilled the pits. Since 1984, the EPA has installed test pits, trenches, and monitoring wells on site as part of the investigation to determine the nature and extent of contamination. In mid-1990, an area resident with a pre-existing health condition was temporarily relocated while excavation and on-site incineration were conducted.



Source Control: In 1985, the EPA selected a remedy for controlling the source of the contamination including: (1) removing wastewater and sediments from the pond and bog; (2) regrading and covering the pond and bog; (3) treating the wastewater in an on-site plant and discharging cleaned water to the nearby stream; (4) excavating the contaminated waste deposits and soil; (5) incinerating excavated materials at a temporary facility on site or at an EPA-approved facility off site; (6) conducting further analysis of soil left behind to see if further cleanup is necessary; (7) evaluating innovative technology to treat remaining soil, if necessary; (8) covering the excavated area with a compacted soil cap to keep rainwater out; (9) building a security fence around the site and work areas; and (10) starting a monitoring program to assess the effectiveness and reliability of the cleanup strategy. The EPA completed the engineering design for this remedy in 1988. Incineration activities and most source control actions were completed in late 1990. The work was managed by the U.S. Army Corps of Engineers.



Groundwater and Sediment Cleanup: In 1989, the EPA selected a remedy for cleaning up groundwater and brook sediments on and around the site including: (1) extracting, treating, and reinjecting groundwater via the on-site water treatment plant to restore the Upper Kirkwood Aquifer to identified cleanup goals; (2) installing a slurry wall to slow the spread of contamination; (3) excavating and incinerating contaminated sediments from the north branch of Squankum Brook; (4) disposing of the incineration residues on site; and (5) restoring the stream bed with clean sand and soil similar to that existing now. The cleanup is planned to begin in summer of 1991. To speed the cleanup process, all sediments were excavated and incinerated under the source control phase, and the existing wastewater treatment plant will be used in this phase, too.

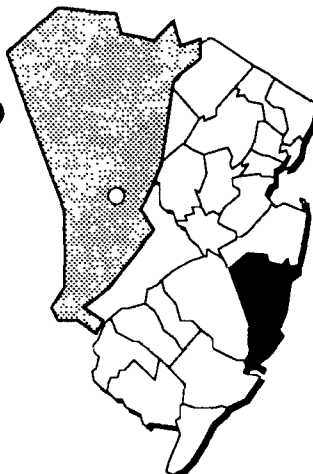
Environmental Progress



Pumping water and removing the wastes from the pits have greatly reduced the potential for exposure to contaminated materials at the Bog Creek Farm site while further cleanup activities are taking place.

BRICK TOWNSHIP LANDFILL NEW JERSEY

EPA ID# NJD980505176



EPA REGION 2
CONGRESSIONAL DIST. 03
Ocean County
Brick Township

Other Names:
French's Landfill
McCormick's Dump

Site Description

The 42-acre Brick Township Landfill operated for more than 30 years, accepting sewage, septage, solids, bulk liquids, and other wastes. Also, over 1,800 drums of chemical wastes reportedly were disposed of at the landfill in 1971. The landfill was privately owned until 1973, when it was acquired and operated by Brick Township until it was closed in 1979. Although the site partially is fenced, trespassers frequently enter. Contaminants appear to be migrating from the landfill with the groundwater in a southeasterly direction. Approximately 3,000 people live within a 1-mile radius of the site. Residential areas are nearby, and new development has started. Groundwater is the source of public and private drinking supplies for the 58,000 people living within a 3-mile radius of the site. Sampling in 1987 indicated no contamination in the private or municipal wells.

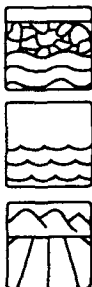
Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Sampling in 1987 showed elevated levels of cadmium and a low-level presence of volatile organic compounds (VOCs) in some monitoring wells in and around the site. Sediments and leachate are contaminated with various heavy metals. VOCs are found in soil from a test pit, and pesticides are found in the septage pits. Although some area residences rely on private wells for drinking water, most are connected to a municipal water well. However, many private wells not used for drinking water are being used for industrial purposes and for lawn and garden maintenance. Thus, there is a threat from ingestion or contact with contaminated groundwater.

Cleanup Approach

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

Response Action Status



Immediate Action: In 1982, Brick Township, under State monitoring, conducted a surface cleanup at the site, including the removal of about 150 aboveground drums and filling and venting of three septage pits.



Entire Site: Presently, the Brick Township Landfill Action Committee is investigating the contamination at the site and is evaluating cleanup alternatives. Field work was completed in 1990. The study is scheduled for completion in 1992, at which time the EPA will select the remedies for the cleanup of the site.

Site Facts: In 1982, the State and Brick Township entered into a Consent Order that required the Township to conduct a surface cleanup of the site. In 1985, the Order was amended to establish a Brick Township Landfill Action Committee, composed of State and Township officials, to perform a long-term study of the site.

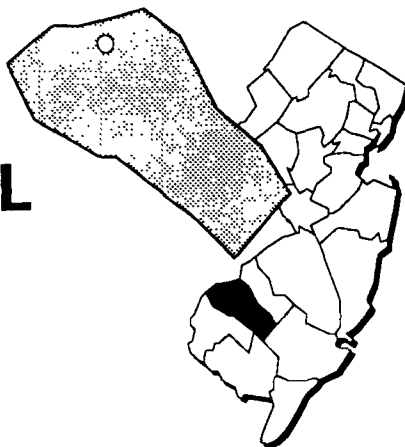
Environmental Progress



The removal of drums and filling and venting of septage pits have greatly reduced the potential for exposure to contaminated materials at the Brick Township Landfill site while further studies are being completed and cleanup activities are being planned.

BRIDGEPORT RENTAL & OIL SERVICES NEW JERSEY

EPA ID# NJD053292652



EPA REGION 2
CONGRESSIONAL DIST. 01

Gloucester County
1 mile east of Bridgeport in Logan Township

Other Names:
Bridgeport Water Line

Site Description

The 30-acre Bridgeport Rental and Oil site is a former waste oil storage and recovery facility located in Logan Township, 1 mile east of Bridgeport and 2 miles south of the Delaware River. The property bears a tank farm consisting of approximately 100 tanks and process vessels, drums, tank trucks, and a 13-acre waste oil and wastewater lagoon. The facility is no longer in operation. A court order prohibits commercial waste handling activities here. Wastes remain in the lagoon and in the storage tanks. The lagoon contains about 2 1/2 million gallons of polychlorinated biphenyl (PCB)-contaminated oil, 60,000 cubic yards of PCB-contaminated sediments and sludge, and 70 million gallons of contaminated wastewater. The wastewater, as well as the on-site groundwater, is contaminated with volatile organic compounds (VOCs). Pollution has migrated in the groundwater up to 600 feet away from the lagoon. The storage tanks contain sludge and sediment material similar to that in the lagoon. The area surrounding the site is primarily rural and agricultural. An active peach orchard borders the site's western edge. Cedar Swamp, a tidal area, lies to the east and leads to Little Timber Creek, a tributary of the Delaware River. The lagoon has threatened repeatedly to breach its dike, and did so once in the early 1970s, causing widespread vegetative damage to about 3 acres of land. The aquifer under the site is used for drinking water by about 800 people in the Bridgeport area. Groundwater is believed to flow generally north toward the Delaware River, although local flow is radially directed away from the lagoon. Domestic water supply wells lie to the north, northwest, and west of the site; 10 of them are within 50 to 1,000 feet of the site.

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

NPL LISTING HISTORY

Proposed Date: 10/01/81

Final Date: 09/01/83

Threats and Contaminants



PCBs and VOCs, including benzene and methylene chloride, have entered groundwater from materials disposed at the site. Sediments and sludges contain PCBs and other organic contaminants and metals including lead, cadmium, chromium, and barium. PCB-laden oil residues have been found in surface water. Tanks on site contain materials similar to those in the lagoon. People may be at risk by drinking contaminated groundwater. The nearby tidal wetland is an ecologically sensitive area, and contamination threatens the habitat of the last White Cedar Swamp fowl.

Cleanup Approach

The site is being addressed in three stages: emergency actions and two long-term remedial phases focusing on cleanup at the lagoon and tank farm areas and on groundwater treatment.

Response Action Status



Emergency Actions: The EPA sent emergency workers to the lagoon on the several occasions when it threatened to overflow its dike. The following actions were taken: (1) in 1981, the failing dike was reinforced, raising the height by about 5 feet; (2) in 1982, the EPA pumped down the lagoon 2 feet and treated the liquids removed; (3) affected homes were provided with filtration units for their well water; (4) in 1983, the lagoon level was lowered again by 2 feet; (5) in early 1984, an initial cleanup measure was taken to stop leaks from the southeastern corners of the lagoon; (6) in late 1984, workers returned for cleanup and replacement when a failed boom spilled 50 gallons of PCB-contaminated oil; and (7) in 1990, drums containing contaminants were prepared and removed from the site to an EPA-approved facility. The two remaining drums will be incinerated on site.



Lagoon, Tank Farm, and Wells: In 1984, the EPA selected the following remedies for cleanup of the lagoon, tank farm, and wells: (1) removing oily waste, contaminated sludges, and polluted water from the lagoon and treating them by on-site incineration; (2) excavating and disposing of drums on the site; (3) continuing to pump to prevent the further spread of contaminated groundwater and to contain any pollutants that may escape during lagoon excavation; (4) removing all tanks and contained waste; and (5) installing a water supply line from Bridgeport to homes with contaminated wells. Between 1987 and 1988, 100 tanks, many of which still contained hazardous wastes, were demolished and removed. More than 250,000 gallons of oils and sludges contaminated with PCBs and about 1 million gallons of liquids were removed from the tanks and taken to EPA-approved disposal facilities, as was debris from the buildings, tanks, vessels, drums, and excavated pipelines. In addition, about 21 million gallons of lagoon wastewater were treated through the on-site treatment system. The drinking water line to 15 affected homes was completed in 1987. The State undertook responsibility for the design and implementation of this action. In 1989, a contract was awarded to commence cleanup by the incineration of lagoon wastes (oil, sediment, and sludges) and area soils. Approximately 70 million gallons of lagoon wastewater will be treated on site in the treatment system used previously. A test of the incineration unit has taken place and is scheduled to begin production use by mid-1991. This process is expected to take approximately 3 years.



Groundwater: The EPA is undertaking a second study of the site to determine what the best strategies will be for cleaning up groundwater and related contamination. The investigation has been initiated and is slated for completion in 1993. The scope of the second phase of this cleanup will be determined by the findings of this investigation.

Site Facts: In June 1982, the Department of Justice, on behalf of the EPA, entered into a Consent Decree with the owners and operators of the site under the Resource Conservation and Recovery Act (RCRA) acknowledging improper disposal activities at the site.

Environmental Progress



The numerous emergency cleanup actions taken at the Bridgeport Rental and Oil facility have greatly reduced the potential for accidental contact with hazardous materials left on site. The majority of contaminated drums located on the site have been removed. Additionally, local residents have been provided with safe drinking water. The EPA determined that the site was safe while further investigations leading to a final selection of a remedy for the groundwater and related contamination are taking place.

BROOK INDUSTRIAL PARK

NEW JERSEY

EPA ID# NJD078251675



EPA REGION 2 CONGRESSIONAL DIST. 12

Somerset County
Bound Brook

Other Names:
Jame Fine Chemical
Blue Spruce Chemical

Site Description

The Brook Industrial Park, a 4 1/2-acre complex of light industries and warehouses, lies on the northern bank of the Raritan River in a heavily industrialized area of Bound Brook. The site is flanked by railroads and a commercial and residential area. The facility dates back to the late 1800s, but the operations of concern have a more recent tenure. Industrial, chemical, and pesticide production and storage began in 1971, when Blue Spruce International occupied part of the facility. Several operations were cited for poor housekeeping and waste disposal practices. Several shops of concern have operated in the industrial park, including Blue Spruce Chemical, Jame Fine Chemicals, Inc., and National Metal Finishings Corp. Jame Fine Chemicals' history of waste handling features the direct discharge of wastewater to the Raritan; open storage of waste oils, sludges, and organic wastes; and suspected discharge of wastewater into a septic tank and leachfield in an unknown location. National Metal Finishings dumped organic solvents and heavy metal wastes into unlined cinder block pits inside its facility; wastewater levels in these pits reportedly rise and fall with the water table levels. Blue Spruce International produced pesticides that were banned in the U.S. and could only be exported. The facility stored Agent Orange, which contains traces of dioxin. The company stored as many as 300 drums containing a wide range of hazardous compounds on the site. Blue Spruce is suspected of discharging pesticide wastes to the drainage ditch and the Raritan and was cited for illegally discharging chemicals to the Industrial Sewage Pumping Station, where workers reportedly became ill as a result. Workers at nearby operations also have become ill from releases from the site. An alleyway between this company and a neighboring corporation was found to be contaminated with dioxin and caused the EPA to take emergency actions. The materials that several shops used or processed have mixed and migrated into the groundwater. The surrounding area is heavily industrialized and residential. Public and private wells within 3 miles of the site provide water to an estimated 613,000 people. One private well lies within 1/4 mile of the site. However, these wells are believed to be upgradient of the site. The Raritan River, adjacent to the site, is used for recreational and commercial purposes.

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

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 10/04/89

Threats and Contaminants



The building flooring, as well as soils and waters in the basement at Blue Spruce, contain a wide variety of pesticides and volatile organic compounds (VOCs). Dioxin was detected in the flooring and basement soil. Many pesticides have been found in monitoring wells downgradient from the site. Sludges and discharges from sewers at Jame Fine contain a score of VOCs. Outdoor soils at Blue Spruce are contaminated with more than 20 pesticides, many VOCs, and dioxin. Outside soils at Jame Fine contain VOCs and semi-volatile organics. At National Metal Finishings, a subsurface pit revealed heavy metals, VOCs, and inorganics. Surface water on the site and runoff to the Raritan River are contaminated with pesticides. Direct contact with or accidental ingestion of contaminated soil, surface water, or groundwater may cause adverse health effects.

Cleanup Approach

The site is being addressed in two stages: emergency actions and a long-term remedial phase directed at cleanup of the entire site.

Response Action Status



Emergency Actions: In 1983, the EPA took emergency actions to seal and lock the Blue Spruce building and to cover the dioxin-contaminated area with asphalt. In 1990, fencing was installed, and a building was made secure on a portion of the site to eliminate accidental contact with possible contaminants.



Entire Site: In 1989, the EPA began an intensive study of pollution problems at this complex site. The investigation will explore the nature of soil and groundwater pollution, determine its extent, and recommend the best strategies for final cleanup. It is scheduled for completion in late 1992. The investigation will focus on several facilities within Brook Industrial Park that are believed to be contributors to the contamination.

Site Facts: In April 1980, the New Jersey Department of Environmental Protection (NJDEP) filed an Administrative Order on Consent citing Jame Fine Chemicals for illegal discharge of cooling water to the Raritan River. In December 1980, the NJDEP issued an Administrative Order to Blue Spruce ordering immediate cleanup of the facility. In August 1985, the NJDEP cited National Metal and Brook Industrial Park for unlicensed discharges of metal plating waste into groundwater starting in 1977.

Environmental Progress

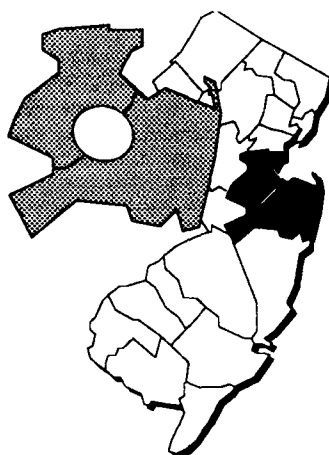


The emergency closing of the Blue Spruce facility, covering the dioxin-contaminated areas with asphalt, and fencing in a portion of the site have greatly reduced the potential for exposure to hazardous materials at the Brook Industrial Park site. Analysis of site conditions led the EPA to determine that no further immediate actions are needed while studies and selection of final remedies are proceeding.

BURNT FLY BOG

NEW JERSEY

EPA ID# NJD980504997



EPA REGION 2
CONGRESSIONAL DIST. 04
Monmouth and
Middlesex Counties
Marlboro Township

Site Description

Burnt Fly Bog is a semi-rural area covering about 1,700 acres, mostly in Marlboro Township, but extending into Middlesex County near Marlboro and the New Jersey Pine Barrens. Contamination at the site began during the 1950s and the early 1960s, with the direct dumping and spreading of hazardous materials in the upland portion of the bog. Treatment and disposal facilities for oily wastes at the edge of the site were poorly built and improperly operated. Over the years, this site was operated under several owners, and the facilities degenerated to several abandoned waste oil lagoons, contaminated waste piles, and buried and exposed drummed wastes. In addition to the oil reprocessing activities, the site was subjected to sanitary landfilling and sand and gravel pit operations. About 10 acres were directly contaminated. Uncontrolled discharges from all these upland waste sources to adjoining wetlands have resulted in groundwater and oil contamination over a 60-acre expanse. An auto salvage yard, a few scattered residences, and a horse farm are located nearby. The site is a groundwater discharge area for the Englishtown Aquifer. Groundwater flows to the surface and drains into Deep Run. The nearest people are located about 1,000 feet away from the site, and the nearest well is 200 feet away. Approximately 1,100 people live within a 1-mile radius, and 15,000 people within a 3-mile radius rely on public or private wells for their drinking water supplies. Streams and wetlands drain the site, and surface water is used for recreation.

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

NPL LISTING HISTORY

Proposed Date: 10/01/81

Final Date: 09/01/83

Threats and Contaminants



Soils and sediments contain polychlorinated biphenyls (PCBs) and lead. Surface water contains lead from runoff from the adjacent wetlands. People may come into contact with site contaminants by accidentally ingesting polluted soils or dusts; eating fish, wild berries, or wild game from the bog; or inhaling the toxic products of burning PCBs during a fire such as one that occurred on the site in 1973. The site is located in a fringe area of the environmentally sensitive New Jersey Pine Barrens. In addition, further endangerment of Deep Run could threaten the drinking water of residents in Perth Amboy, who use the stream as a potable water supply source.

Cleanup Approach

The site is being addressed in four stages: emergency actions and three long-term remedial phases focusing on cleanup of the uplands area, cleanup of the Westerly Wetlands, and further investigations of the entire site.

Response Action Status



Emergency Actions: In 1982, EPA emergency crews went to work in the upland section of the site. They repaired the earthen dike the State had built to hold back lagoon contents. They also installed a security fence around the lagoons and drums.



Uplands Area: The EPA selected a remedy to clean up the Uplands Area in 1983, which included: (1) excavating hazardous substances in lagoon 1, the asphalt pile area, the tar patch area, and the drummed waste area and disposing of them off site in EPA-approved facilities; (2) excavating and removing hazardous materials in lagoons 2, 3, and 4, the Northerly Wetlands, and the contaminated soils area; (3) restoring the original site contours and replanting the area; (4) designing a comprehensive five-year groundwater monitoring program and testing eight residential wells; and (5) studying the Westerly Wetlands further to determine the extent of contamination there. All of the contaminated soil and sludge have been excavated. Nearly 85,000 tons of soil have been removed and disposed of at approved landfills. This total includes approximately 10,000 tons of stabilized sludge. Approximately 1,000 tons of PCB-contaminated sludge remain on the site, awaiting removal and incineration. The final disposal of this sludge is expected to occur in 1992.



Westerly Wetlands: The remedy selected for this area includes: (1) excavating 5,600 cubic yards of contaminated materials that have migrated past the Westerly Wetlands to the downstream area; (2) disposing of these substances in the same manner in which Upland Area wastes are being handled; (3) containing the contaminated soils in the Westerly Wetlands by means of a sedimentation basin and appropriate diversion controls; (4) building a security fence and access road around the Westerly Wetlands; and (5) conducting studies on the most promising treatment alternatives for the Westerly Wetlands, the Northerly Wetlands, and the contaminated soils area. The State began the engineering design for this remedy in 1989, and it is scheduled for completion in 1992. The final remedy for contaminated soils will be determined, based on the treatability studies described above and the studies to be conducted in the third remedial phase.



Entire Site: The State has started intensive studies designed to identify the final remedy for contaminated materials in the Westerly Wetlands, the Northerly Wetlands, and the contaminated soil area. This investigation includes a wetlands restoration and an environmental impact study to determine if any harmful effects will occur during cleanup of the wetlands.

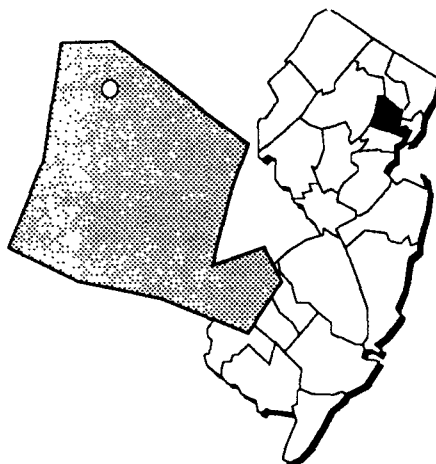
Environmental Progress



Construction of a dike and security fence around the lagoons and drums by EPA emergency crews and the removal and disposal of the contaminated soils and sludge in the Uplands area have greatly reduced the potential for accidental contact with hazardous materials and for contaminated liquids to migrate from the site. The site has been determined to be safe while further investigations into the wetlands and contaminated soil areas are planned.

CALDWELL TRUCKING NEW JERSEY

EPA ID# NJD048798953



EPA REGION 2
CONGRESSIONAL DIST. 11
Essex County
Fairfield Township

Other Names:
Fairfield Boro Site

Site Description

The 11-acre Caldwell Trucking site consists of several lots used for the disposal of residential, commercial, and industrial septic waste. The wastes were put into unlined lagoons and steel holding tanks from the early 1950s until 1984. Septic wastes were placed in the open lagoons and sodium hypochlorite, a disinfectant, was added. The wastes were allowed to settle for a period of time, and eventually, the liquid phase was pumped out and trucked to a large seepage lagoon located in the far northwestern portion of the site. The seepage lagoon was utilized from 1968 to 1973. After 1973, Caldwell installed steel storage tanks to store the wastes transported to the site. All the open, unlined lagoons were backfilled, with the exception of one that was covered with plywood. By 1984, the tanks were no longer used, and Caldwell operated solely as a transport facility until 1988, at which time the business was closed. Another neighboring company may have contributed to the groundwater contamination through spillage of solvents and the misuse of an old septic system. There are about 500 single family homes located in a heavily populated area within 1 mile of the site. Since 1981, over 100 private wells and 2 municipal wells in the area have been taken out of service due to contamination. The affected residents have been supplied with municipal water. The contaminated groundwater plume originating from the site is moving toward the Passaic River, which is used for recreational activities.

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

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

Threats and Contaminants



Volatile organic compounds (VOCs) were detected in air samples taken along the periphery of the site near the seepage lagoon during drilling operations. The groundwater on and off site is significantly contaminated with VOCs including trichloroethylene (TCE) and chloroform. Polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and VOCs were detected in subsurface site soils and metals in surface soils. VOCs were detected in off-site surface water, an unnamed tributary to Deepavaal



Brook, the brook itself, and the Passaic River. Drinking contaminated groundwater is a potential health threat as long as contaminated wells continue to be used. Other health threats include exposure related to accidentally ingesting contaminated surface water, soil, or sediments, or inhaling contaminated air. There also may be a health risk associated with eating fish from the area surface wastes.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the entire site and an off-site contamination study.

Response Action Status



Immediate Actions: Several actions were implemented in 1990 to reduce the potential for exposure to site contaminants. Chain-link gates and fences were installed at critical points to prevent access to the site. The exposed lagoon and the four underground storage tanks were covered and then surrounded with snow fencing. Portions of an access road were covered with geotech fabric and stone to minimize exposure to trespassing dirt bike riders. Warning signs also were posted on the fences and at the entrance to the site.



Entire Site: The first cleanup phase is separated into three events including residential water line hookups, restoration of municipal well No. 7, and cleanup of the site. The final selection of cleanup technologies to address site contamination included: (1) excavating and treating, through the addition of heat, approximately 28,000 cubic yards of contaminated soils and waste materials; (2) disposing of treated soils in a secure landfill to be constructed at the site in accordance with Resource Conservation and Recovery Act (RCRA) requirements; (3) restoring a lost potable water resource by providing treatment, through air stripping, of municipal public water supply well No. 7; (4) providing an alternate water supply for residents potentially affected by groundwater contamination from the site; and (5) preparing a supplemental investigation to identify the extent and other sources of groundwater contamination and to develop and evaluate appropriate cleanup alternatives. In the summer of 1989, the EPA connected the remaining 55 homes and 9 commercial establishments in the plume area to municipal water. The affected parties decided against the restoration of municipal well No. 7 in favor of continuing to purchase bottled water. The EPA is developing the technical specifications for site cleanup, with activities scheduled to begin in 1992.



Off-Site Study: The EPA will install groundwater recovery wells equipped with pumps at various locations throughout the study area to intercept contaminated groundwater. An air stripper will be constructed to treat extracted groundwater. An effluent pipe, which will lead to either Deepavaal Creek or the Passaic River, will be constructed. Design of this cleanup action is expected to begin in 1991. Pumping and treating of the groundwater will last about 30 years.

Environmental Progress

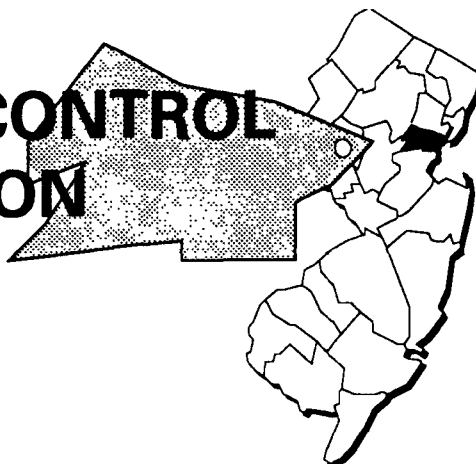


The provision of an alternate drinking water supply to the affected homes and businesses in the area of the Caldwell Trucking site has significantly reduced the potential for exposure to contaminated groundwater. Site restriction measures, along with the covering of open lagoons and contaminated soils, have significantly reduced the risk of exposure to on-site contaminants while the design of the cleanup activities is underway.

CHEMICAL CONTROL CORPORATION

NEW JERSEY

EPA ID# NJD000607481



EPA REGION 2
CONGRESSIONAL DIST. 07
Union County
Elizabeth

Site Description

The Chemical Control Corporation (CCC) site consists of 2 acres and a portion of the Elizabeth River. The site area, formerly a marsh, is flat and barely above sea level. The surrounding area is mostly industrial. From 1970 to 1978, CCC operated as a hazardous waste storage, treatment, and disposal facility, accepting various types of chemicals including: acids, arsenic, bases, cyanides, flammable solvents, polychlorinated biphenyls (PCBs), compressed gases, biological agents, and pesticides. Throughout its operations, CCC was cited for discharge and waste storage violations. In 1979, the State of New Jersey initiated a site cleanup that included bulk solids and liquids, drums at and below the soil surface, gas cylinders, infectious wastes, radioactive wastes, highly explosive liquids, debris, tanks, and 3 feet of soil. Excavated soil areas were replaced with a 3-foot gravel cover. An explosion and fire in 1980 interrupted the site cleanup and created additional cleanup needs by destroying the site and reportedly launching drums of burning waste into the air. Contaminated runoff from firefighting efforts entered the Elizabeth River. After the fire and explosion, the cleanup was accelerated and was completed in 1981. As of 1983, the site was a fenced gravel lot with approximately 200 gas cylinders and 11 trailers waiting for disposal. Contaminated soil remains under the gravel. The storm drains at the site also have been blocked. There are approximately 14,300 residents within 1 mile of the site. One residence is located within 200 feet of the site, and densely populated neighborhoods are located across the Elizabeth River. Drinking water comes from surface water sources.

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: 09/01/83

Threats and Contaminants



The sediments of the Elizabeth River and the on-site soils are contaminated with volatile organic compounds (VOCs), pesticides, acid and base/neutral extractables, and metals. The subsoil is contaminated with VOCs. Eating contaminated fish, shellfish, crabs, and other marine organisms and direct contact with sediments in the Elizabeth River are potential health threats. Other industrial pollution sources in the area probably contribute to contamination in the Elizabeth River. The site is located near estuaries and critical habitats for estuarine fauna; these areas could be threatened by contaminated waters and sediments.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases directed at controlling the source of contamination and cleanup of the entire site.

Response Action Status



Immediate Actions: The EPA performed immediate actions at the site to ensure human and environmental safety. These actions included: (1) packing 181 gas cylinders in safe containers and installing additional pressure gauges on them; (2) removing and decontaminating 11 box trailers and one vacuum truck; (3) clearing plugged storm sewers; (4) sampling and removing 187 gas cylinders that were left at the site and one taken from the Elizabeth River; (5) designing a device used for sampling and compressing gases into new cylinders; (6) performing a limited site investigation and a focused evaluation of the alternatives for cleanup to confirm reports that drums from the site had entered the river; and (7) removing all the containers that were found adjacent to the site.



Source Control: After performing the immediate actions described above, the EPA installed new cylinder gauges, reconstructed storm sewer catch basins and grates, constructed curbing to prevent runoff of contaminated sediments, and decontaminated five box trailers. The gas cylinder cleanup is complete. Harmless gases were vented, while certain easily treated gases were neutralized on site. Dangerous gases have been shipped off site for proper disposal. The EPA transported all hazardous materials generated by these cleanup actions to a federally approved disposal site. All activities for this stage of site cleanup were completed by 1990.



Entire Site: The cleanup technologies chosen to address VOC-contaminated soil on site include: (1) combining the contaminated soil with a neutralizer that will harden so that the contaminants cannot migrate from the site; (2) removing debris from earlier cleanup actions, including water collected while installing monitoring wells, items recovered from the Elizabeth River under the initial cleanup action, used disposable equipment, and the decontamination pad; (3) sealing the sanitary sewer line under the site where it connects to the South Front Street storm sewer; (4) repairing the berm that separates the site from the Elizabeth River; and (5) collecting and analyzing environmental samples to ensure the effectiveness of the remedy, including an evaluation after five years to assess its protectiveness of public health and the environment. A pilot study determined the remedy is effective in binding the contaminants and reducing their mobility. The potentially responsible parties are designing the technical specifications for the remedy. It is expected to be completed in 1992.

Site Facts: In January 1979, the State, through litigation, placed the company in receivership. In 1990, the EPA and 179 potentially responsible parties signed a Consent Decree, under which the parties agreed to design the remedy and perform the remaining cleanup activities at the site.

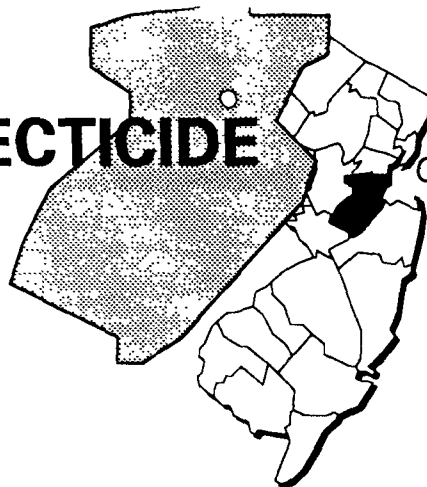
Environmental Progress



The EPA has performed numerous immediate actions at the Chemical Control Corp. site which have greatly reduced the potential for exposure to hazardous materials on the site and eliminated the sources of contamination. The EPA has determined that the site is safe while it awaits final cleanup.

CHEMICAL INSECTICIDE CORPORATION NEW JERSEY

EPA ID# NJD980484653



EPA REGION 2
CONGRESSIONAL DIST. 15
Middlesex County
Edison Township

Site Description

The Chemical Insecticide Corporation (CIC) Site is located in Edison Township and occupies about 6 acres. The property was formerly occupied by a number of industrial companies. CIC used the site from 1958 to 1970 for processing various pesticides, including herbicides that often contained dioxin as an impurity. In the mid-1960s, the Edison Department of Health and Human Resources became concerned about odors, discharges, and on-site fires. The Department ordered the facility to stop discharging wastewater, oversaw disposal of leaking drums to eliminate an odor problem, and ordered the closing of two on-site lagoons. CIC declared bankruptcy in 1970. Piscataway Associates bought the property and demolished the production facilities in 1975. As part of a State-wide dioxin screening program, the New Jersey Department of Environmental Protection sampled soil from the site and found dioxin, triggering more detailed investigations. There are approximately 77,000 people living within 3 miles of the site. A stream and a river that are used for recreation run near the site. Groundwater is a backup water supply in the event of water shortages in the area.

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

NPL LISTING HISTORY

Proposed Date: 10/26/89

Final Date: 08/30/90

Threats and Contaminants



The groundwater is contaminated with volatile organic compounds (VOCs), including benzene and trichloroethane; pesticides such as lindane; and arsenic. The soil and sediments are contaminated with pesticides, arsenic, and dioxin. Runoff from the site contained arsenic and the herbicide dinoseb. Workers and others on site could be exposed to contaminants by direct contact with soil or inhaling contaminated dust. Contaminated surface water runoff presents exposure risks on nearby properties. Continued off-site groundwater migration could affect wells in the area.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on surface water runoff and cleanup of source materials and groundwater.

Response Action Status _____



Immediate Actions: A 6-foot chain-link fence, encompassing a portion of the existing fence, was constructed to restrict access to the detected contaminants. Fifteen warning signs were posted, and a snow fence was erected around the catchment. In addition, 202 tons of crushed stone were applied to improve the utility road adjacent to a drainage ditch. A second action involved the drainage ditch, which overflowed into a parking lot. The ditch was unplugged, the adjacent berm was improved, and the parking lot was cleaned. Risks associated with contaminated surface water were reduced, but not completely eliminated.



Contaminated Surface Water Runoff: Actions selected for cleanup include: (1) grading the site; (2) installing barriers to reduce surface water from leaving or entering the site; and (3) installing an impermeable cap over the site and controlled release of uncontaminated runoff from the cap. The technical design for these activities is expected to be completed in 1991, with construction slated for completion in 1992.



Source Materials and Groundwater: The EPA is conducting an investigation of the sources of hazardous waste materials and groundwater contamination, and completion is expected in 1991.

Environmental Progress _____



Installation of a security fence around the Chemical Insecticide Corporation site and the other actions taken to control the migration of the contamination have greatly reduced the immediate threat to the surrounding community and the environment while the design for cleaning up contaminated surface water is underway and investigations leading to a selection of the final cleanup remedy are taking place.

CHEMICAL LEAMAN TANK LINES, INC. NEW JERSEY

EPA ID# NJD047321443



EPA REGION 2
CONGRESSIONAL DIST. 01
Gloucester County
Logan Township

Site Description

Chemical Leaman Tank Lines, Inc. has operated a tank-washing facility since 1960 on a 31-acre site in Bridgeport. The wastewater generated was placed in a series of seven unlined lagoons and ultimately was discharged to Moss Creek. In 1975, sludge in the settling lagoons was excavated and disposed of off site. The lagoons were then filled in, along with the aeration lagoons, but no sludge was removed. In 1980 and 1981, the State found carbon tetrachloride and other organics in the groundwater on the site as well as in private wells. Logan Township has a population of approximately 3,000 residents. Agriculture accounts for about one-third of the land use and more than half is undeveloped marshes and woodlands. Chemical Leaman Tank Lines, Inc. is in an area zoned for light industry. About 50 homes are within a 1/2-mile radius. The residences located near the site have individual domestic water supply wells, although many have not been used for drinking water since contaminants were discovered in the water in the 1970s. During 1987, residences north of the site along Route 44 were connected to the Bridgeport Municipal Water System.

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 on site is contaminated with volatile organic compounds (VOCs) including trichloroethene, benzene, and vinyl chloride and heavy metals including arsenic, chromium, and zinc. Many of the same contaminants have been found in private wells off site. Contaminants found in subsurface soils include heavy metals, VOCs, and phthalate. People who use water from VOC-contaminated wells for bathing, clothes washing, or other uses may come in direct contact with or inhale contaminants. Area homes have been connected to the municipal water supplies, or residents are receiving bottled water. The contaminated on-site well is used for tank trailer washing operations. Workers could be exposed to VOCs by direct contact with or by inhaling contaminants evaporating from the water during these operations, as well as from residual chemicals flushed out of the tank trailers during washing procedures. The pollution of the creek and other surrounding marshes, wetlands, and woodlands may be from the migrating contaminants in the groundwater.

Cleanup Approach

The site is being addressed in four stages: immediate actions and three long-term remedial phases focusing on cleanup of the groundwater contamination, soil contamination, and wetlands.

Response Action Status



Immediate Actions: In a cooperative action between the State of New Jersey and the EPA, activated carbon treatment units were placed in the four homes with contaminated drinking water. The four homes later were connected to a permanent water line from a nearby town. The EPA is planning to connect four more homes to the municipal water line as well.



Groundwater Contamination: In 1989, the EPA took over the responsibility of investigating the groundwater, source areas, and non-wetlands soil and the possible cleanup actions. This investigation was completed in mid-1990. Cleanup remedies selected include groundwater extraction, treatment through chemical precipitation, air stripping and granulated activated carbon, and discharge of treated groundwater into the Delaware River. The design of the selected remedy is scheduled to begin in 1991.



Soil Contamination: Sampling of on-site soils to determine the extent of soil contamination was completed in spring 1990. The EPA has nearly completed a thorough investigation of the soil contamination, with recommendations for cleanup expected in 1991.



Wetlands: An investigation into the nature and extent of contamination in the wetlands began in 1990 and is scheduled for completion in late 1991. Recommendations on selected cleanup methods are expected to be made in early 1992.

Site Facts: Chemical Leaman Tank Lines Inc., the potentially responsible party, entered into a Consent Order in July 1985 to perform the site investigation and the alternative cleanup activities. In July 1989, the EPA took over and completed the groundwater study. Chemical Leaman Tank Lines, Inc. entered into a Consent Decree in April 1991 to design the technologies and to perform the cleanup work for groundwater contamination at this site.

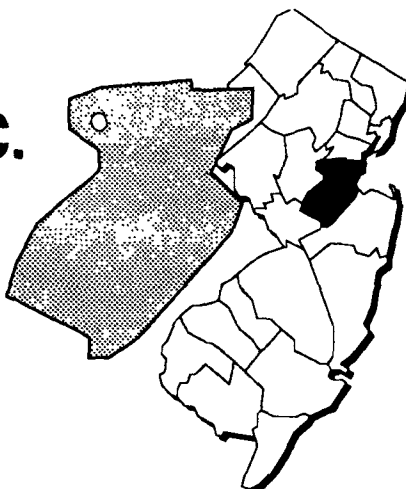
Environmental Progress



The affected homes to the north of the Chemical Leaman site have been connected to an alternate water supply. Affected homes located to the south and west of the site will be connected to an alternate water supply in 1991, thereby reducing the potential for exposure to contaminated groundwater while further investigations leading to the selection of remedies for the soil contamination and the wetlands are taking place.

CHEMSOL, INC. NEW JERSEY

EPA ID# NJD980528889



EPA REGION 2
CONGRESSIONAL DIST. 12
Middlesex County
Piscataway

Site Description

Chemsol, Inc. is a 40-acre site in Piscataway. This inactive site was used for solvent recovery and other industrial processes in the 1950s through approximately 1964. The facility was closed after a series of industrial accidents, explosions, and fires. The site was purchased by Tang Realty in 1978. The State determined that 40 drums of chemical wastes were buried at the site. Soils in and around the site have been contaminated from leaking drums and other containers of unknown substances that were discovered and excavated in 1988. Additionally, Tang Realty, the owner, excavated and disposed of over 3,700 cubic yards of polychlorinated biphenyls (PCB)-contaminated site soils. The groundwater around the site is used mainly for industrial processes, although there are private wells in the area. An estimated 36,000 people live within a 3-mile radius of the site, with the nearest well and the nearest occupied building 400 feet away from the site. Residents in the area obtained their drinking water from public and private wells. In 1990, municipal water lines were extended into the area.

Site Responsibility: This 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



Volatile organic compounds (VOCs) such as trichloroethylene (TCE), chloroform, and carbon tetrachloride have contaminated on-site groundwater. Site soils have been contaminated by solvents from leaking drums, as well as by PCBs. Chlorinated solvents including TCE, chloroform, toluene, and benzene have been detected in on-site surface water. The contaminated groundwater, surface water, and soil could pose a health hazard to on-site workers and nearby residents through direct contact or accidental ingestion. In addition, chemicals may accumulate in fish, water fowl, livestock, and commercial agricultural products if pollutants should migrate off the site.

Cleanup Approach

The site is being addressed in three phases: an initial action and two long-term remedial phases focusing on cleanup of the entire site and of groundwater.

Response Action Status



Initial Action: In 1988, over 3,700 cubic yards of PCB-contaminated soils were removed from the site by Tang Realty. In 1990, municipal water service was extended into the area. The EPA is in the process of removing chemical drums and containers discovered at the site, as well as contaminated soil. This removal action is expected to be completed in late 1991.



Entire Site: The EPA is carrying out an investigation into site contamination. The aim of this investigation is to determine the nature and extent of the soil, groundwater, and surface water contamination. Groundwater samples will be collected from monitoring wells for analysis, as will surface water and sediment samples from the stream on site. An interim remedy also is being developed to restrict off-site migration of contaminated groundwater. The site investigation is scheduled to conclude in late 1991, when a plan for cleanup will be proposed.



Groundwater: The EPA is conducting a study which will address potential off-site and deeper groundwater contamination, as well as soil and possible air contamination. Post-excavation soil sampling will be performed to determine the nature and extent of soil contamination. Groundwater and residential well water sampling will continue. Air samples will be collected and analyzed to determine potential air contamination. This study is expected to be completed in 1993.

Site Facts: The New Jersey Department of Environmental Protection issued orders to Tang Realty in 1983 and 1984 for the performance of a site investigation.

Environmental Progress

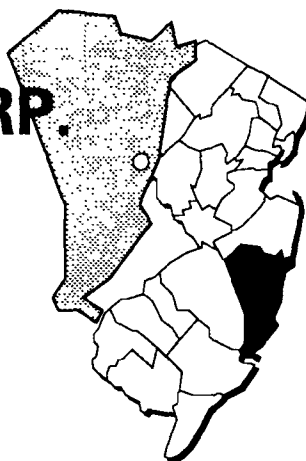


The removal of the drums and contaminated soils is greatly reducing the potential for exposure to hazardous materials at the Chemsol, Inc. site while investigations leading to the selection of the final cleanup remedy are taking place.

CIBA-GEIGY CORP.

NEW JERSEY

EPA ID# NJD001502517



EPA REGION 2
CONGRESSIONAL DIST. 03

Ocean County
Route 37 in Dover Township

Other Names:
Toms River Chemical

Site Description

The Ciba-Geigy Chemical Corporation site is located in Dover Township. The site covers 1,400 acres, 320 of which are developed. The remaining area is largely wooded. The manufacturing facility, presently owned by Ciba-Geigy, has been in operation since 1952 and is composed of numerous buildings, an industrial wastewater treatment plant, and a reservoir for emergency storage of treated and untreated wastewater. From 1952 to 1988, a variety of synthetic organic pigments, organic dyestuffs, and epoxy resins were manufactured at the site. The company disposed of chemical wastes on site in the following locations: the drum disposal area, containing 100,000 drums; the lime sludge disposal area used for the disposal of inorganic wastes; the 12-acre filtercake disposal area, which received sludge from wastewater treatment; 5 backfilled lagoons comprising 8 1/2 acres; a 25-acre borrow/compactor debris disposal area; and a calcium sulfate disposal area. The drum disposal area and the lime sludge disposal area were closed in 1978. About this time, the filtercake disposal area also was closed and covered with soil. The EPA began investigating the site in 1980. The State issued a Consent Order forcing Ciba-Geigy to close part of the landfill and to conduct groundwater monitoring. Groundwater feeds the Toms River, which runs through the northeastern part of the property. The groundwater in the area is tapped by municipal, industrial, and private wells. Contamination is moving from the inactive disposal areas towards the Toms River via the groundwater system. The site is bordered by industrial, commercial, residential, and recreational areas. The Township of Dover has an estimated population of 64,000 persons. There are 180 residential units located less than 1/2 mile to the north of the site and over 250 residential units located less than 1/2 mile from the site's southern boundary. An elementary school is located very near the site fence boundary.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



The groundwater and soils are contaminated with volatile organic compounds (VOCs) including benzene, trichloroethylene (TCE), and toluene and heavy metals including arsenic and chromium. The contaminated groundwater and soil could pose a health hazard to the public through direct contact or accidental ingestion. Also, the contaminants from the site could pollute the Toms River, which forms the northeastern boundary of the site. Winding River Park, an outdoor recreational area situated in the flood plain of the Toms River, also could be affected by the site. Wetlands near the site also face possible contamination.

Cleanup Approach

The site is being addressed in three long-term remedial phases focusing on cleanup of the groundwater and the entire site and source control.

Response Action Status



Groundwater: The EPA decided on the following cleanup measures to protect public health and the environment: (1) sealing contaminated residential irrigation wells; (2) on- and off-site groundwater pumping with on-site treatment and subsequent discharge into the Toms River; and (3) implementing a river and groundwater monitoring program. Sealing of contaminated residential irrigation wells continues while design of cleanup technologies is underway and is expected to be completed in late 1991.



Entire Site: The second phase of the investigation to evaluate the extent and the nature of the contamination on the entire site began in 1989, and completion is expected in late 1992. The investigations include characterizations of up to ten source areas outside the production area, the wastewater treatment plant area, and off-site wetlands, as well as the 100-acre production area, and other treatment and disposal facilities.



Source Control: The first two long-term remedial phases will be completed before contamination source control measures are considered. A work plan will be prepared for this phase if the EPA determines that additional measures are needed to clean up the site.

Site Facts: In 1984, the EPA informed the parties potentially responsible for the site contamination of their responsibility for cleaning up the site. After negotiations with the EPA, the parties agreed to fund the investigative work carried out to determine the nature and the extent of the contamination.

Environmental Progress

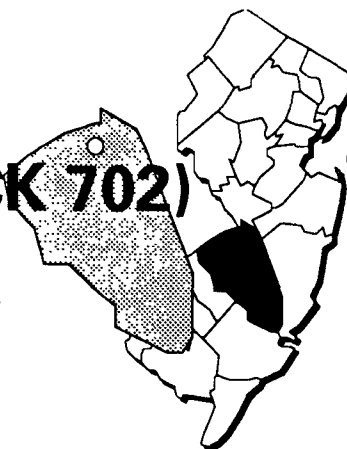


The remedies have been selected for the cleanup of the groundwater, and contaminated irrigation wells have been sealed. The EPA has determined that the Ciba-Geigy Corp. site does not pose an immediate threat to the surrounding community or the environment while further investigations into final remedies for the remaining portions of the site are underway.

CINNAMINSON TOWNSHIP (BLOCK 702) GROUND WATER CONTAMINATION NEW JERSEY

EPA ID# NJD980785638

Site Description



EPA REGION 2
CONGRESSIONAL DIST. 13
Burlington County
Cinnaminson Township

Other Names:
Cinnaminson Township Landfill

The Cinnaminson Township (Block 702) Ground Water Contamination site occupies 120 acres in an industrial and residential area. The landfill located on site began operations in the mid-1950s; wastes were deposited in an unlined former gravel pit. Chemical wastes were illegally deposited in the landfill. In the 1970s, the landfill was cited several times by the New Jersey Department of Environmental Protection for violations of landfill regulations. In 1979, analysis revealed that the groundwater underneath and adjacent to the landfill was contaminated. The landfill was closed in 1980. The hydrogeology beneath the landfill is very complicated due to the presence of clay layers called lenses, intensive pumping of groundwater east of the site, and the possibility that groundwater naturally moves in two different directions beneath the site. The contaminated aquifer is a source of drinking water for people living around the site. There are both public and private water supply wells within 1 mile of the study area. Approximately 55,000 people live within a 3-mile radius of the site. There are five private wells on Taylors Lane, approximately 4,700 feet from the site.

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

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 06/01/86

Threats and Contaminants



Volatile organic compounds (VOCs) including chloroform, benzene, and vinyl chloride have contaminated the groundwater. The contaminated groundwater could adversely affect the health of individuals if it reaches drinking water wells and is then ingested.

Cleanup Approach

The site is being addressed in two long-term remedial phases directed at cleanup of the groundwater and the entire site.

Response Action Status _____



Groundwater: The EPA completed a study in 1990 of the extent and the nature of the contamination in the groundwater at the site. The investigation included the installation of monitoring wells and sampling of the groundwater downgradient of the landfill to locate the areas of greatest contamination, which will be addressed first once the cleanup activities are started. Sampling of 12 private wells upgradient from the site found elevated levels of nickel and nitrate in one well. That resident was connected to a local water line. These wells are not thought to be threatened by site contamination due to the direction of groundwater flow. However, municipal wells could be affected. Also, samples of surface water, sediment, and air were taken and found to be within acceptable levels. The selected remedy includes pumping groundwater from both deep and shallow aquifers, treating it with granular activated carbon, and reinjecting the treated groundwater into the lower aquifer. The design of these technologies is expected to begin in mid-1991.



Entire Site: An evaluation of the source of the contamination at the entire site is expected to begin in 1993 and is to be completed in 1996.

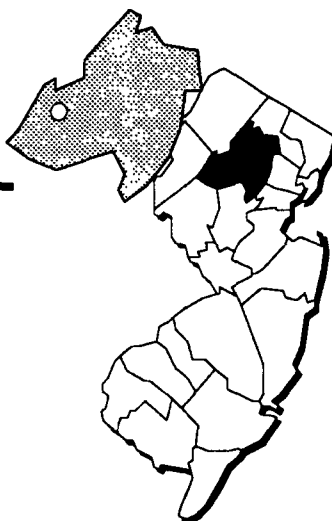
Environmental Progress _____



After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Cinnaminson Ground Water Contamination site while cleanup actions are being planned.

COMBE FILL NORTH LANDFILL NEW JERSEY

EPA ID# NJD980530596



EPA REGION 2
CONGRESSIONAL DIST. 11
Morris County
Mt. Olive Township

Site Description

Between 1966 and 1978, the 65-acre Combe Fill North Landfill site operated as a sanitary municipal landfill, accepting municipal and industrial wastes, along with minimal amounts of dry sewage sludge. In 1978, the landfill was purchased by Combe Fill Corporation (CFC). In 1979, groundwater was found to be contaminated with volatile organic compounds (VOCs), as were private residential wells downslope from the site. VOCs were also found in the air. Runoff flows across the surface of the landfill and drains into the creeks that border the site. The landfill was not properly closed when CFC went bankrupt in 1981. The area surrounding the site is primarily wooded, with small residential areas, farms, and light industry. Some land is used for farming purposes. Approximately 10,000 people rely on groundwater supplied from wells.

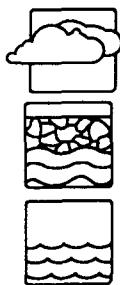
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Air is contaminated with methane and VOCs emanating from the landfill. Groundwater is contaminated with various VOCs as well as phthalates, zinc, and cyanide. Runoff from the site that drains into nearby creeks may contaminate the surface water and fish. People who drink contaminated groundwater may be at risk. In addition, people who come into direct contact with uncovered wastes may suffer adverse health effects.

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: In 1986, the EPA and the State selected a remedy to clean up the site that includes: (1) grading and compacting the waste disposal area; (2) covering the landfill with a clay or a synthetic material to prevent surface water and rainwater from coming into contact with the buried waste; (3) installing a system of ditches and metal pipes to collect drainage from the site; (4) installing a ventilation system for the methane gas; and (5) fencing the site. The State has completed most cleanup activities. Once all the remaining details of cleanup activities are completed in 1992, the State plans to monitor the groundwater and air to ensure the effectiveness of the cleanup.

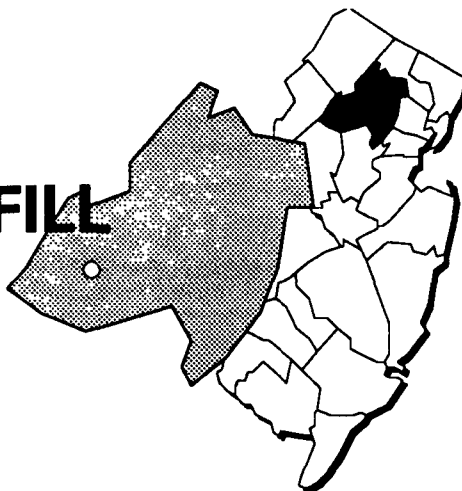
Environmental Progress



State actions have restricted access to the site, removed the threat of direct contact with contaminants, and prevented the further spread of contaminants at the Combe Fill North Landfill site while the planned cleanup activities are completed.

COMBE FILL SOUTH LANDFILL NEW JERSEY

EPA ID# NJD094966611



EPA REGION 2
CONGRESSIONAL DIST. 11
Morris County
Chester and Washington Townships

Site Description

The Combe Fill South Landfill consists of three separate fill areas comprising 65 acres on a 115-acre parcel of land between Chester and Washington Townships. The site operated as a municipal landfill from the 1940s until 1981 and was licensed to accept municipal and non-hazardous industrial wastes, sewage sludge, septic tank wastes, chemicals, and waste oils. In 1978, Combe Fill Corporation (CFC) bought the landfill. While under CFC management, procedures at the landfill violated many of the New Jersey solid waste administrative codes. CFC went bankrupt in 1981, before the landfill was properly closed. A citizen's group, one of two formed by residents who were concerned over disposal practices at the site, sampled the groundwater, leachate, and surface water and found them to be contaminated. Testing indicated that the fill material consists mainly of highly decomposed rubbish, and that no hot spots or localized sources of hazardous substances exist. Contaminants have seeped into the aquifer beneath the site. The State provided bottled water to residents affected by contaminated groundwater. Leachate, groundwater, and surface runoff form the headwaters of Trout Brook, which flows through Hacklebarney State Park. The area surrounding the site is semi-rural. A large portion of a nearby wetlands area was cleared to construct the landfill. Trout Brook is used for fishing and recreational activities. Approximately 170 people live within 1/2 mile of the landfill. Most of the residents use private wells as their source of drinking water. Vegetable and grain crops, orchards, and horse farms are located near the site.

Site Responsibility: This site is being addressed through a combination of Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Air sampling showed the presence of methane and other gases and volatile organic compounds (VOCs) such as benzene, ethylbenzene, and toluene. Groundwater is contaminated with VOCs and arsenic. Soil contains pesticides including aldrin and dieldrin. Contaminated surface runoff drains into Trout Brook. Contaminants may accumulate in the trout and could pose a health hazard to people who eat them. Although residents have been provided with an alternate water supply, people who continue to drink the contaminated well water may suffer adverse health effects. In addition, people who come in direct contact with or accidentally ingest contaminated soil may be at risk.

Cleanup Approach

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

Response Action Status



Immediate Action: The State provided bottled water to residents affected by groundwater contamination and fenced the site to prevent access.



Entire Site: In 1986, the EPA and the State selected a remedy that includes: (1) covering the landfill with clay or a synthetic material to prevent surface water and rainwater from coming into contact with the buried wastes; (2) installing a system to collect the landfill gases; (3) pumping the shallow groundwater and leachate and treating it before discharging it into Trout Brook; (4) installing controls to accommodate stormwater runoff and seasonal increases in rain; and (5) performing an additional study to determine if the deep aquifer needs treatment. The State of New Jersey is designing the technical specifications to clean up the site in two phases. The design is scheduled for completion in 1992. When all cleanup activities are completed, the State will monitor the site to ensure the cleanup has been effective.

Environmental Progress

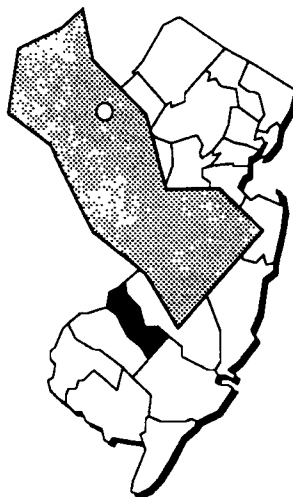


The cleanup remedies have been selected for the Combe Fill South site and work is scheduled to be started in 1992. The site has been fenced, and residents have been provided with bottled water, reducing the potential for exposure to contaminants on the site while the design of cleanup actions is completed and cleanup is taking place.

COOPER ROAD SITE

NEW JERSEY

EPA ID# NJD980761381



EPA REGION 2
CONGRESSIONAL DIST. 13

Camden County
Voorhees Township

Site Description

The Cooper Road Site covers 100 square feet in Voorhees Township. The site consists of an old borrow pit that had been excavated for fill material. In 1982, several dozen 1- to 2-ounce glass vials containing volatile organic compounds (VOCs) were discovered on the site. Some of the vials were broken, but most were intact. The State requested that the property owners remove the vials, but the owners did not comply. The property was sold in 1983, and the new owners, under State supervision, removed the vials and excavated 6 inches of contaminated soil and placed the vials and soil in a federally approved hazardous waste facility. The EPA deleted the Cooper Road Site from the National Priorities List in 1989, when it was determined that the site no longer posed a threat to the public or the environment. The site lies in an area that has undergone recent residential development. Approximately 1,400 people live within 3 miles of the site. The nearest residence is located 300 feet from the site, and the nearest private well is 500 feet away. New residential developments within the site area are being placed on the municipal water service.

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

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Deleted Date: 02/22/89

Threats and Contaminants



Soil was contaminated with VOCs. The vials found on the site contained VOCs such as benzene, ethylbenzene, and xylene. Tests conducted after the owners removed the vials and excavated the contaminated soils showed that the site was safe to the surrounding community and the environment.

Cleanup Approach

The site was addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status



Entire Site: The significant risks and threats to the community and the environment were eliminated in 1987 after the owners, under State supervision, removed the glass vials and excavated contaminated soils.

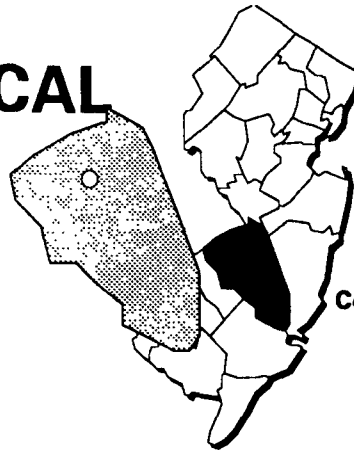
Environmental Progress



The contaminated soils and materials have been removed from the Cooper Road site, thereby eliminating any potential site-related health risks to the community and the environment. The EPA deleted the site from the NPL in 1989.

COSDEN CHEMICAL COATINGS CORPORATION NEW JERSEY

EPA ID# NJD000565531



EPA REGION 2
CONGRESSIONAL DIST. 13
Burlington County
Beverly

Other Names:
Cosden Paint Company
Cosden Industrial Coatings Corporation
Moleta-Cosden Industrial Coatings

Site Description

The 6 1/2-acre Cosden Chemical Coatings Corp. site operated as a production facility under several names from the early 1940s until 1989. The facility produced coatings for industrial applications that involved the use of solvents, which were stored on site in drums. Prior to 1974, solvents and wastes were recycled by a contractor who regularly removed the drums. In 1974, the recycling ceased, and the drums accumulated on the site. The site first came to the attention of the New Jersey Department of Environmental Protection (NJDEP) following a grass fire at the facility. An inspection by the NJDEP in 1980 revealed surface spills and several hundred unsecured drums stored on site. The EPA conducted sampling in 1988 and found soil and groundwater contaminated with volatile organic compounds (VOCs). Approximately 700 people live within 1 mile of the site; the closest residence is 1/10 mile away. Approximately 69,000 people within 3 miles of the site depend on groundwater for their drinking water. Three municipal wells are located within 1 mile of the site. The Delaware River is 4,000 feet away and is used for recreational activities.

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

NPL LISTING HISTORY

Proposed Date: 01/01/87

Final Date: 07/01/87

Threats and Contaminants



The soil and groundwater are contaminated with VOCs including toluene, xylene, and ethyl benzene. Soil also is contaminated with heavy metals including chromium, lead, zinc, and copper, as well as polychlorinated biphenyls (PCBs). People who come in direct contact with or accidentally ingest contaminated soil or groundwater may be at risk. Although private wells had been the source of drinking water in the past, all of the homes in the area are now connected to the municipal water supply.

Cleanup Approach

This 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 1985, the State secured the site by consolidating the contents of the drums into dumpsters. The State then removed 540 drums of PCB wastes and sent them to a federally approved incinerator for disposal. In 1987, the State removed 43 drums of paint and paint sludges for incineration at a federally approved facility. In 1989, the EPA constructed a fence to secure the site.



Entire Site: The EPA is conducting an investigation to define the contamination at the site. Geophysical studies are being performed to identify the locations of buried drums and underground storage tanks and to determine their contribution to the contamination. The EPA is sampling the soil to measure the type, amount, and location of contaminants. Six monitoring wells will be installed to monitor groundwater and to analyze the contaminants. In addition, private water wells will be sampled to determine if they pose a public health threat. Once these investigations are completed in fall 1991, alternatives for cleaning up the site will be recommended.

Site Facts: The State ordered Cosden to clean up the on-site spills and to remove and dispose of the drums three different times (1981, 1984, and 1985). The company did not comply with any of the orders.

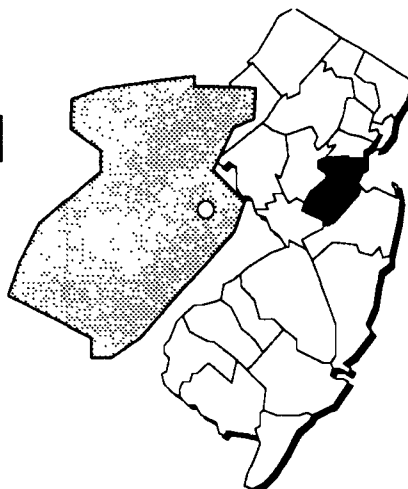
Environmental Progress



The removal of drums and installation of a fence have greatly reduced the potential for exposure to contaminants at the Cosden Chemical Coatings Corp. site while further studies on the nature and extent of contamination are being completed.

CPS/MADISON INDUSTRIES NEW JERSEY

EPA ID# NJD002141190



EPA REGION 2
CONGRESSIONAL DIST. 06
Middlesex County
Old Bridge Township

Other Names:
CPS Chemical
Old Bridge Chemical

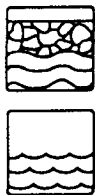
Site Description

The CPS/Madison Industries site consists of two adjacent manufacturing facilities located on a 35-acre tract of land. CPS processes, treats, and stores organic chemicals used in the production of sewage treatment agents, lubricants, oil field chemicals, and anti-corrosive agents. The company generates lead wastes and spent halogenated solvents that are shipped off site for disposal. The hazardous wastes are stored in tanks or containers, where some solvent distillation occurs. Madison Industries produces zinc compounds for fertilizers, pharmaceuticals, and food additives. Since 1967, the two companies repeatedly have dumped and discharged chemicals into the public sewer system as well as onto their respective properties. Thirty-two municipal wells were closed due to contamination. Approximately 400 tons of hazardous material are present at the site. Approximately 1,000 people live within 1/2 mile of the site. Prickett's Brook and Pond have been contaminated, but are not used for recreation or water supplies.

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

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

Threats and Contaminants



Groundwater is contaminated with various volatile organic compounds (VOCs) and heavy metals including cadmium and lead, as well as phthalates. The sediments and surface water of Prickett's Pond are contaminated with lead, cadmium, and VOCs. Even though Prickett's Pond is not generally used for recreation, children who play near it may suffer adverse health effects if they should directly contact or ingest the water or sediments. Although the contaminated water wells have been taken out of service, people who come in direct contact with or accidentally drink contaminated groundwater may be at risk. The Perth Amboy well fields are downgradient of the site.

Cleanup Approach

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

Response Action Status



Interim Actions: In January 1991, a groundwater pump and treat system was installed as a temporary remedy to prevent contamination of the nearby Perth Amboy well fields while further studies are being completed.



Entire Site: Before this site was listed on the NPL, CPS and Madison Industries, under State supervision, studied the type and extent of contamination at the site. Once further studies on the groundwater, surface water, and sediment contamination are completed, the EPA will review the recommended alternatives and will select the cleanup actions to be implemented.

Site Facts: An Administrative Order on Consent to perform site contamination investigations was signed by the two companies and the State in 1985. Negotiations are underway between the EPA and the State to conduct studies of the site.

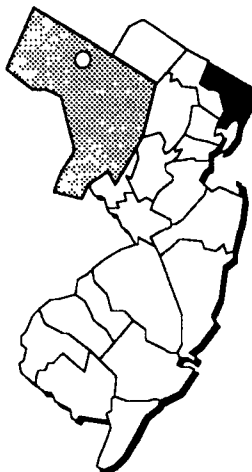
Environmental Progress



A temporary groundwater treatment system has been installed to contain the spread of groundwater contamination and protect the Perth Amboy well fields that provide a public drinking water supply. The EPA and the State have determined that residents and the environment are protected while further investigations leading to the selection of final cleanup remedies are taking place.

CURCIO SCRAP METAL, INC. NEW JERSEY

EPA ID# NJD011717584



EPA REGION 2
CONGRESSIONAL DIST. 09
Bergen County
Saddle Brook Township

Site Description

The 1-acre Curcio Scrap Metal, Inc. (CSMI) site is an active scrap metal yard that contains 10,950 square feet of warehouse and office space. CSMI and Cirello Iron and Steel Company (CISC) collect scrap iron, copper, aluminum, and other ferrous and non-ferrous metals on this active yard. In 1982, CSMI received shipments of 54 electrical transformers and, while cutting the transformers, oil containing polychlorinated biphenyls (PCBs) spilled onto the ground. The State became aware of the site in 1982 when a citizen became concerned over CSMI's activities. The State found the soil and runoff from a drainage ditch to be contaminated with PCBs. In 1985, the State discovered an oil spill that flowed from the site to a pond approximately 300 feet from the Curcio site and determined that CISC was responsible for the spill. The company spilled about 200 to 300 gallons of hydraulic fluid on the CSMI site. Approximately 30,000 people depend on public wells within 3 miles of the site as their sole source of drinking water. An estimated 1,000 to 3,000 people live within a 1-mile radius, with the closest residence being 300 feet from the site. The site is above the Brunswick formation, one of the State's most important aquifers. Schroeders Brook is located nearby.

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

NPL LISTING HISTORY

Proposed Date: 01/01/87

Final Date: 07/01/87

Threats and Contaminants



The groundwater and soil are contaminated with PCBs, heavy metals, and volatile organic chemicals (VOCs) from the electrical transformers. Surface water in a drainage ditch and in a nearby pond may be contaminated with the same contaminants. People who ingest or come in direct contact with PCB-contaminated water may be at risk. In addition, the polluted surface water in the drainage ditch and pond may pose a health threat through direct contact or accidental ingestion.

Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on cleanup of the soil and groundwater and surface water.

Response Action Status



Soil: The parties potentially responsible for site contamination are conducting a study of the site, under EPA monitoring. Once the study is completed in 1991, alternatives to clean up the contamination will be recommended.



Groundwater and Surface Water: The potentially responsible parties are conducting a study to determine the nature and extent of groundwater and surface water contamination and to identify cleanup alternatives. The study is expected to be completed in spring 1992.

Site Facts: In 1988, the EPA, CSMI, and CISC signed an Administrative Order on Consent in which the companies agreed to conduct a study to measure the extent of the contamination at the site. The EPA issued a Unilateral Order in 1989 requiring the companies to refrain from taking any actions that might interfere with the EPA's investigation or cleanup of the site. The companies also are required to implement provisions for eliminating any future releases of hazardous substances at the site.

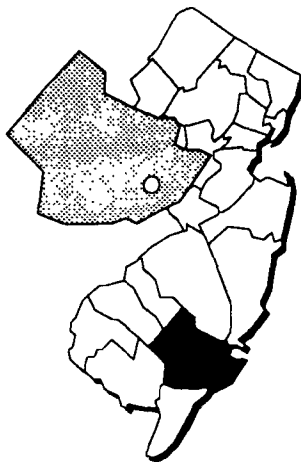
Environmental Progress



After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Curcio Scrap Metal site while further studies are being completed and cleanup activities are being planned.

D'IMPERIO PROPERTY NEW JERSEY

EPA ID# NJD980529416



EPA REGION 2
CONGRESSIONAL DIST. 02
Atlantic County
Hamilton Township

Other Names:
Motel Dennis

Site Description

The 1 1/2-acre D'Imperio Property site comprises two disposal areas on a 200-acre parcel of land where unauthorized dumping took place from the late 1960s to 1976. The first disposal area consists mainly of partially buried and ruptured metal drums. Approximately sixty drums containing various volatile organic compounds (VOCs) including solvents were dumped there. The second disposal area contains mainly domestic refuse including paper, plastics, metal appliances, and pipes. The groundwater is contaminated and the contaminant plume has been detected in two aquifers. The site is located in a rural area, with most of the developed areas more than 1/2 mile from the property. There is one motel within 1,000 feet of the site. Approximately 6,000 people within 3 miles of the site use groundwater for drinking water. Twenty private wells are located within 1 mile, with the closest well 300 feet upgradient of the site and one well 1,400 feet downgradient. The site is within the New Jersey Pineland Reserve. Approximately 2,000 feet away are the Babcock Swamp wetlands, which are drained by Babcock Creek.

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

NPL LISTING HISTORY

Proposed Date: 10/01/81

Final Date: 09/01/83

Threats and Contaminants



The groundwater is contaminated with VOCs, and the soil contains VOCs and plastics. Because the site is in the New Jersey Pinelands Reserve and near wetlands, the possibility exists that contaminants may harm the environment and wildlife in these areas. People who ingest or come in direct contact with the contaminated groundwater from private wells may be at risk. If the pollutants seep to Babcock Creek, contaminants may accumulate in these fish. Should the fish be eaten, people may suffer adverse health effects. In addition, contaminated soil may pose a health hazard through direct contact.

Cleanup Approach

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

Response Action Status



Immediate Action: In 1982, the EPA constructed a fence and posted a guard to prevent people from entering the site and coming into contact with hazardous substances.



Entire Site: In 1985, the EPA selected a remedy to clean up the site that includes: (1) excavating and transporting 3,900 cubic yards of contaminated waste, soil, and drums to a federally approved facility; (2) constructing a cover made of clay or synthetic material to prevent rainwater from spreading buried wastes; and (3) pumping and treating the groundwater to remove the contaminants and then discharging the clean water back into the aquifers. The EPA has removed the 3,900 cubic yards of contaminated soil and disposed of it in a federally approved facility, along with 82 drums. The cover was completed in 1987. The EPA currently is designing the technical specifications for the groundwater pump and treatment system. Once the design phase is completed in 1992, the groundwater cleanup will begin.

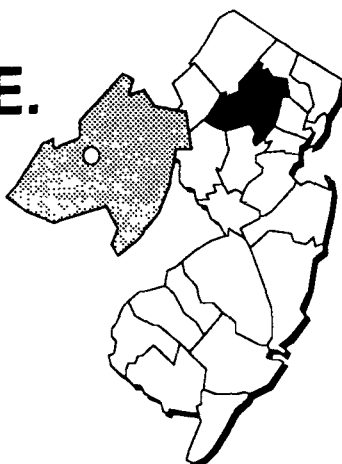
Environmental Progress



By securing the site with a fence and a guard, removing the contaminated soil and drums, and capping the buried wastes, the EPA greatly reduced the potential for exposure to contaminated materials at the D'Imperio Property site while further cleanup activities are taking place.

DAYCO CORP./L.E. CARPENTER CO. NEW JERSEY

EPA ID# NJD002168748



EPA REGION 2
CONGRESSIONAL DIST. 11
Morris County
Wharton Borough

Site Description

The 14 1/2-acre Dayco Corp./L.E. Carpenter Company site operated as a vinyl wall covering manufacturing facility. During the operations, solid and liquid wastes were disposed of in unlined on-site lagoons, approximately 20 feet from the Rockaway River. Although manufacturing is no longer taking place on site, the site is still active as a warehouse and office facility. The site is above an aquifer that provides water for both Wharton and Dover and is in the flood plain of the Rockaway River. The site also borders residences and other industrial facilities. Approximately 27,000 people live within a 3-mile radius of the site. The nearest residence is 150 feet from the site, and two of Wharton's public supply wells are approximately 2,600 feet from the site.

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

NPL LISTING HISTORY

Proposed Date: 04/01/85

Final Date: 07/01/87

Threats and Contaminants



The groundwater, sediments, and soil are contaminated with various volatile organic compounds (VOCs), such as xylene and ethyl benzene and with phthalate esters. The contaminated groundwater, soil, and sediments could adversely affect the health of people who come in direct contact with or accidentally ingest contaminated materials. Also, due to the proximity of the site to the Rockaway River, the contaminants may have reached the river and polluted the water.

Cleanup Approach

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

Response Action Status



Initial Actions: In 1982, Dayco Corp./L.E. Carpenter removed approximately 4,000 cubic yards of soil from the property. Storage tanks at the facility also have been cleaned out. A program to pump floating organics from the water table is underway.



Entire Site: In 1986, the company took responsibility for carrying out a comprehensive investigation of the site to evaluate the nature and extent of the contamination. Once the study is completed in late 1991, alternative cleanup actions will be evaluated by the EPA.

Site Facts: Under an Administrative Order signed by L.E. Carpenter and the State of New Jersey in 1986, L.E. Carpenter is conducting the site investigation and will also be performing the required site cleanup activities.

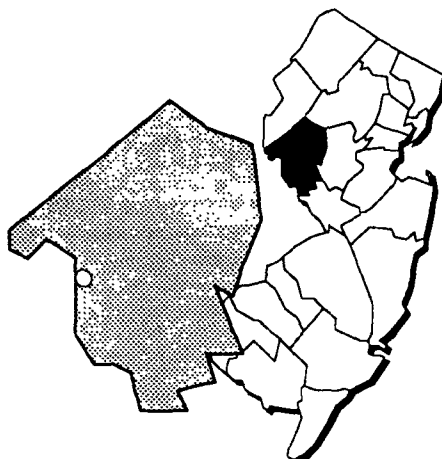
Environmental Progress



By removing contaminated soil and cleaning storage tanks, the parties potentially responsible for contamination at the Dayco Corp./L.E. Carpenter site have greatly reduced the potential for exposure to contaminated materials while studies leading to the selection of final cleanup remedies are taking place.

DE REWAL CHEMICAL COMPANY NEW JERSEY

EPA ID# NJD980761373



EPA REGION 2
CONGRESSIONAL DIST. 12
Hunterdon County
Kingwood Township

Site Description

From 1970 to 1973, the 3 3/4-acre De Rewal Chemical Company site manufactured a textile preservative and agricultural fungicide and served as a warehouse for the storage and resale of chemicals. Chemicals handled included a range of metals, acid solutions, and fertilizer nutrients and associated compounds. Numerous spills were reported in 1973, including one incident in which a tank truck containing a highly acidic chromium solution was allowed to drain onto the soil and eventually to the Delaware River. The area formerly occupied by the company was sold in 1979 and has been used since then for a small business and private residence. The site is located within the flood plain of the river, which is used for recreation. Groundwater is the source of drinking water for the area. Investigations of the groundwater indicated the shallow water-bearing zone is contaminated with heavy metals and volatile organic compounds (VOCs). Several residences are located north and south of the site; the residence on site houses the owner of the property and five tenants. The population of Kingwood Township is approximately 3,000.

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

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Testing of the bedrock aquifer showed the presence of VOCs such as trichloroethene and tetrachloroethene, as well as the heavy metal cadmium, but not at levels exceeding safety standards. The shallow water-bearing zone also contains metals and VOCs. No connection has been proven between the shallow and bedrock aquifers. The soil is contaminated with heavy metals including chromium, cadmium, copper, and lead, as well as polycyclic aromatic hydrocarbons (PAHs) and VOCs. Contaminated groundwater and the soil could pose a health hazard to individuals through direct contact or accidental ingestion.

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: Based on studies of the contamination at the site, the EPA selected a remedy to clean up the site which includes: (1) excavation of contaminated soil; (2) on-site thermal treatment of VOC-contaminated soil; (3) on-site solidification and stabilization of the thermally treated soil and the remaining metal-contaminated soil; (4) extraction of shallow contaminated groundwater with on-site storage, and off-site disposal at an approved industrial wastewater treatment facility; (5) provision of a treatment system for the on-site residential well; (6) monitoring to ensure the remedy has been effective; and (7) establishment of deed restrictions. The results from monitoring of the bedrock aquifer after the completion of the cleanup will determine if there is a need for further action. In 1989, the EPA began designing technical specifications for the cleanup. A treatment system was provided for the on-site residential well in 1990. The design of the major cleanup activities is scheduled for completion late in 1992.

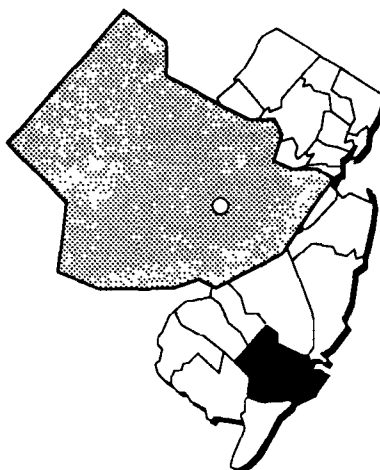
Environmental Progress



Installation of a treatment system for the on-site residential well will reduce the threat of exposure to contaminants at the De Rewal Chemical Company site while the remaining cleanup activities are being designed.

DELILAH ROAD NEW JERSEY

EPA ID# NJD980529002



EPA REGION 2
CONGRESSIONAL DIST. 02
Atlantic County
Egg Harbor Township

Site Description

The 40-acre Delilah Road site is one of a complex of four landfills formerly operated by Charles Price. The site was a sand and gravel pit used for sand mining operations and was then converted to a solid waste disposal site, accepting municipal and construction wastes and some hazardous wastes. A permit subsequently was issued for the disposal of non-hazardous municipal and solid waste only. The site accepted municipal and household wastes from 1974 to 1980, but records indicate that drummed flammable wastes and sludges containing trichloroethylene (TCE) and lead were dumped at the site. A notice of violation was issued by the New Jersey Department of Environmental Protection in 1979. Landfill operations ended in 1980. Numerous incidents of illegal dumping were reported after the site was closed. Sampling by the EPA uncovered groundwater contamination in 1982. Jarrets Run, a creek that flows intermittently into Absecon Creek, is located 1,000 feet north of the landfill. Approximately 3,500 people live within a 3-mile radius of the site. A New Jersey Water Company public water supply well is located less than a mile from the site.

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

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Volatile organic compounds (VOCs) and heavy metals including arsenic are present in the soil. The groundwater is contaminated with low levels of heavy metals and VOCs. Contaminants in the groundwater are not conclusively linked to the landfill. VOCs from the landfill may be evaporating into the air. The contaminated groundwater and soil could pose a health hazard to individuals through direct contact or accidental ingestion. Bottled water is available to nearby residents, as use of water from contaminated wells may represent a health threat. Access to the site is unrestricted.

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 State completed an investigation in 1990 to determine the extent and nature of the contamination. The results of the investigation were used in selecting the cleanup actions to be implemented. The chosen cleanup remedies include placing an impermeable cap over the landfill; installing a landfill gas control system along with a groundwater monitoring system; and fencing and deed restrictions to limit access to the site. Cleanup activities will begin once the design of the remedy is completed.

Environmental Progress

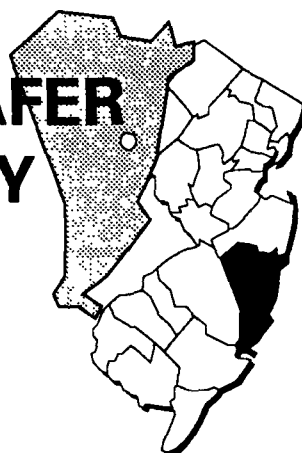


After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Delilah Road site while cleanup actions are being planned.

DENZER & SCHAFFER X-RAY COMPANY

NEW JERSEY

EPA ID# NJD046644407



EPA REGION 2
CONGRESSIONAL DIST. 13
Ocean County
Bayville

Site Description

The 5-acre Denzer & Schaffer X-Ray Company site is involved in the reclamation of silver from both microfilm and X-ray negatives. Contamination occurred due to such practices as the discharge of the stripping solutions to the sanitary septic system. Microfilm processing waste from a nearby facility also may have been disposed of in the site's septic tanks. This means of disposal was used from 1974 through 1981. Other identified sources of contamination included the stockpiling of shredded and stripped film and, prior to 1974, the incineration of the film waste. The sanitary septic tank currently is filled with sand. Waste materials that are generated now are disposed of off site. The underlying Cohansey Aquifer is contaminated with volatile organic compounds (VOCs). The aquifer supplies drinking water to residential and public water supply wells serving approximately 25,500 area residents. The site is near the coastline and close to Potters Creek and Barnegat Bay.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



The groundwater is contaminated with heavy metals including arsenic, chromium, lead, and mercury, as well as VOCs including chloroform and toluene. Carbon disulfide and vinyl acetate were detected in some sediment samples. Cadmium was the only chemical detected at a significant concentration when sampling was conducted at 13 soil boring locations. Potential risks exist for those who drink groundwater from contaminated wells.

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: In 1987, the State initiated a site investigation to determine the extent of groundwater contamination and other contaminants of concern. The study, scheduled to be completed in 1992, will identify the extent of contamination at the site and also will identify alternative technologies for the cleanup.

Environmental Progress



After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Denzer & Schafer X-Ray Company site while further investigations leading to the selection of final cleanup remedies are taking place.

DIAMOND ALKALI CO. NEW JERSEY

EPA ID# NJD980528996



EPA REGION 2
CONGRESSIONAL DIST. 10
Essex County
Newark

Other Names:
Diamond Shamrock Site
80 Lister Avenue Property

Site Description

The Diamond Alkali Co. site covers over 3 acres in Newark, adjacent to the Passaic River. The site has been used for chemical manufacturing by numerous companies for more than 100 years. The mid-1940s marked the beginning of the manufacturing operations related to the current site conditions, including the production of DDT and phenoxy herbicides. The Diamond Alkali Co. (later known as Diamond Shamrock), acquired the property in 1951 and produced various chemicals and pesticides until 1969, when it was shut down. Subsequent owners remained on the property until 1983, when EPA sampling at the site revealed high levels of dioxin. The area is both densely populated and heavily industrialized. The municipal water is drawn from the Wanaque Reservoir, roughly 35 miles from the site. Approximately 40,000 people live within 1 mile of the site; 367,000 people reside within 3 miles of the site.

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



Dioxin has been detected in on-site monitoring wells. Other contaminants detected in groundwater included volatile organic compounds (VOCs) including benzene, acetone, and toluene and herbicides. Soil in areas where herbicide manufacturing took place are contaminated with dioxin. Sediments in the Passaic River contain herbicides. Workers involved in the cleanup and area residents, including children, may be at risk if direct contact is made with contaminated soils. Individuals accidentally ingesting contaminated soil or surface water also may be at risk, as may those using contaminated groundwater for other uses. The Passaic River and fish and shellfish from the river may be threatened by runoff from the site.

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: The dioxin discovery led to the site being secured with a fence.

All exposed soils were covered with geofabric to prevent potential migration of contamination, and guards were placed at the site. Dioxin-contaminated soils and debris were removed by excavation, vacuuming, and other means, and were transferred to 120 Lister Ave. for storage. This work was initiated by the EPA and the New Jersey Department of Environmental Protection (NJDEP) in 1983 and taken over by the Diamond Shamrock Chemicals Company in 1984 under a State enforcement order.



Entire Site: In 1987, the EPA selected an interim remedy that relies on installation of a cap over the site, construction of a slurry wall around the property, and pumping and treating of groundwater to limit releases of hazardous substances. Periodic reevaluation of the remedy will be made, and it will be supplemented by additional actions as necessary. The parties potentially responsible for the contamination are in the process of designing the cleanup plans. Cleanup is expected to begin in 1993, when the design of the remedy is scheduled for completion.

Site Facts: In 1984, the State and Diamond Shamrock Chemicals Company entered into two Administrative Orders on Consent, one for the completion of the immediate response work and one for an investigation to determine the extent of site contamination and to identify possible alternatives for the cleanup. A Consent Decree was filed in 1989 between Chemical Land Holdings, Occidental Chemical Corporation, the State, and the EPA requiring the potentially responsible parties to undertake final cleanup activities at the site.

Environmental Progress

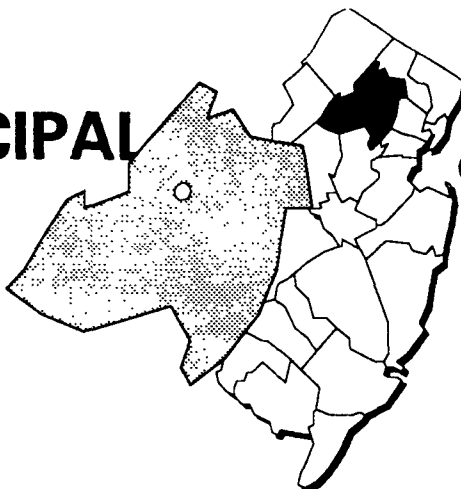


Securing the site, covering the soils, and removing the contaminated soil and debris greatly reduced the potential for individuals to have contact with the contaminated materials while design of the cleanup actions are underway at the Diamond Alkali Co. site.

DOVER MUNICIPAL WELL 4

NEW JERSEY

EPA ID# NJD980654131



EPA REGION 2
CONGRESSIONAL DIST. 11
Morris County
Dover

Site Description

The Township of Dover Water Commission in Morris County owns Municipal Well 4. This well provided drinking water for the municipality until it was taken out of service in 1980 because of contaminated groundwater. The contaminants, first detected in 1980, are halogenated organic solvents. The source of the contamination is unknown. The New Jersey Department of Environmental Protection (NJDEP) is investigating the site. Approximately 32,000 people living within 3 miles of the site are affected by the contamination in the groundwater.

Site Responsibility: This 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



Halogenated organic solvents including trichloroethane, tetrachloroethylene, and dichloroethylene have been detected in the groundwater. The contaminated groundwater could pose a health hazard to individuals if it is ingested.

Cleanup Approach

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

Response Action Status _____



Entire Site: The parties potentially responsible for the contamination conducted studies at their own facilities to determine if they are a source for the contamination of the Dover Municipal Well 4. The State currently is conducting investigations at the site to evaluate the nature and extent of the contamination. When these studies are completed in 1993, final cleanup actions will be recommended and remedy selections will be made.

Site Facts: The NJDEP identified two parties potentially responsible for the contamination. An Administrative Consent Order was signed between NJDEP and the two parties; however, the NJDEP broke off negotiations with the potentially responsible parties after they refused to pay for investigative work performed by the State to evaluate the level of contamination.

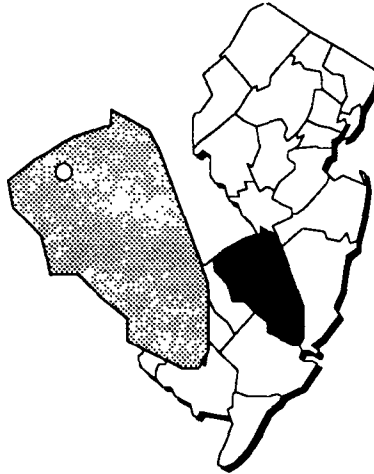
Environmental Progress _____



After adding the Dover Municipal Well 4 site to the NPL, the EPA performed a preliminary evaluation and determined that the site does not pose an immediate threat to the public, providing they do not drink or use water from this well. Further investigations leading to the discovery of the source of the contamination and the permanent cleanup remedies currently are underway.

ELLIS PROPERTY NEW JERSEY

EPA ID# NJD980529085



EPA REGION 2
CONGRESSIONAL DIST. 13
Burlington County
Evesham Township

Site Description

The Ellis Property covers 36 acres in Evesham Township. The site, once used for drum-recycling operations, consists of a large two-story building housing several washing tanks and troughs and 50 to 75 drums, many full; three sheds containing drums of various sizes and full chemical containers; and an area adjacent to the sheds containing about one hundred 55-gallon plastic drums, most of which still contain some acid liquid. Several hundred drums are spread haphazardly around the site, and there are many spills. The site is surrounded by cultivated fields. Sharps Run, an intermittent stream, is less than a mile to the south. Groundwater and surface water are suspected of being contaminated with acids. The Englishtown Aquifer underlies the site, with other aquifers about 300 feet below. Groundwater in the vicinity serves as a drinking water source for 900 homes and for the irrigation of farmland. There are about 20 potable wells within a 1-mile radius of the site. Approximately 3,500 people live within a 3-mile radius of the Ellis Property. The nearest residence is about 2,500 feet from the site.

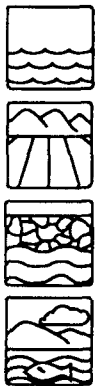
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Sediments and soils on site have been contaminated with heavy metals including chromium and lead. Monitoring wells have shown that the groundwater is contaminated with trichloroethylene (TCE) and heavy metals. The surface water has the potential to be contaminated with heavy metals. Contaminated soil and groundwater could pose a health hazard if accidentally ingested. There are drainage ditches on the site that could carry contaminants to a wetland and to Sharps Creek. Within 3 miles downstream of the site, the surface water is reportedly used for recreation. A housing development is being planned that will use groundwater for a drinking water supply.

Cleanup Approach _____

The site is being addressed in two stages: initial actions and a long-term remedial phase directed at cleanup of the entire site.

Response Action Status _____



Initial Actions: In 1983, the New Jersey Department of Environmental Protection removed some drums and contaminated soil from the site. In 1987, two farm buildings on site were demolished, and the area affected by acids was neutralized by the EPA. At the same time, some drums on site were removed, and the rest were stored on site. In 1990, the last of the drums and contaminated materials were removed.



Entire Site: The State is conducting an investigation to determine the exact nature and extent of the contamination. The results of the investigation, expected in 1992, will be used by the EPA to evaluate and select final cleanup alternatives.

Environmental Progress _____

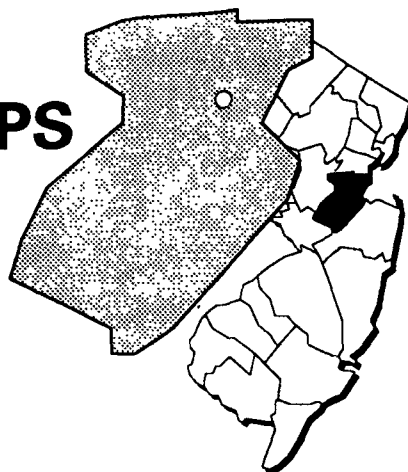


The removal of contaminated drums, soils, and materials, as well as the other actions described above, have made the Ellis Property site safer while the investigations leading to the selection of a final cleanup remedy are taking place.

EVOR PHILLIPS LEASING

NEW JERSEY

EPA ID# NJD980654222



EPA REGION 2 CONGRESSIONAL DIST. 06

Middlesex County
Old Bridge Township

Other Names:
Phillips Leasing
N. America Metals
EPL Industries

Site Description

The Evor Phillips Leasing (EPL) site covers 6 acres in Old Bridge Township. A State investigation conducted in 1982 found between 4,000 and 5,000 drums containing explosive chemicals buried at the site. EPL has no equipment for containing the drums of waste, and the area is unlined, enabling contaminants to migrate through the soil, groundwater, and surface water. The area surrounding the site is used for hunting and fishing. However, there has been no evidence that game or fish have become contaminated.

Site Responsibility: This 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



Volatile organic compounds (VOCs) including dichloroethane and trichloroethylene (TCE) and heavy metals such as copper, nickel, and zinc have contaminated the groundwater. The soil is contaminated with VOCs and phthalates, a plastics by-product. Since access to the EPL site is possible, trespassers, on-site workers, and children may be exposed to potential health hazards. Direct contact with or accidental ingestion of contaminated soil and groundwater pose a health threat. Municipal well data confirms the presence of site-related contaminants in the groundwater. All well water samples exceeded the EPA's and the State of New Jersey's water quality criteria for heavy metals. It is possible that leaching of on-site contaminants into the underlying aquifer is occurring and is causing contamination of drinking water wells.

Cleanup Approach

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

Response Action Status



Initial Actions: In 1983, the State excavated 30 to 40 drums and removed them from the site; 4,000 to 5,000 drums remain buried on site.



Entire Site: The State is conducting a study focused on identifying the sources of contamination on site and determining the nature and extent of the contamination of the groundwater. The results of this study are expected in 1991. The EPA will review the cleanup alternatives and will select the best remedy for the site.

Site Facts: Under an Administrative Order on Consent, signed between the State and several potentially responsible parties, the parties agreed to contribute funds for a thorough investigation of the site.

Environmental Progress

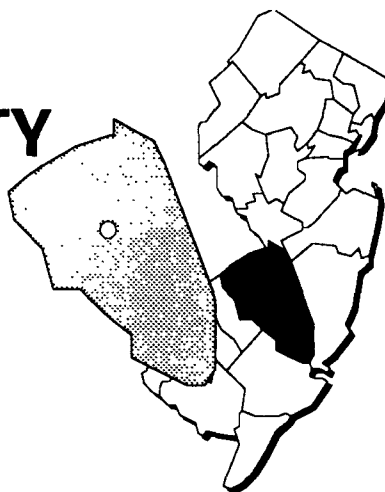


The EPA has determined that while site studies are taking place the site does not pose an immediate threat to the surrounding community or the environment. Until final cleanup is complete, the EPA will ensure the safety of the public and environment, and will continue to monitor the site to ensure that the wastes at the Evor Phillips Leasing site do not migrate to surrounding areas.

EWAN PROPERTY

NEW JERSEY

EPA ID# NJD980761365



EPA REGION 2
CONGRESSIONAL DIST. 13
Burlington County
Wallingford Way, Shamong Township

Other Names:
Shamong Township Drum Dump

Site Description

The Ewan Property consists of 43 heavily wooded acres in Shamong Township. The site, which includes a contaminated groundwater plume, is located within the Central Pine Barrens portion of the New Jersey Pinelands. Two areas of industrial waste disposal were suspected during initial site studies. Area A, consisting of 9 acres, is the area of concern. Site investigations revealed that during the early to mid-1970s, from 500 to 8,000 drums containing hazardous industrial wastes were emptied or buried in trenches, and the trenches subsequently were backfilled with soil. Soil and groundwater sampling indicate the presence of volatile organic compounds (VOCs), semi-volatiles, and metals. It is estimated that Area A has 4,500 cubic yards of highly contaminated waste material and 29,500 cubic yards of moderately contaminated soil. The property is surrounded by forest, agricultural land, and residential areas. Private residences are provided domestic water from wells as close as a mile downstream from the site. Approximately 330 people live in the area and are served by individual domestic water wells. The groundwater is used not only for domestic purposes, but also for irrigation of croplands. Adjacent to the site is an intermittent stream. The Pinelands area is a major groundwater recharge area.

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



A plume of contaminated groundwater that is 760 feet long, 600 feet wide, and 30 feet deep is contaminated with VOCs including acetone and benzene and the heavy metals chromium and aluminum. Two aquifers below the site are hydraulically linked. The groundwater under the site flows in a southerly direction. Monitoring wells both on and off site detected contaminants in the groundwater. Soil also is contaminated with VOCs and heavy metals. Drinking the contaminated groundwater could pose a health threat. The New Jersey Pinelands, a sensitive ecosystem and major groundwater recharge area, is threatened by site contaminants.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases directed at removal of the buried drums and cleanup of the soil and groundwater.

Response Action Status



Immediate Actions: At the EPA's direction, a potentially responsible party installed a security fence in 1988 to keep trespassers and children away from contaminants at the site.



Buried Drums: The EPA has selected the cleanup methods to be used to remove contaminated materials and buried drums from the site. These methods include: (1) construction of an area for waste identification, grouping, and storage; (2) excavation of wastes; (3) collection and grouping of waste materials with off-site incineration of all appropriate wastes; (4) temporary on-site storage and assessment of non-incinerable wastes to determine proper treatment/disposal methods; and (5) monitoring air and groundwater during the cleanup activities. The potentially responsible parties began the design of the technical specifications for this work in 1989. Once the design phase is completed, cleanup work will begin.



Soil and Groundwater: In 1989, the cleanup plan for contaminated soil and groundwater was chosen by the EPA. Soil cleanup, which includes excavation of contaminated soil and treatment to remove contaminants by solvent extraction and soil washing, will be followed by placement of the treated soils back onto the site. For the contaminated groundwater, the chosen remedy is to collect, treat, and reinject the treated groundwater into the aquifer. After completion of these measures, the cleanup plan calls for restoration of the disposal areas and appropriate environmental monitoring. Once the design of the cleanup remedy is completed, cleanup work will begin.

Site Facts: The EPA has identified and notified approximately 30 potentially responsible parties. Seventeen parties have been ordered to remove contaminated materials and buried drums.

Environmental Progress

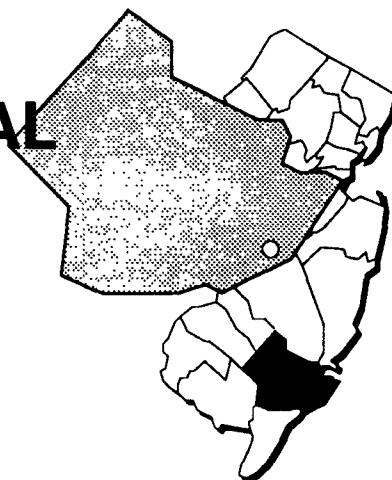


Installation of a security fence has reduced the potential for contact with contaminants while the chosen remedies are in the design and review stage. The EPA has determined that the Ewan Property site does not pose a threat to the surrounding community or the environment while it awaits final cleanup actions.

FAA TECHNICAL CENTER

NEW JERSEY

EPA ID# NJ9690510020



EPA REGION 2
CONGRESSIONAL DIST. 02
Atlantic County
8 miles northwest of Atlantic City

Site Description

The Federal Aviation Administration (FAA) Technical Center site covers an area of approximately 5,000 acres on a site northwest of Atlantic City. The site borders the Garden State Parkway in southeastern New Jersey. Installations on the site include the Atlantic City International Airport, a New Jersey Air National Guard Station, and extensive FAA facilities. Activities at the site started in 1942 with the construction of a Naval air base. In late 1958, the FAA, then known as the Airways Modernization Board, took over the operation and has used the facility as an airport and aviation safety research center. In 1984, the New Jersey Department of Environmental Protection (NJDEP) contracted for an assessment of pollution sources that could affect the then-proposed Atlantic City Municipal Well Field, to be located on the north shore of the Upper Atlantic City Reservoir, within the FAA Technical Center boundaries. This investigation identified five areas as posing a threat to the proposed well field: the Salvage Area (Area 20A), where scrap materials and drums of hazardous waste oils and solvents were stored; the Fuel Mist Test Facility (Area 27), where jet fuels were sprayed and burned to test the anti-misting properties of certain fuel additives; the Fire Training Area (Area 29), where fuel fire testing and fire training exercises were conducted; the Avgas Fuel Farm and Photo Lab (Area 41), where leaks from underground storage tanks, discharge of photographic lab wastes, and spillage of fuels may have occurred; and the Abandoned Navy Landfill (Area 56), an area south of the main runway, used as a landfill by the Navy. The FAA also has identified additional areas to the NJDEP and the EPA that may affect the environment. Atlantic City's municipal water supply is provided by nine groundwater supply wells located just north of the Upper Atlantic City Reservoir on FAA property, as well as by water drawn directly from the Atlantic City Reservoirs. The reservoirs are fed by the North and South Branches of Doughty's Mill Stream, which cross portions of the Technical Center grounds. An estimated 68,000 people obtain drinking water from the Atlantic City Reservoirs.

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

NPL LISTING HISTORY

Proposed Date: 07/13/89

Final Date: 08/30/90

Threats and Contaminants



Volatile organic compounds (VOCs), including tetrachloroethylene, dichloroethylene, benzene, and toluene are present in groundwater at three areas on site, and elevated levels of cadmium and chromium were found in groundwater at the Abandoned Navy Landfill (Area 56). Polychlorinated biphenyls (PCBs) and VOCs were detected in soils in the drum storage areas of the Building 206 Salvage Yard and at the location of two

underground waste oil tanks near the southwestern corner of Building 206. Although the Atlantic City municipal wells are not contaminated, a potential health threat exists if pollutants migrate to the wells. People who accidentally ingest contaminated soil may suffer adverse health effects.

Cleanup Approach

The site is being addressed in 11 stages: initial actions and 10 long-term remedial phases focusing on cleanup of the various areas of contamination and the groundwater at the site. Additional cleanup phases may be designated in the future as site studies continue.

Response Action Status



Initial Actions: In 1989, PCB-contaminated soil and a contaminated cement pad were removed from the Transformer Storage Area.



Jet Fuel Farm: In 1989, the EPA selected a remedy to clean up the jet fuel in the soil and groundwater by excavating the contaminated soil and treating it by incineration in a cement kiln, and in-situ biotreatment of groundwater. The design of the technical specifications is planned to be completed in 1991.



Salvage Yard Soil and Groundwater: Under EPA monitoring, the FAA will remove contaminated soil to an off-site rotary kiln for incineration to destroy contaminants. Groundwater will be extracted and cleaned with an air stripping technology. Design of the site-specific cleanup technologies began in 1990, with completion expected in 1992.



Fire Training Area: The investigation into the nature and extent of contamination at the fire training area is expected to be completed in 1991. A plan outlining the EPA's preferred cleanup strategy will be presented upon completion of the investigation.



Other Areas: Investigations to determine the nature and extent of contamination are underway at several other areas at the FAA Technical Center Site. As a result of the initial action described above, no further action is required at the Transformer Storage Area.

Based on the results of investigations at other areas, additional cleanup phases, as well as specific cleanup alternatives, may be recommended.

Site Facts: An Interagency Agreement between the EPA and the FAA is expected to be signed in 1991.

Environmental Progress

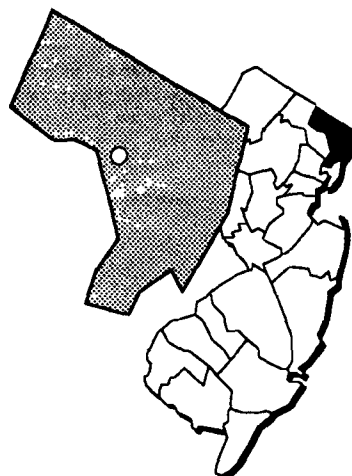


Initial actions have removed PCB-contaminated soils and limited the potential for exposure to hazardous wastes. Remedy designs for groundwater and additional soil contamination are nearing completion while investigations are being conducted at the remaining contamination areas of the FAA Technical Center site.

FAIR LAWN WELL FIELD

NEW JERSEY

EPA ID# NJD980654107



EPA REGION 2
CONGRESSIONAL DIST. 09
Bergen County
Fair Lawn

Site Description

The Fair Lawn Well Field site contains three municipal wells that supply drinking water to the 32,000 residents of Fair Lawn. In 1978, volatile organic compounds (VOCs) were detected in municipal supply wells located within and adjacent to the Fairlawn Industrial Park. These wells were removed from the municipal system shortly after contamination was discovered. Fisher Scientific Company and Sandvik, Inc. have been identified as contributing sources to groundwater contamination. The site is bounded on three sides by the remaining industries of Fairlawn Industrial Park, and there are several residences within 300 feet of the site. There are no private wells in the vicinity of the site. However, there are public water supply wells nearby.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



VOCs were detected in groundwater contributing to the public drinking water supply. Soils on the site also are contaminated with VOCs including benzene and toluene. Few potential threats to individuals exist, since the contaminated wells were taken out of service. However, accidental ingestion or direct contact with contaminated groundwater or soil may pose a health threat.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the Sandvik Facility and the Fisher Scientific Facility.

Response Action Status _____



Immediate Actions: In 1984, the potentially responsible parties removed contaminated soil from the site and, in 1987, installed air strippers to treat the well fields.



Sandvik Facility: Under State monitoring, Sandvik conducted a limited investigation of its facility. The New Jersey Department of Environmental Protection (NJDEP) is negotiating with Sandvik to conduct additional investigations at its facility.



Fisher Scientific Facility: Fisher Scientific conducted a limited investigation of its facility, under monitoring by the State. Fisher has installed a trench to collect contaminated groundwater for discharge to a publicly owned water treatment works; however, groundwater is not currently being discharged to a wastewater treatment facility due to permitting issues.

Site Facts: In 1984, an Administrative Order was signed by Sandvik and the State for the company to conduct a site investigation. An Administrative Order also was signed in 1986 by Fisher Scientific's parent company, Allied Signal, and the State for investigations, contaminated soil removal activities, and construction of a groundwater collection system.

Environmental Progress _____

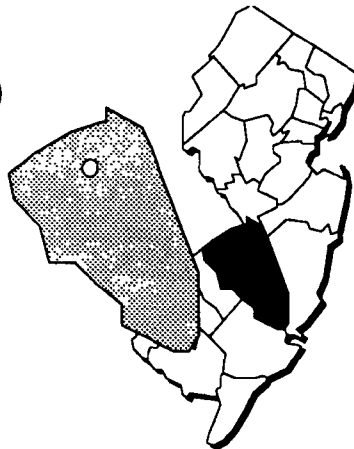


The immediate actions described above have greatly reduced the potential for exposure to contaminated groundwater and soil at the Fair Lawn Well Field site while further investigations and cleanup activities are taking place. The wells currently are being treated to remove contaminants and to ensure that the public is provided with a safe drinking water supply.

FLORENCE LAND RECONTOURING LANDFILL

NEW JERSEY

EPA ID# NJD980529143



EPA REGION 2
CONGRESSIONAL DIST. 04
Burlington County
In the Townships of Florence,
Mansfield, and Springfield

Other Names:
Gravel Pit

Site Description

The Florence Land Recontouring (FLR) Landfill is a 60-acre site that contains a 29-acre landfill, two lagoons, a pond, and two tanks. The FLR Landfill was operated as a municipal solid waste disposal facility from 1973 until late 1981, and the State licensed it to accept sanitary and non-chemical industrial wastes. In 1975, the New Jersey Department of Environmental Protection (NJDEP) investigated chemical waste disposal at the site and found that 95 tons of hazardous waste consisting of phthalates, heavy metals, and vinyl chloride monomers were illegally disposed of at the site. Elevated levels of hazardous substances were discovered in soils and groundwater within the landfill. However, results of sampling and analysis of off-site wells over the past 9 years have shown that water quality is within health standards. Approximately 4,500 people live within a 3-mile radius of the site. The area surrounding the site is primarily mixed agriculture and residential. The site is bordered by land purchased by Burlington County for a new 600-acre solid waste management facility and by Assiscunk Creek, a tributary to the Delaware River, which is used for recreation and irrigation.

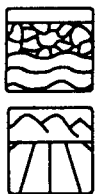
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



The groundwater and soils are contaminated with volatile organic compounds (VOCs) including methylene chloride and vinyl chloride and the heavy metals arsenic, chromium, and lead. The leachate is contaminated with VOCs and polycyclic aromatic hydrocarbons (PAHs). The residents in the area using the groundwater for domestic purposes could be exposed should the contaminants migrate from the landfill into the wells. Exposure through direct contact appears minimal, since the contamination is below the landfill cap. The cleanup workers and those who trespass on the landfill are at particular risk, especially during activities which may disturb the landfill cap. The workers may be exposed to contaminants through direct contact with the soils and groundwater, inhalation of VOCs and other gases typically produced in landfills by biological degradation of refuse, and the accidental ingestion of soil or groundwater.

Cleanup Approach

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

Response Action Status



Initial Action: In 1982, a clay cover was placed on the landfill during closure. A leachate collection system was installed, and the resulting leachate was placed into two lagoons constructed on another section of the property. The leachate lagoons were surrounded by a 5-foot-high fence with barbed wire around the top. Carbon adsorption filters were placed on top of the six leachate collection system manholes to collect the VOCs and to control odors.



Entire Site: In 1986, the EPA chose the following methods to clean up the site: (1) construction of a synthetic membrane and clay composite cap, a perimeter soil/Bentonite slurry wall, an upstream groundwater interceptor system, and a new stormwater management system; (2) leachate treatment and disposal at a municipal wastewater treatment facility or the Burlington County Solid Waste Complex, gas collection, and treatment; (3) removal and disposal of lagoon liquids and sediments and other surface debris; (4) construction of a partial fence with warning signs; and (5) supplemental sampling of groundwater, surface water, and sediments during the design phase. The technical specifications and design for the cleanup were completed in early 1991. While the installation of the security fence is the only activity completed to date, the other cleanup activities are underway and are scheduled for completion in 1992.

Site Facts: In January 1979, a Consent Order to alleviate and control further contamination was issued by the New Jersey Superior Court. Subsequent enforcement action by the NJDEP was necessitated by the lack of adherence to the terms of the Consent Order. In July 1981, Florence Land Recontouring, Inc. submitted a final closure plan, and operations terminated in November 1981.

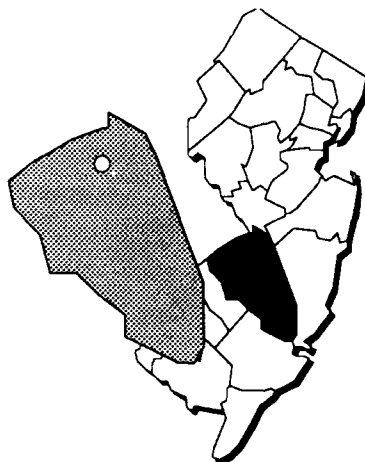
Environmental Progress



By placing a clay cover over the landfill, installing a leachate collection system, and fencing around the leachate lagoons, the site has been made safer for the surrounding community while the cleanup activities continue.

FORT DIX (LANDFILL SITE) NEW JERSEY

EPA ID# NJ2210020275



EPA REGION 2
CONGRESSIONAL DIST. 13
Burlington County
Pemberton

Other Names:
U.S. Army Training Center (USATC)

Site Description

The 126-acre Fort Dix (Landfill Site) operated as a sanitary landfill from 1950 until 1984. The U.S. Army's Fort Dix Military Reservation and McGuire Air Force Base used the landfill. Wastes from these bases were buried in a series of parallel trenches, which were covered with native soil that had been removed when the trench was excavated. Some of the types of waste disposed of in the landfill included sludges, waste paints and thinners, and pesticides. Cannon Run and an unnamed stream are located near the landfill and flow into Rancocas Creek. A hardwood swamp also is located near the landfill. The site is surrounded by woods and dense vegetation. Wooded areas around the landfill are open to the public during the hunting season. Unauthorized recreational activities such as dirt biking occur near the site. An estimated 5,000 people live in military housing about 4,000 feet upstream of the landfill. Approximately 500 people live in Pemberton Township, which is 4,000 feet from the landfill, and 7,300 residents are served by domestic wells within 3 miles of the landfill.

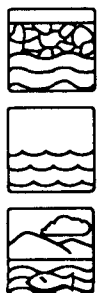
Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 07/01/87

Threats and Contaminants



The groundwater and surface water are contaminated with various volatile organic compounds (VOCs) as well as heavy metals including manganese, lead, and cadmium. Potential threats to health include drinking and direct contact with contaminated groundwater and the hardwood swamp surface water. However, no potable water supply wells are threatened by the groundwater contamination. There is also a potential health risk associated with ingesting contaminated plants and animals from the swamp.

Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on cleanup of the landfill and the disposal and spill areas.

Response Action Status



Landfill: The Army completed a records search and began groundwater sampling around the landfill. In 1987, the Army completed its investigation into the nature and extent of contamination at the site. Based on the results of the investigation, the Army proposed to cap the landfill and monitor groundwater over a 30-year period. A formal decision to implement these remedies is expected in 1991.



Disposal and Spill Areas: The Army identified 21 past disposal and spill areas potentially contaminated with hazardous wastes. Additionally, an investigation recommended that the EPA conduct a study of 10 additional areas of the site to determine the nature and extent of contamination. The subsequent investigation and recommendations for final cleanup alternatives are planned to be completed in 1992.

Site Facts: Fort Dix is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DoD facilities. In 1985, the EPA, the State, and the Army signed an Administrative Order on Consent. The DoD agreed to investigate the contamination at the site and to define the contaminants and recommend alternatives for final cleanup.

Environmental Progress

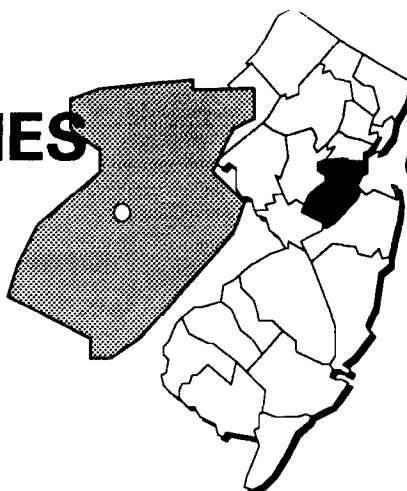


Upon listing the site on the NPL, the EPA performed an initial assessment and determined that the Fort Dix Landfill site does not pose an immediate threat to nearby residents or the environment while studies leading to final cleanup are underway.

FRIED INDUSTRIES

NEW JERSEY

EPA ID# NJD041828906



EPA REGION 2
CONGRESSIONAL DIST. 12
Middlesex County
East Brunswick Township

Site Description

Fried Industries manufactures floor finishing products, detergent solutions, and other cleaning products on this site in East Brunswick Township. Also, the facility has been leased at times to a manufacturer of automotive antifreeze. In 1983, the EPA found that hazardous wastes were improperly stored on site and that the soil was contaminated with volatile organic compounds (VOCs) and copper. In a limited excavation, the EPA found deteriorated buried drums. There is a strong potential for the site to contaminate the groundwater and surface water. In 1985, Phillip Fried, president of the firm, notified the Middlesex County Department of Health (MCDH) that the facility's holding tank was full and in danger of overflowing. At the request of the MCDH, the EPA conducted a site visit. Samples of the process waste tank and the septic holding tank on site indicated the presence of hydrocarbons. There was evidence that the tanks already had overflowed to a drainage ditch entering Bog Brook and Mill Pond, which flows to Lawrence Brook, a tributary of the Raritan River. Also, seepage into the ground threatened the underlying aquifer. Approximately 25,000 people live within a 3/4-mile radius. The Fried Industries site is used as a local park by many of the area's residents.

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

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 06/01/86

Threats and Contaminants



The groundwater is contaminated with VOCs including chloroform, benzene, and vinyl chloride. The soil is contaminated with VOCs and heavy metals including mercury and copper. Contaminated groundwater and soil, if accidentally ingested or through direct contact, could adversely affect the health of individuals. Also, there is concern that Bog Brook, Mill Pond, Lawrence Brook, Farrington Lake Reservoir, and the adjoining wetlands may be contaminated.

Cleanup Approach

This 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: Approximately 7,000 gallons of process and septic wastes were pumped from the tanks and transported for treatment to the Middlesex County Utilities Authority and Perk Chemical Company. The Town of East Brunswick provided hookups to a public water supply to residences with contaminated wells. An immediate action was approved in 1989 to remove approximately 800 drums and containers from the site. A fence was installed, and a security guard was posted while the drum removal, expected to be completed in late 1991, is underway.



Entire Site: The EPA currently is conducting an investigation to determine the nature and extent of the contamination including: (1) a soil gas survey to delineate any contaminant plume and to locate areas of elevated contamination; (2) a geophysical survey to further define any contaminant plume, as well as the locations of buried drums and fill areas; (3) a sampling of surface and buried drums, repacking of leaking drums, and placement of all drums in a secured area on site; (4) a survey and sampling of selected off-site residential wells to delineate any subsurface migration of site-related contaminants; (5) a delineation of Fried Industries property boundaries and on-site wetlands; and (6) an air monitoring program to determine potential contaminant migration off the Fried Industries site. The EPA has determined that additional studies are needed and is developing a work plan for the second phase of studies. Upon completion of site studies in early 1992, cleanup alternatives will be proposed.

Site Facts: The site owner was informed that the EPA would conduct an investigation on site to determine the extent and the nature of the site contamination. In 1986, the owner voluntarily suspended further operations on site after the overflow of contaminated water. The site owner was asked to leave the site premises and did so in 1989.

Environmental Progress

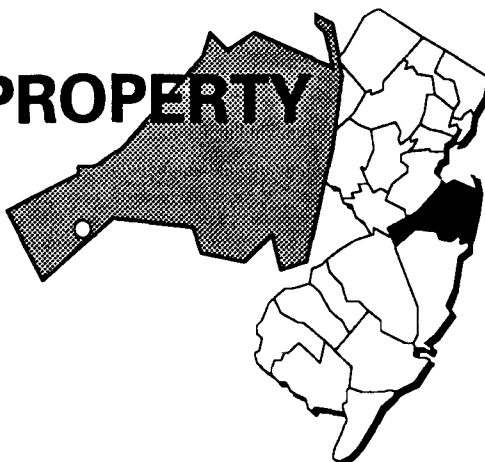


The removal of hazardous liquids, the provision of an uncontaminated public water supply, and securing the site have greatly reduced the potential for exposure to hazardous substances at the Fried Industries site while studies leading to the selection of final cleanup activities are taking place.

FRIEDMAN PROPERTY

NEW JERSEY

EPA ID# NJD980532832



EPA REGION 2
CONGRESSIONAL DIST. 04

Monmouth County
Upper Freehold Township

Other Names:
Thiokol Corp Site

Site Description

The 3-acre Friedman Property is an open, vacant lot with scrub vegetation. Drums and liquids were dumped into a ditch at the site in the late 1950s and 1960s. Groundwater underlying this abandoned site was suspected to contain a number of contaminants. The Friedman Property was one of four priority NPL sites within a 2-mile radius. The site is in a rural area with scattered residences, commercial facilities, and several trailer parks, all dependent on local groundwater as the source of drinking water. The site is bordered by an unnamed tributary to Lahaway Creek, a single-family residential property, and routes 537 and 539.

Site Responsibility: This site was addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Deleted Date: 03/07/86

Threats and Contaminants



Although groundwater samples showed very low levels of creosotes and volatile organic compounds (VOCs), a groundwater plume could not be defined. After extensive investigations, the EPA has determined that the low levels of compounds in the groundwater do not pose a threat to human health or the environment.

Cleanup Approach _____

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

Response Action Status _____



Entire Site: In 1985, the EPA determined the Friedman Property site did not require long-term cleanup actions to address the low-level residual contamination detected at the site. The EPA, however, has required annual monitoring of on-site wells for a five-year period to ensure that groundwater remains within safe levels. The New Jersey Department of Environmental Protection (NJDEP) is performing the monitoring and soon will be submitting the sampling results to the EPA. The EPA recommended that the State request local authorities to place deed restrictions on future uses of the property.

Site Facts: In 1982, the EPA asked the potentially responsible party, the Morton Thiokol Corporation, to carry out an investigation to determine the nature and the extent of the contamination at the site. In 1983, the company submitted a proposal to the EPA for the investigation. The proposal was rejected by the EPA, and the NJDEP decided to carry out the investigation. The result of the State's investigations led to the EPA's decision to delete the site from the NPL.

Environmental Progress _____

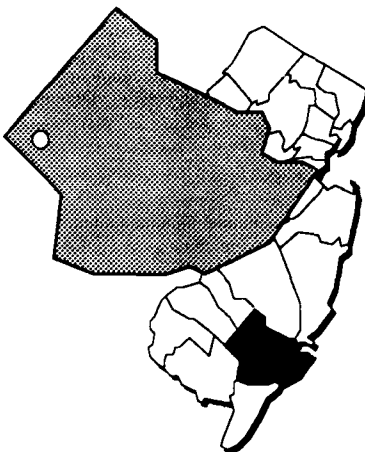


After conducting extensive site investigations, the EPA has determined that the low levels of contaminants do not pose threats to nearby residents at the Friedman Property site or the environment and has deleted the site from the NPL.

GARDEN STATE CLEANERS CO.

NEW JERSEY

EPA ID# NJD053280160



EPA REGION 2
CONGRESSIONAL DIST. 02
Atlantic County
Minotola

Site Description

Garden State Cleaners Co. is a commercial dry cleaning facility that has been operating since 1966. It is located approximately 500 feet south of the South Jersey Clothing Company site, which also is on the NPL. In an investigation of Garden State Cleaners (GSC) in 1984, the New Jersey Department of Environmental Protection detected high levels of the volatile organic compounds (VOCs) tetrachloroethylene (PCE) and trichloroethylene (TCE) in soil below a steam discharge pipe. Off-site monitoring wells downstream of GSC and South Jersey Clothing contain large quantities of VOCs, which has forced some residential private wells to close and the Borough to construct a new municipal water supply system. Approximately 9,000 people live in this mixed residential and commercial area. They obtain drinking water and irrigate 3,800 acres of farmland from wells within 3 miles of the site.

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

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/30/89

Threats and Contaminants



The groundwater and soil are contaminated with VOCs including PCE and TCE. Use of contaminated groundwater for domestic purposes and agricultural irrigation may pose a health threat as a result of drinking or direct contact with contaminants.

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 EPA currently is conducting an investigation to determine the nature and extent of contamination on the entire site and to identify alternatives for cleanup. All field work has been completed. The investigation is scheduled to be completed in 1991.

Environmental Progress _____

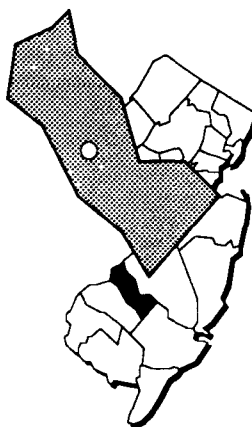


After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Garden State Cleaners site while further studies leading to the selection of final cleanup remedies are taking place.

GEMS LANDFILL

NEW JERSEY

EPA ID# NJD980529192



EPA REGION 2
CONGRESSIONAL DIST. 01

Camden County
Gloucester Township

Other Names:
Gems/Amadei
Amadei Landfill
Gloucester Environmental Manufacturing
Services Landfill

Site Description

The 60-acre GEMS Landfill site has been owned by Gloucester Township from the late 1950s to the present. During this time, the landfill has been operated by various parties as a disposal site for solid, liquid, and hazardous wastes and substances. Records indicate that a variety of industrial wastes including asbestos, solvents, and other materials were disposed of at the GEMS site between 1970 and 1979. In 1980, sludge from the City of Philadelphia's northeast wastewater treatment facility was disposed of at the site. Analyses of the sludge revealed the presence of pesticides. The State closed the landfill in 1980. Scattered industrial and recreational areas are adjacent to the site. The closest residences are approximately 300 feet from the landfill. Approximately 6,000 people live within a mile of the site, and 38,000 people live within a 3-mile radius. Holly Run and Briar Lake are near the site.

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

NPL LISTING HISTORY

Proposed Date: 07/01/82

Final Date: 09/01/83

Threats and Contaminants



Volatile organic compounds (VOCs) are evaporating into the atmosphere and are significantly degrading air quality. VOCs and heavy metals have been detected in the Cohansey and Mt. Laurel/Wenonah Aquifers. VOCs, lead, ammonia, and benzoic acid have been detected in off-site surface soils. On-site leachate and soil have been contaminated with heavy metals including cadmium and lead, and VOCs including methylene chloride and carcinogenic polycyclic aromatic hydrocarbons (PAHs). Leachate from the site also is contaminating Holly Run and Briar Lake. Potential health risks exist for individuals who make direct contact with or ingest contaminated groundwater, surface water, or soil. A wetland west of the site has been affected by contaminated leachate flowing from the landfill.

Cleanup Approach

This 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 removed debris from the site, constructed a fence, and took other measures to prevent residents from coming in contact with wastes in the area.



Entire Site: The EPA selected the following remedy to clean up the site: (1) constructing a landfill cap and regrading existing landfill side slopes; (2) installing an active gas collection and treatment system, a groundwater pump and treatment system, and surface water controls; (3) implementing a monitoring program; and (4) relocating and isolating Holly Run and installing limited runoff controls. In addition, the potentially affected homes will be connected to the existing public water supply system. The potentially responsible parties have begun final cleanup activities at the site, and completion is scheduled for 1992. The pump and treat system will then be constructed, with operation and maintenance continuing after the remedies are completed in 1993.

Site Facts: In 1981, a suit was instituted by the State to compel compliance with operation and closure regulations. Complex litigation involves the Township, the New Jersey Department of Environmental Protection (NJDEP), the New Jersey Board of Public Utilities, and a number of potentially responsible generators and transporters. The EPA sent Notice Letters in 1983 and 1985 to the parties potentially responsible for site contamination to provide them the opportunity to perform cleanup actions. In 1987, the EPA sent Notice Letters to over 120 potentially responsible parties to provide them the opportunity to implement or fund the cleanup actions. In 1988, NJDEP issued a Directive and Notice to Insurers to 131 respondents and 71 insurance companies directing them to proceed with the cleanup. As a result of an EPA Unilateral Administrative Order and the State directives, potentially responsible parties have undertaken cleanup activities.

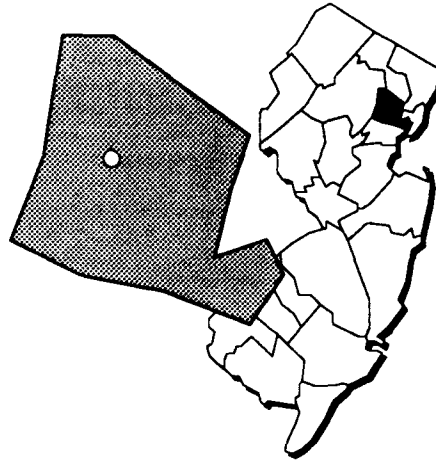
Environmental Progress



The removal of debris, construction of a fence, and the ongoing long-term cleanup activities described above have greatly reduced the potential for exposure to hazardous materials at the GEMS Landfill site while cleanup activities are being completed.

GLEN RIDGE RADIUM SITE NEW JERSEY

EPA ID# NJD980785646



EPA REGION 2
CONGRESSIONAL DIST. 08
Essex County
Glen Ridge

Site Description

The 90-acre Glen Ridge Radium Site includes 306 properties on residential land. The soil at the site is contaminated with radioactive waste materials suspected to have originated from nearby radium processing facilities that operated in the 1920s. Subsequently, houses were constructed on or near the radium waste disposal areas. Some of the radium-contaminated soil was used as fill in the low-lying areas, and some was mixed with cement for sidewalks and foundations. More than 300,000 cubic yards of contaminated soil are scattered on public and private properties within portions of three communities. In 1983, the State identified a number of homes with high levels of radon gas and radon decay products, as well as excessive levels of indoor and outdoor gamma radiation. This site is similar to the nearby Montclair/West Orange Radium site, which also contains radium-contaminated soils from the same sources. Cleanup remedies will address both sites. Approximately 300 homes were identified as being affected by radium-contaminated soil, radon, or gamma radiation. Approximately 41,000 people live within 1 mile of the site, and 289,000 live within 3 miles.

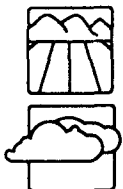
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 02/01/85

Threats and Contaminants



The soil is contaminated with radium. Radium decays to radon gas, which is emitted into the air. Some properties on the site are contaminated with radium and exhibit excessive levels of radon gas and gamma radiation. People who are exposed to the radium, radon, and radon decay products may suffer from high rates of cancer. Accidental ingestion of soil may cause adverse health effects. Vegetables grown in the contaminated soil also may pose a health threat.

Cleanup Approach

This site is being addressed in four stages: emergency actions and three long-term remedial phases focusing on cleanup of the soil and structures, the groundwater, and the remaining properties.

Response Action Status



Emergency Actions: In 1983, the EPA installed temporary radon ventilation systems and gamma ray shielding in some of the affected houses. The EPA has since replaced the original radon ventilation system with a sub-slab depressurization system. The gamma radiation shielding remains in place.



Soil and Structures: In 1989, the EPA selected a remedy to clean up the soil and structures, which includes: (1) excavating approximately 50,000 cubic yards of contaminated soil and debris at the most extensively contaminated properties and disposing of them in a licensed facility; (2) installing and maintaining indoor engineering controls at less contaminated properties; (3) monitoring the site to ensure the effectiveness of the remedy; and (4) continuing alternative treatment studies for future actions at the site. The EPA is designing the technical specifications to clean up the soil and structures on the site. As portions of the design are completed, the cleanup will begin in a phased manner. The first cleanup actions began in 1990.



Groundwater: The EPA is conducting a study to determine whether contaminants from the soil have entered the groundwater. This investigation is scheduled for completion in 1992.



Remaining Properties: In 1990, the EPA selected a remedy for the remaining properties, as well as public access areas and streets. The remedy includes excavation and off-site disposal of all radium-contaminated material from public and private properties; environmental monitoring, as required, to ensure the effectiveness of the remedy; and the continuation of treatment technology studies to reduce the volume of radium-contaminated material for off-site disposal. Once the design of the selected remedy is completed, cleanup work will begin.

Site Facts: The Glen Ridge Radium site and the Montclair/West Orange Radium site are being investigated simultaneously, and the cleanup remedies will address both areas.

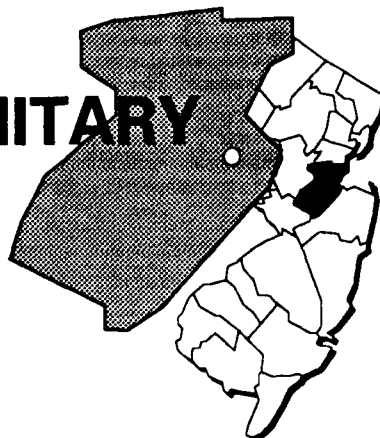
Environmental Progress



By providing air treatment systems to protect affected residents from radioactive materials, the EPA and the State have greatly reduced the potential for exposure to radioactive substances at the Glen Ridge Radium Site while further studies and cleanup activities are taking place.

GLOBAL SANITARY LANDFILL NEW JERSEY

EPA ID# NJD063160667



EPA REGION 2
CONGRESSIONAL DIST. 04
Middlesex County
Old Bridge Township

Site Description

The 60-acre Global Sanitary Landfill site was licensed by the New Jersey Department of Environmental Protection to accept non-hazardous waste. The landfill borders Cheesquake Creek Tidal Marsh on three sides. In 1984, after heavy rains, two consecutive high tides occurred in the wetlands, and a portion of the southern side of the landfill collapsed and slid into the adjoining wetlands. As a result, the State closed the landfill. In 1984, the State detected volatile organic compounds (VOCs) seeping from the site into the wetlands. The State is overseeing an investigation by the owners to locate approximately 100,000 drums containing paint, paint thinner, and various solvents that may have been buried in the landfill from 1968 to 1977. Groundwater immediately underneath the site has become contaminated by pollutants leaching from the landfill. The Sayreville Water Company has five water supply wells within a mile of the site. Approximately 86,000 people depend on wells within 3 miles as their sole source of drinking water. The water supplies for Sayreville, Lawrence Harbor, South Amboy, and Perth Amboy are threatened. Raritan Bay is located 2 miles from the site and is used for recreational activities. Commercial fishing is conducted in the area.

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

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/30/89

Threats and Contaminants



An aquifer underneath the site is contaminated; however, the nature of the contamination has not yet been fully identified. The leachate seeping from the landfill into the wetlands contains VOCs including methylene chloride, chloroform, trichloroethylene, and benzene. VOCs have seeped from the landfill into the Cheesquake Creek Tidal Marsh. The contaminants may have a harmful effect on the wildlife inhabiting the wetlands area.

Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on closure of the landfill and cleanup of the groundwater, surface water, and the surrounding wetlands.

Response Action Status



Closure of the Landfill: In 1989, the State began investigations into the feasibility of closing the landfill. These investigations are expected to be completed in late 1991, with the final cleanup recommendation being selected at that time.



Groundwater, Surface Water, and Surrounding Wetlands: The State began investigations into the extent of the contamination in the Cheesquake Creek Tidal Marsh and the aquifer in 1990. Once the investigations are completed, scheduled for 1992, final cleanup technologies will be selected by the EPA.

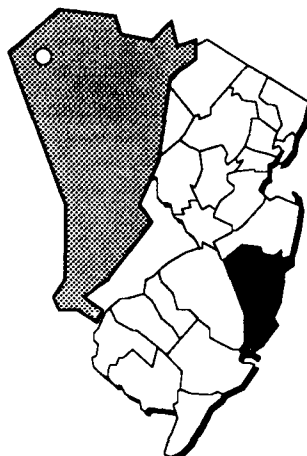
Environmental Progress



After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Global Landfill site while further studies are being conducted.

GOOSE FARM NEW JERSEY

EPA ID# NJD980530109



EPA REGION 2
CONGRESSIONAL DIST. 13
Ocean County
Plumsted Township

Site Description

The 1 1/2-acre Goose Farm site was used as a hazardous waste disposal area from the mid-1940s to the mid-1970s by a manufacturer of polysulfide rubber and solid rocket fuel propellant. The majority of wastes were dumped into a pit dug through fine sand. Waste chemicals from laboratories, drums, and bulk liquids were dumped into the pit. In 1980, the New Jersey Department of Environmental Protection found that a contaminant plume that originated in the waste pit area had migrated north toward a nearby stream. Soil also was found to contain volatile organic compounds (VOCs). This site is within 2 miles of three other NPL sites: the Friedman Property, Pijack Farm, and Spence Farm. Approximately 10 residences are located within 2,000 feet of the Goose Farm site. An unnamed stream on the site flows into Lahaway Creek, a tributary of the Delaware River, which is used for recreational activities. The site is adjacent to a forest.

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: 09/01/83

Threats and Contaminants



Groundwater is contaminated with VOCs and arsenic. VOCs, polychlorinated biphenyls (PCBs), phenols, arsenic, and zinc are contaminating the soil. The unnamed stream that flows into Lahaway Creek is contaminated with methylene chloride. Leachate from the pit contained various VOCs; however, the drums were removed and there is no longer any leachate from the pit. Although surface water is not used as a source of drinking water, it is used for irrigation of food crops. Contaminants may accumulate in the food and pose a health hazard if consumed. The surface water is used for recreational purposes and may be harmful if accidentally ingested. Wildlife in the area may be affected by the pollutants. People who come in direct contact with or ingest the contaminated groundwater or soil may suffer adverse health effects.

Cleanup Approach

This 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 1980, the EPA and the State installed a groundwater recovery and treatment system. In addition, approximately 5,000 containers containing 9,000 gallons of bulked liquids were removed from the waste pit and disposed of off site in a federally approved facility. About 3,500 tons of contaminated soil and 12 drums of PCB waste also were disposed of off site.



Entire Site: In 1985, the EPA selected a remedy to clean up the site that includes flushing the contaminated soil and groundwater underneath the site. The groundwater will be recovered using a well-point system and will be treated on site prior to being released into the soil. Following this process, extensive testing will be conducted to determine if covering the site is needed. Studies also will be conducted to measure the extent of PCB-contaminated soil and, if necessary, the soil will be cleaned. As part of this remedy, in 1989, Morton-Thiokol excavated PCB-contaminated soil from the pit and regraded the area. The company has conducted a field investigation for the technical design of the groundwater flushing system cleanup. Once the design of this remedy is completed, scheduled for late 1991, remaining cleanup activities will begin.

Site Facts: In 1988, the potentially responsible party, Morton-Thiokol, agreed to clean up the site under a Consent Decree.

Environmental Progress

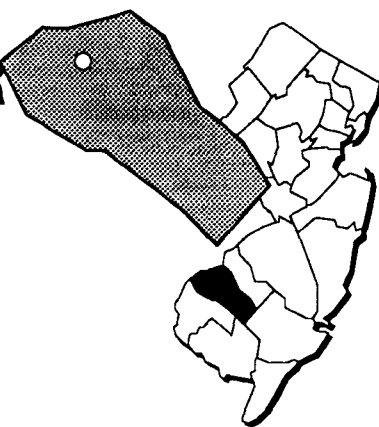


Removing the liquid and solid hazardous wastes and installing a groundwater treatment system have greatly reduced the potential for exposure to contaminants at the Goose Farm site while final cleanup activities are taking place.

HELEN KRAMER LANDFILL

NEW JERSEY

EPA ID# NJD980505366



EPA REGION 2
CONGRESSIONAL DIST. 02
Gloucester County
Mantua Township

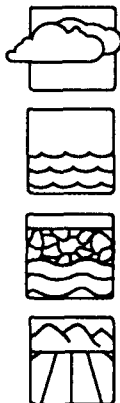
Site Description

The Helen Kramer Landfill site encompasses a 90-acre refuse area with three leachate collection ponds and an 11-acre stressed vegetation area. The landfill originally was operated as a sand and gravel pit. The site became a landfill between 1963 and 1965, when landfilling occurred simultaneously with sand excavation. Several types of wastes were deposited at the landfill, including municipal wastes, septage, industrial wastes, and hospital wastes. Industrial wastes included sludges, waste oils, solvents, chemical intermediates, pesticides, plastics, acids and bases, heavy metals, catalysts, and paints and pigments. The bulk of these wastes were disposed of directly into the landfill, not in containers. The State closed the landfill in 1981 because it exceeded capacity. An underground fire at the site in 1981 burned for about 2 months, emitting noxious fumes to surrounding areas. The aquifer underneath the site is contaminated with volatile organic compounds (VOCs) and heavy metals. Approximately 1,500 people live within a mile of the site; 10,000 people live within 3 miles. A farmhouse and several occupied trailers are located at or near the site boundary. Groundwater provides drinking water for the area; surface water is used for irrigation. Edwards Run, a tributary of Mantua Creek and the Delaware River, drains the site.

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

NPL LISTING HISTORY
Proposed Date: 07/01/82
Final Date: 09/01/83

Threats and Contaminants



Air sampling in 1983 revealed high levels of VOCs including vinyl chloride, benzene, and toluene. Sediments from on-site lagoons contain heavy metals such as arsenic and cadmium, as well as various VOCs. The aquifer beneath the site and leachate from the lagoons are contaminated with heavy metals such as arsenic, chromium, lead, and cadmium, as well as various VOCs. The soil and surface water at Edwards Run are contaminated with VOCs. Gases released from the landfill could reach Center City and pose a health threat to residents. Because nearby residents use public water supplies, the likelihood of exposure to groundwater contaminants is low. Pollution of surface water may pose a health threat to people using the stream for recreation or fishing.

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: In 1985, the EPA selected a remedy to clean up the site which includes: (1) constructing a trench to collect the leachate seeps from the landfill; (2) covering the landfill with a clay cap to prevent rain water from spreading the buried contaminants; (3) injecting special materials to form a slurry wall encompassing the landfill to prevent groundwater from moving into the contaminated area; (4) installing a gas collection and treatment system; (5) constructing a fence around the site; (6) draining, excavating, and filling the leachate ponds and lagoons; (7) controlling surface water movement on the site; (8) collecting and treating the groundwater and leachate from the trench; and (9) monitoring the site to ensure the cleanup measures are effective. Construction on the security fence has begun, and the site has been surveyed. Groundbreaking for the slurry wall is scheduled for the fall of 1991, as is the installation of the tanks at the treatment plant. The site cleanup is scheduled to be completed in 1993.

Site Facts: The State is pursuing the owner to properly close the landfill. The owner has filed for bankruptcy. The EPA is seeking other parties that may be responsible for site contamination.

Environmental Progress



After adding this site to the NPL, the EPA performed preliminary investigations and determined that there were no immediate threats to human health or the environment while ongoing cleanup activities are being completed at the Helen Kramer Landfill.

HERCULES, INC. (GIBBSTOWN PLANT)

NEW JERSEY

EPA ID# NJD002349058



EPA REGION 2
CONGRESSIONAL DIST. 01
Gloucester County
Gibbstown

Other Names:
Higgins Plant

Site Description

The 350-acre Hercules, Inc. (Gibbstown Plant) site operates as an organic hydroxide/peroxide manufacturing facility. An unlined solid waste disposal area used by Hercules from 1952 to 1974, and used by DuPont prior to 1952, is on the site. The companies disposed of solvents, acids, and waste oils in two unlined disposal pits. In 1980, the U.S. Geological Survey conducted tests of the aquifer underneath the site. The groundwater was found to be contaminated with volatile organic compounds (VOCs). Hercules is located in an undeveloped area on the banks of the Delaware River. Approximately 13,000 people live within a 3-mile radius of the site. Area residents are served by municipal water wells. Cronmell Creek runs through the site and discharges into the Delaware River.

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

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

Threats and Contaminants



In some areas of the site, groundwater was found to be contaminated with benzene and phenols. Lead also was detected in the groundwater. Soil was found to be contaminated with VOCs and heavy metals including lead. Area residents are supplied with water by municipal water wells that are not contaminated. However, if the contamination in the aquifer migrates, these wells may be threatened. People who come in direct contact with or accidentally ingest on-site hazardous wastes or contaminated soil may be at risk. If pollutants leach from the disposal area into the surrounding wetlands or Cronmell Creek, wildlife may be harmed.

Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on cleanup of the solid waste disposal area and cleanup of the process plant area.

Response Action Status



Solid Waste Disposal Area: Hercules, under State monitoring, is investigating the extent of contamination in the solid waste disposal area. Eight monitoring wells have been constructed in this area. Once the investigation is finished in 1992, measures to clean up the disposal area will be recommended.



Process Plant Area: Hercules, under State monitoring, is treating contaminated groundwater and is further investigating the contamination in and around the manufacturing plant area. Once the investigation is completed in 1993, measures will be recommended for cleanup of the manufacturing area.

Site Facts: An Administrative Order on Consent was issued by the State in 1986 to Hercules to take responsibility for investigating the nature and extent of site contamination and to evaluate cleanup alternatives for both areas.

Environmental Progress

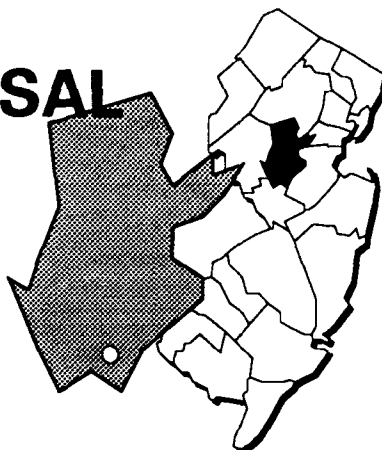


After adding this site to the NPL, the EPA performed preliminary investigations at the Hercules site and determined that no immediate actions were required while studies leading to the selection of final cleanup activities are taking place.

HIGGINS DISPOSAL

NEW JERSEY

EPA ID# NJD053102232



EPA REGION 2
CONGRESSIONAL DIST. 05

Somerset County
North of Kingston

Other Names:
Laurel Avenue

Site Description

The 38-acre Higgins Disposal site first was identified in 1981, when FMC Corporation reported to the EPA that it had deposited approximately 61,000 cubic feet of wastes containing heavy metals, organic solvents, and pesticides at the site in 1974. The owner had operated the unpermitted landfill and transfer station since 1952. In 1982, the State directed the owner to cease acceptance and disposal of solid waste and to remove the waste already at the facility. The hazardous waste area consists of a pond, waste piles, aboveground drums and tanks, a landfill, and, possibly, buried drums. The State discovered volatile organic compounds (VOCs) in groundwater and soil, as well as polychlorinated biphenyls (PCBs). Approximately 2,000 private wells within 3 miles of the site serve 8,000 people. Within a 3-mile radius are several farms producing fruits, vegetables, sod, and animal feed. These farms do not use groundwater for irrigation but use streams and ponds that are not considered to be threatened by contamination. A freshwater wetland is 300 feet away from the site. The lagoon on site discharges into Dirty Brook, a tributary of the Delaware/Raritan Canal, which is used for boating and fishing. The North Brunswick Township Water Department has a drinking water intake located on the canal 6 miles downstream from the site.

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

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 08/30/90

Threats and Contaminants



The groundwater, sediments, and soil are contaminated with various VOCs. Because the Delaware/Raritan Canal is used for recreation, people who have direct contact with or accidentally ingest the water may be at risk. In addition, fish from the canal may be harmful to human health if consumed. The soil on the site is permeable, which makes it easy for contaminants to migrate. Comingn direct contact with or accidentally ingesting the soil may pose a health hazard. The wetlands area is a habitat for nine endangered species. Should pollutants seep into the wetlands, wildlife may suffer adverse effects.

Cleanup Approach

This site is being addressed in two stages: an initial action and a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status



Initial Action: As a result of the detection of VOCs, wells that contain pollutants have been restricted for use. The homes within the well restriction area have been supplied with a system to filter out contaminants.



Entire Site: The EPA has conducted many preliminary investigations, which led to this site being placed on the NPL. The EPA will continue to study the extent of contamination at the site. Work plans for site studies are under review by the EPA. Field work is expected to begin in 1991. The results of these studies will be the basis for recommending measures to clean up the site, expected in 1993.

Environmental Progress

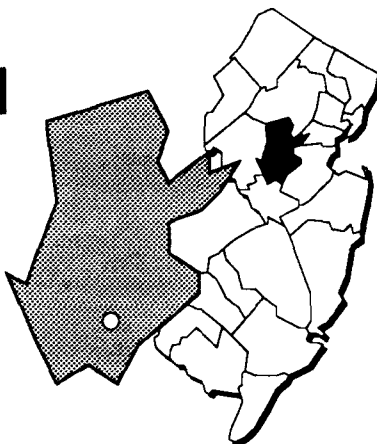


The restrictions on the use of contaminated wells and the installation of filtering systems have significantly reduced the threat of exposure to contaminants from the Higgins Disposal site while further investigations are taking place.

HIGGINS FARM

NEW JERSEY

EPA ID# NJD981490261



EPA REGION 2
CONGRESSIONAL DIST. 07

Somerset County
Franklin Township

Other Names:
Route 518

Site Description

The 74-acre Higgins Farm site consists of a drum burial dump, located in the northern part of the site, and a second area nearby suspected of being contaminated. The dump once contained 50 drums. The New Jersey Department of Environmental Protection (NJDEP) discovered the dump site in 1985 while conducting an investigation after the Franklin Township Health Department reported levels of chlorobenzene in a nearby private well. The NJDEP informed the farm's owner of State requirements relating to the excavation of buried drums, which then were removed in 1986. Before being halted by the NJDEP for conducting these activities without prior authorization, an estimated 10 drums were removed, crushed, and placed in a roll-off container. After proper authorization, the owner located approximately 50 drums by probing the ground with a backhoe. During excavation activities, drums were punctured and their contents spilled onto the ground. Fluids were pumped from a pit where contaminants were stored before being transferred into a holding tank. Visually contaminated soils were placed in roll-off containers, and approximately ten drums were overpacked. The NJDEP sampled ten residential wells in the vicinity of the site in 1986, three of which exhibited volatile organic compound (VOC) contamination. In addition, a subsequent investigation found soil in the area of the excavation pit to be contaminated with dioxins and pesticides. The nearest well is located 120 feet from the drum burial dump.

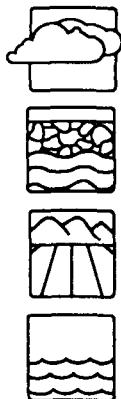
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/30/89

Threats and Contaminants



Indoor air located in the basement of a nearby residence is contaminated with VOCs including toluene and xylene. Groundwater in private wells also is contaminated with VOCs, while on-site soils are contaminated with pesticides and dioxins. The on-site surface water located in the pond is contaminated with creosotes. Possible health threats include being exposed to contaminants if coming into direct contact with site-related contaminants. Area residents could be exposed to contaminants that have accumulated in locally raised cattle. Residents, on-site workers, employees of the farm, hunters, and trespassers could come into direct contact with contaminated soils. Carter's Brook, lying 2,000 feet to the east of the site, occasionally is visited by children. Because this creek lies downslope of the site, it is possible that site-related contaminants could migrate into it. Local residents use the Millstone River and the Delaware and Raritan Canal, located 2 miles south of the site, for such recreational purposes as fishing, boating, and swimming.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the entire site and provision of an alternate water supply.

Response Action Status



Immediate Actions: The EPA authorized the delivery of bottled water to nearby residents in 1987. The NJDEP installed carbon filter units on the wells of the affected residents' homes in 1989. At that time, the EPA discontinued bottled water delivery. The NJDEP will maintain the carbon treatment units. The following actions were taken by the EPA in 1987 to stabilize the site and to control the release of hazardous substances into the environment: (1) a barn was constructed to house material that may be contaminated, including overpacked drums and roll-off containers; (2) the excavation pit was drained, lined, and backfilled; (3) the pumped liquids were treated and stored in a holding tank; and (4) the drum burial area was fenced to prevent access by unauthorized persons.



Entire Site: The EPA investigated site contamination and the most effective methods to clean up the entire site. Activities included: (1) conducting a survey to determine the rock formations that exist under the site and to locate any drums that may be buried on site; (2) conducting a soil gas survey to outline areas of potential contamination; (3) installing monitoring wells to collect samples for chemical analysis; and (4) installing soil borings, a technique to analyze soil contamination. The field work was completed in 1991. The EPA is evaluating the results of the investigation.



Alternate Water Supply: In 1990, the EPA selected a remedy to provide a safe drinking water supply. The remedy includes the design and construction of a water main extension distribution system and connection to the existing water supply system, operation and maintenance of existing carbon adsorption units, and continued sampling of wells. These activities are expected to begin shortly.

Site Facts: The EPA notified the potentially responsible parties of their liability for cleanup activities in 1988 and 1989 and offered them the opportunity to conduct or finance the investigation of site contamination. These parties refused to undertake the investigation.

Environmental Progress

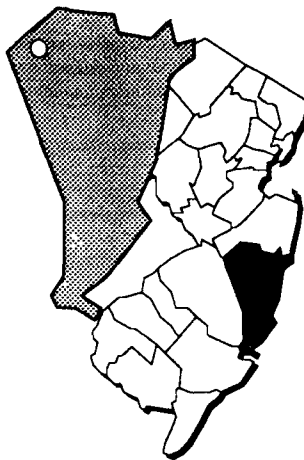


By providing a temporary water supply until a permanent alternative water source is connected to residences, the EPA and the State eliminated immediate threats from contaminated groundwater at the Higgins Farm site. Protective storage of hazardous materials and security fences will help prevent contact with contaminants. The EPA will continue to protect the safety of nearby residents while further investigations leading to the selection of final cleanup activities are being completed.

HOPKINS FARM

NEW JERSEY

EPA ID# NJD980532840



EPA REGION 2
CONGRESSIONAL DIST. 13
Ocean County
Plumsted Township

Other Names:
Thiokol Chemical Corporation

Site Description

The 57-acre Hopkins Farm site is one of seven similar hazardous waste sites located within a 20-square-mile area in Ocean and Monmouth counties. From 1962 to 1965, the Hopkins Farm site allegedly was used by Thiokol Chemical Company for the disposal of drummed and bulk wastes. Pesticides, volatile organic chemicals (VOCs), and heavy metals are among the contaminants found on site. The site is in a wooded area immediately north of an active farm. The site is not fenced or posted. The town nearest to the site is New Egypt, approximately 2 miles to the southwest. The Fort Dix Military Reservation is approximately 3 miles to the south. There are three houses within 1,000 feet of the site, and approximately 760 people live within a 1-mile radius.

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 underlying the area is contaminated with VOCs. The soil also is contaminated with VOCs and the heavy metal antimony. The contaminated groundwater and soil could adversely affect the health of individuals through direct contact or accidental ingestion; however, no contamination of drinking water wells has been detected.

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: Under EPA monitoring, the parties potentially responsible for the site contamination started an investigation to determine the nature and extent of the contamination at the site. The results of the investigation, scheduled to be completed in 1991, will help identify alternative technologies to address groundwater and soil contamination and any other contamination areas revealed during the study. Once the studies are completed, the EPA will select the final cleanup remedies and will initiate site cleanup activities.

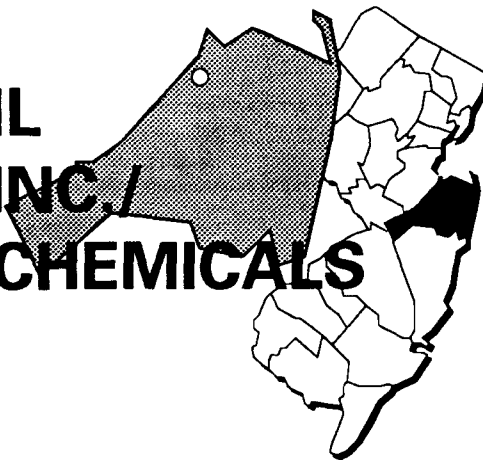
Environmental Progress



After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Hopkins Farm site while further studies leading to cleanup activities are taking place.

IMPERIAL OIL COMPANY, INC./ CHAMPION CHEMICALS NEW JERSEY

EPA ID# NJD980654099



EPA REGION 2
CONGRESSIONAL DIST. 04
Monmouth County
Morganville

Other Names:
Birch Swamp Brook Dumps #1 and #2

Site Description

The 5-acre Imperial Oil Co., Inc./Champion Chemicals site consists of seven production, storage, and maintenance buildings and 56 aboveground storage tanks. Imperial blends oil on the site, which is leased from Champion Chemicals. Several companies have operated at the site in the past. One, a reprocessor of waste oil, may have discharged wastes to a nearby stream. A waste pile on the premises is contaminated with polychlorinated biphenyls (PCBs). The process area is protected by a fence that completely encloses it, and a security guard is posted 24 hours a day at the front gate. Surrounding the site are many areas that could be critically affected by the contaminants in the soil and water. A fire pond, located in the northeastern corner of the property line, is contaminated. A small stream from the pond eventually flows into Lake Lefferts. Also located around the site are a wetland and wooded area. Approximately 25,000 people live within 3 miles of the site, and about 760 people are served by private wells drawing from contaminated groundwater.

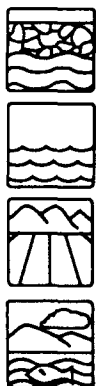
Site Responsibility: This site is being addressed through Federal and State actions.

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), PCBs, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, and phthalates, a plastics by-product. Off-site sediments contain heavy metals including arsenic and lead, phthalates, and PCBs. The surface soil is contaminated with heavy metals including chromium, lead, and arsenic, as well as PCBs. Surface water contains arsenic. Potential health threats include direct contact, accidental ingestion, or inhalation of airborne contaminated dust, groundwater, or soil. Using Lake Lefferts for recreation could lead to exposure to contaminants from the site, and fish there may be contaminated. Wetlands areas also may be threatened.

Cleanup Approach _____

This site is being addressed in two long-term remedial phases focusing on cleanup of off-site contamination and on-site contamination.

Response Action Status _____



Off-Site Contamination: In 1990, the EPA selected a remedy to clean up off-site contamination. The remedy calls for excavation and off-site disposal of contaminated soils from the wetlands, restoration of affected wetlands, and installation of a fence to control access to the contaminated soil areas. The design of the cleanup is scheduled to begin in 1991.



On-Site Contamination: The New Jersey Department of Environmental Protection (NJDEP) is investigating the site to determine the nature and extent of contamination and to identify alternatives for cleanup. The investigation is scheduled for completion in 1992.

Environmental Progress _____

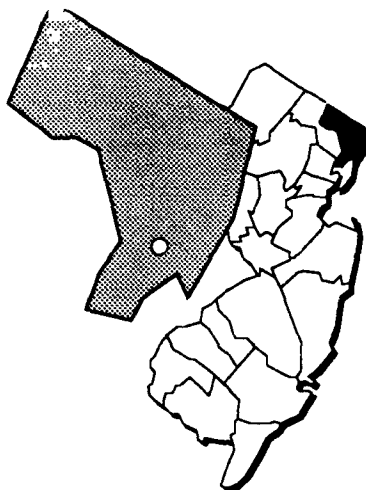


After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Imperial Oil Company/Champion Chemicals site while further studies are completed and cleanup activities are being planned.

INDUSTRIAL LATEX CORP.

NEW JERSEY

EPA ID# NJD981178411



EPA REGION 2
CONGRESSIONAL DIST. 08
Bergen County
Wallington

Site Description

The 9 1/2-acre Industrial Latex Corp. site houses an inactive facility that produced chemical adhesives and natural and synthetic rubber compounds. The company put wastes from its processes into drums and stored or buried them in unlined trenches. Raw materials used to make latex adhesives and other rubber compounds were stored in 22 underground tanks. The company also stored waste solvents in aboveground tanks before it flushed them into an on-site sanitary septic system. Various containers of explosives, flammables, and hazardous substances were stored in two buildings on the site. The facility was vandalized and sustained fire damage. The EPA conducted a site inspection in 1986 and found approximately 1,300 drums and pails, 200 buried drums, 2 aboveground storage tanks, 17 underground storage tanks, and 30 vats of solvents and flammable materials. Many of these containers were rusting, deteriorating, and leaking. Also, the EPA found numerous drums that contained very high concentrations of polychlorinated biphenyls (PCBs), many of which were leaking directly onto the ground. The site lies in a residential and commercial area; approximately 10,000 people live within 1/2 mile of the site.

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

NPL LISTING HISTORY Proposed Date: 06/24/88 Final Date: 03/30/89

Threats and Contaminants



Soil is contaminated with PCBs, toluene, xylene, ethyl benzene, and benzene. Possible health risks include direct contact with or accidental ingestion of the contaminated soil.

Cleanup Approach

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

Response Action Status



Initial Actions: Under State supervision, the current owner removed 400 drums from the site in 1986. Two 20-cubic-yard roll-offs were sampled and removed for disposal.

The EPA removed and treated about 100,000 gallons of contaminated liquids and removed 22 underground tanks. The tanks were decontaminated and dismantled for eventual disposal as scrap metal. The site was stabilized, which included conducting an inventory of materials on the site, removing shock-sensitive and highly flammable chemicals, and removing 37 truckloads of non-hazardous, combustible trash. Additionally, the EPA destroyed 1,525 shock-sensitive and flammable materials, recycled 2,940 gallons of flammable organic liquids, and treated 1,441 gallons of this material. They also treated 115,000 gallons of non-PCB liquid wastes, incinerated 4,200 gallons of PCB liquid wastes, incinerated 12,048 gallons of flammable PCB solids, and sent 113,050 gallons of non-flammable PCB solids to an off-site landfill. In 1989, the EPA repaired the fence around the eastern part of the site. Areas of the fence also were repaired in 1990 and 1991.



Entire Site: The EPA is conducting a thorough investigation of the site to determine the type, source, and extent of contamination. Field work underway includes sampling and treatability studies to determine the most appropriate methods to clean up the site. This study is scheduled to be completed in 1992.

Site Facts: The current owner of the property removed 400 drums from the site in response to an Administrative Order from the New Jersey Department of Environmental Protection (NJDEP). The EPA notified four previous owners of the property and a potential generator of hazardous substances. To date, none of the potentially responsible parties have cooperated in helping the EPA to secure the site and carry out studies to determine the nature and extent of contamination on the site.

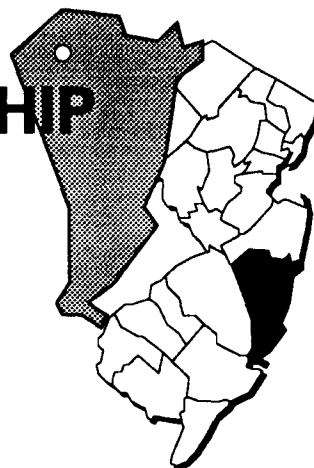
Environmental Progress



The removal of drums, tanks, and liquids have greatly reduced the potential for exposure to contaminants around the Industrial Latex site while further investigations are being conducted.

JACKSON TOWNSHIP LANDFILL NEW JERSEY

EPA ID# NJD980505283



EPA REGION 2
CONGRESSIONAL DIST. 04
Ocean County
Jackson Township

Site Description

The Jackson Township Landfill operated from 1972 until its closure in 1980. Twenty acres of this 135-acre site were used for dumping millions of gallons of liquid sewage and septage wastes. The site, originally a titanium ore mining pit, was turned over to the Township by a local mining company in the early 1970s. The site contains mine tailings on the surface. The landfill originally was located in a relatively undeveloped area, but homes were built, and shallow wells were constructed close to the landfill. In 1977, residents complained of poor water quality. Tests showed that the Cohansey Aquifer, a shallow aquifer, was contaminated with a variety of volatile organic chemicals (VOCs). In 1978, Jackson Township advised residents to stop drinking water from shallow wells. In 1980, a public water supply from a deep water well located 1/2 mile southeast from the site was extended to residents near the site. There are approximately 3,200 people living within 3 miles of the site. All of the 165 homes in the area have been connected to the public water supply system, but contamination of more distant residences on private water wells is possible.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



On-site monitoring wells and nearby residential wells were sampled periodically in the 1980s and did not confirm the widespread contamination found in 1978. A few sampling points on site have shown elevated levels of one or more VOCs and heavy metals. All the nearby residences rely on a municipal water well. However, residential wells farther away from the site may be threatened in the future by the migration of contaminants leaching from the landfill. Though the landfill is largely secured, people may come into direct contact with or ingest contaminated dust or soil at or near the landfill, which may pose a health threat.

Cleanup Approach

This site is being addressed in two stages: an initial action and a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status



Initial Action: In 1980, the State provided an alternate water supply for 130 wells that were contaminated as a result of groundwater contamination at the landfill.



Entire Site: Jackson Township, under State monitoring, is investigating the nature and extent of groundwater and soil contamination at the site and is evaluating cleanup alternatives. The study is scheduled for completion in 1992, at which time cleanup remedies will be selected for the site.

Site Facts: In 1988, the State and Jackson Township entered into a Consent Order that requires the Township to conduct a long-term study of the site.

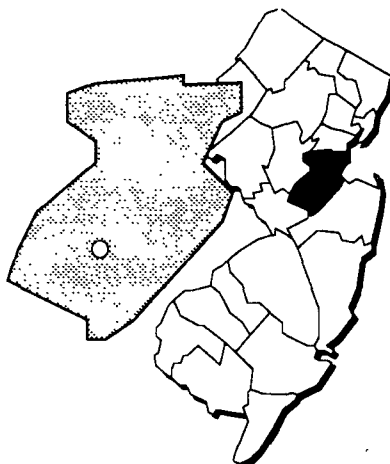
Environmental Progress



By providing an alternate water supply, the potential for exposure to contaminated groundwater at the Jackson Township Landfill has been eliminated. The EPA and the State will continue to ensure the safety of nearby residents while Jackson Township continues with studies and cleanup activities.

JIS LANDFILL NEW JERSEY

EPA ID# NJD097400998



EPA REGION 2
CONGRESSIONAL DIST. 12

Middlesex County
South Brunswick

Other Names:
Jones Industrial Services, Inc.
Jones Industrial Services Landfill

Site Description

The 11-acre Jones Industrial Services (JIS) Landfill site began as a 33-acre pit that was excavated to provide soil needed during the construction of the New Jersey Turnpike. Landfill operations apparently began in 1962. In 1976, JIS reported that 71,000 gallons of oil, 71 tons of non-ferrous metals, 129,000 gallons of liquid waste, and 171,000 tons of industrial solids were emptied into the pit in 1975. Approximately 50,000 cubic yards of waste were disposed of annually until the operation was closed in 1980 by the New Jersey Department of Environmental Protection (NJDEP). Bulk liquid chemicals, including industrial solvents and pesticides, are buried at the site. JIS placed a protective cover over the top of the landfill in 1983. In 1984, JIS was ordered to implement groundwater cleanup. The EPA is providing bottled water to the residents of affected homes in the area. Approximately 32,000 people are located within 3 miles of the site and depend on groundwater for domestic uses. The surface water near the site also is used for boating, fishing, and other recreational activities.

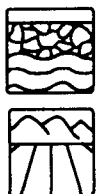
Site Responsibility: This site is being addressed through Federal and State actions.

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). The soil is contaminated with methylene chloride and polychlorinated biphenyls (PCBs). The JIS site is in an agricultural area overlying two interconnected aquifers, the Pennsauken and the Old Bridge Aquifers. VOCs have contaminated Old Bridge Aquifer, and the contaminated groundwater plume has migrated off site. One residential well has been closed, and others are threatened due to contamination. Use of contaminated groundwater for drinking, bathing, cleaning, or agriculture could pose a health threat.

Cleanup Approach

This 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: The State requested that the EPA conduct an assessment of the site. Private water supplies were sampled and found to be contaminated with VOCs at 10 residences. The EPA is providing bottled water to the residents of the affected homes. The Monroe Utilities Authority installed water mains to supply potable water, and the EPA provided hookups at five locations having contaminated wells.



Entire Site: The State began an investigation of the site to determine the nature and extent of contamination and to identify alternatives for cleanup. Activities include sampling of the air, soil, and groundwater. The investigation is scheduled to be completed in 1992, and a decision on selected cleanup methods will follow.

Site Facts: Eight potentially responsible parties signed Administrative Orders agreeing to pay for the full cost of the State's investigation. Ten additional potentially responsible parties recently have been identified and have agreed to contribute to the cost of the site studies.

Environmental Progress

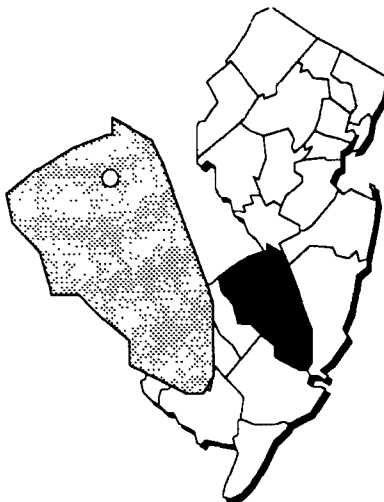


The provision of bottled water to affected residents and the installation of water mains to supply potable water has eliminated the possible threat of drinking contaminated groundwater at the JIS Landfill site. The EPA and the State will continue to ensure the safety of nearby residents and the environment while further studies and cleanup activities are taking place.

KAUFFMAN & MINTER, INC.

NEW JERSEY

EPA ID# NJD002493054



EPA REGION 2
CONGRESSIONAL DIST. 04
Burlington County
Jobstown

Site Description

Company-owned tanker trucks transport bulk liquids including synthetic organics, plastics, resins, vegetable oils, petroleum oils, and alcohols from the 5-acre Kauffman & Minter, Inc. site. From 1960 to 1980, the company discharged wastewater used to clean the inside of its trucks into an unlined lagoon on site. The plant operators did not attach a retention pond to the lagoon to handle the overflow of wastewater during heavy rains. In 1984, a dike that surrounded the lagoon broke, allowing wastewater to migrate off site. The main impact of this site may be on how the community uses the groundwater resource in the area. Contaminants at the site do not yet threaten the community's groundwater resource, but could impact it in the future. Private wells within 3 miles of the site provide drinking water to approximately 2,600 people and irrigate 4,000 acres of farmland. The closest home is 500 feet from the lagoon.

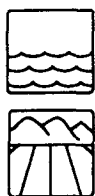
Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/30/89

Threats and Contaminants



Chemicals that were detected in the lagoon and on-site soil include various pesticides and volatile organic compounds (VOCs). The pit area is contaminated with VOCs. The site does not appear to have contaminated the groundwater that residents use for drinking, washing, and irrigating crops. Direct contact with the lagoon material and contaminated soil is a major public health concern and must be avoided.

Cleanup Approach

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

Response Action Status _____



Initial Actions: Kauffman & Minter fenced the site and constructed a berm around the lagoon to prevent the migration of wastewater off site.



Entire Site: The EPA is conducting a study into the nature and extent of contamination at the site. The study is scheduled to be completed in late 1992, at which time a cleanup remedy will be selected.

Site Facts: In 1983, the New Jersey Department of Environmental Protection cited the company for operating the lagoon without the proper permits. The EPA issued a Consent Order to fence the site, maintain adequate freeboard in the lagoon, install a berm around the lagoon, and conduct sampling activities. The company has been delinquent in performing these activities. The EPA is taking action to perform these activities, beginning in mid-1991.

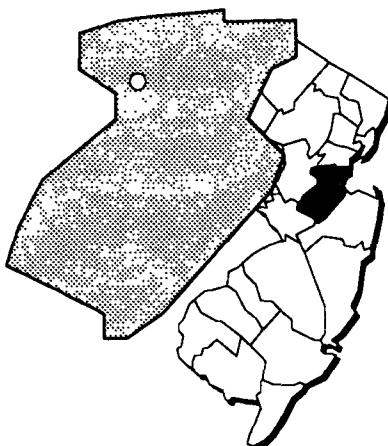
Environmental Progress _____



The potentially responsible party fenced the site and constructed a berm around the lagoon. These actions will reduce threats to the public health and the environment while further studies are completed and cleanup activities are being planned at the Kauffman & Minter site.

KIN-BUC LANDFILL NEW JERSEY

EPA ID# NJD049860836



EPA REGION 2
CONGRESSIONAL DIST. 06
Middlesex County
Edison Township

Site Description

The 220-acre Kin-Buc Landfill site is an inactive landfill that operated from 1968 to 1976. From 1971 to 1976, the site was a State-approved landfill for industrial and municipal wastes, both solid and liquid. The site accepted hazardous waste beginning in 1971, until the State revoked its permit in 1976. An estimated 70 million gallons of liquid wastes, including 3 million gallons of oily waste, and over 1 million tons of solid waste, were disposed of between 1973 and 1976. The Kin-Buc site includes two major mounds (Kin-Buc I and Kin-Buc II) and one minor mound (Mound B). Site activities included burying and compacting contained wastes in Kin-Buc II and discharging hazardous liquid wastes into bulldozed pits at the top of Kin-Buc I. Three pits of black, oily leachate, designated Pits A, B, and C are located at an edge of Kin-Buc I. Adjacent to the pits is an impoundment referred to as Pool C. Oil, heavily laden with polychlorinated biphenyls (PCBs), accumulates in Pool C and then discharges into Edmonds Creek, a tributary of the Raritan River. The pond also holds leachate that contains chlorinated volatile organic compounds (VOCs) which are believed to be coming from the landfill. The Edison Township Municipal Landfill lies 600 feet to the south of the site. There is a refuse-filled low-lying area between Kin-Buc I and the Edison Landfill. There are 3,000 people living within 3 miles of the site. The site is located in a wetlands area adjacent to the Raritan River.

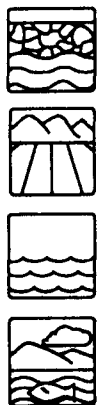
Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 10/01/81

Final Date: 09/01/83

Threats and Contaminants



Although the data is not yet complete, elevated levels of PCBs in edible fish and shellfish are likely. The food chain may be contaminated with PCBs, cadmium, and other heavy metals. Concentrations of PCBs were found in shallow wells in the refuse layer of the site. This shallow water may drain into creeks or rivers. The sand and gravel aquifer beneath the site is contaminated with leachate from VOCs and heavy metals. Aqueous and PCB-contaminated leachate from the landfill has been seeping into an area known as Pool C. Elevated levels of PCBs were found in sediment samples in Edmonds Creek, Rum Creek, and the Raritan River. PCBs and a large number of other pollutants were detected in surface water. The bedrock aquifer may be contaminated. Consumption of PCB-contaminated food may cause a wide range of ill effects in people. While in operation, frequent major fires and a number of serious occupational injuries have occurred at the landfill. Contaminants seeping into the wetlands may harm wildlife.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the two major mounds and Pool C, and cleanup of Mound B and the adjacent waterways, wetlands, and groundwater.

Response Action Status



Immediate Actions: In 1980, the EPA began cleanup activities consisting of collection, treatment, and disposal of oily and aqueous phase leachate from Pool C. In 1982, as part of the settlement negotiations, the owners assumed responsibility for cleanup activities. In 1984, 4,000 drums containing oily and aqueous phases of leachate and contaminated solids were shipped off site for incineration. From 1984 to 1987, 1,400,000 gallons of aqueous phase leachate were shipped off site for treatment and disposal. As of 1987, 26,000 gallons of oily phase leachate had been shipped off site for incineration. This activity continues and is scheduled to be completed in 1994.



Two Major Mounds and Pool C: The cleanup technologies selected to address these areas include: (1) installation of a slurry wall on all sides of the site; (2) collection and off-site incineration of oily phase leachate; (3) collection and on-site treatment of aqueous phase leachate and contaminated groundwater with direct surface water discharge; (4) maintenance and upgrading, if necessary, of the existing cap on Kin-Buc I; (5) installation of a cap on Kin-Buc II and on portions of the low-lying area between Kin-Buc I and the Edison Landfill, as well as Pool C; (6) long-term periodic monitoring; and (7) operation and maintenance. The parties potentially responsible for site contamination, under EPA monitoring, are preparing the technical specifications and design for the selected cleanup technologies. Cleanup activities for this phase will begin once the design phase is completed in 1992.



Mound B and Adjacent Waterways, Wetlands, and Groundwater: The potentially responsible parties, under EPA monitoring, currently are conducting an investigation into the nature and extent of contamination at the site. The investigation also will characterize the impacts that off-site contaminant migration may have on the surrounding areas and will evaluate alternatives to address the contamination. The investigation is scheduled to be completed in 1992.

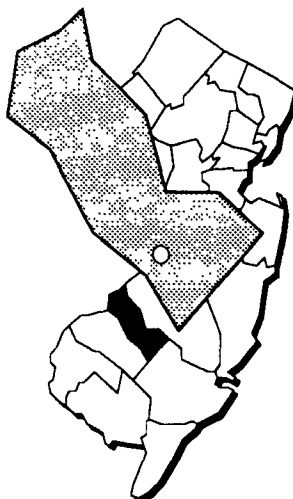
Environmental Progress



The numerous immediate cleanup actions to remove leachate and contaminated solids have greatly reduced the potential for exposure to hazardous substances at the Kin-Buc Landfill site while further studies are being conducted and cleanup activities are being planned.

KING OF PRUSSIA NEW JERSEY

EPA ID# NJD980505341



EPA REGION 2
CONGRESSIONAL DIST. 01
Camden County
New Jersey Pine Barrens

Other Names:
King of Prussia Technical
Corporation Disposal

Site Description

The 40-acre King of Prussia (KOP) site was purchased by the Township of King of Prussia from Winslow Township in 1970. KOP treated industrial waste and disposed of hazardous liquids on the site and stopped its operations in 1973. From 1973 to 1975, Evor Phillips, Inc. owned the site and continued operations during part of this period. In 1975, the site was abandoned. The Township regained ownership of the property in 1976, when it foreclosed because of unpaid property taxes. Illegal dumping of waste is suspected while the Township owned the site, because it was unfenced and near the road. The site had six lagoons, an undetermined number of buried drums, plastic containers, and two rusting and torn tankers. Records of the site show that approximately 15 million gallons of wastewater containing toxic chemicals were delivered to the site. Of the six lagoons, the EPA confirmed the visible remains of four, but the other two lagoons no longer were evident. The site was fenced in 1988 to protect public health and to prevent further illegal dumping of waste on the site. The site is in a rural area within the Pinelands National Reserve and is adjacent to the Winslow Wildlife Management Area. The Great Egg Harbor River borders the property. Approximately 10,000 people live within 3 miles of the site, and 3,000 people depend on groundwater for drinking water supplies.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater is contaminated with heavy metals including beryllium, chromium, copper, and nickel. Groundwater also contains phthalates and various volatile organic compounds (VOCs). Lagoon sludge contains lindane. The soil is contaminated with various heavy metals and VOCs. Surface water is contaminated with heavy metals including chromium and copper. People can become exposed to hazardous and toxic chemicals through accidental ingestion or direct contact with groundwater, sludge, soil, and surface water. The site is within the 6,000-acre Winslow Wildlife Management Area, which is used for recreation. City drinking water is not available in this area; therefore, residents must use private wells for their water needs.

Cleanup Approach

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

Response Action Status



Initial Actions: The EPA fenced the site in 1988, and in 1989, removed and disposed of 120 buried plastic containers and the associated contaminated liquids and soils. In 1990, the EPA removed 200 drums and 235 additional plastic containers. The EPA initiated the removal of two tankers and their contents in early 1991. Disposal of the contents of the drums and tankers is scheduled to be completed in mid-1991.



Entire Site: The parties potentially responsible for site contamination completed a study to determine the nature and extent of contamination at the site in 1990. The EPA and the New Jersey Department of Environmental Protection have reviewed the study and selected a remedy which includes: excavation and cleanup of contaminated soils, sediments, and sludges; drum removal and off-site disposal; tanker removal and off-site disposal; installation of a pump and treat system for contaminated groundwater; and additional monitoring of the Great Egg Harbor River. Design of the selected remedy is expected to begin in mid-1991.

Site Facts: From 1981 to 1989, the EPA sent out 55 Request for Information letters to gain information about possible potentially responsible parties. Five waste generators signed an Administrative Order on Consent in 1985 to conduct a site investigation. The EPA has identified nine additional parties who are considered responsible for contaminating the site. The EPA issued an order to five potentially responsible parties to design and conduct cleanup activities at the site.

Environmental Progress

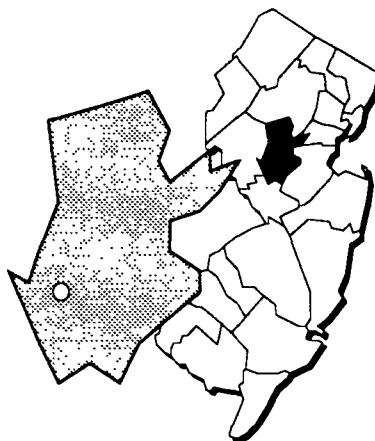


The removal of the drums and contaminated materials and the fencing of the site have greatly reduced the potential for exposure to hazardous materials at the King of Prussia site while final cleanup activities are being planned.

KRYSOWATY FARM

NEW JERSEY

EPA ID# NJD980529838



EPA REGION 2 CONGRESSIONAL DIST. 12

Somerset County
Hillsborough Township

Other Names:
Three Bridges Drum Dump

Site Description

The 1-acre Kryswaty Farm site was a waste disposal area where approximately 500 drums of paint and dye wastes were allegedly dumped, crushed, and buried from 1965 to 1970. In addition to drums, other wastes including demolition debris, tires, automobiles, bulk wastes, solvents, and waste sludge were disposed of at the farm. Local residents became concerned when they smelled odors in their well water. The New Jersey Department of Environmental Protection (NJDEP) investigated the site in 1979 and found volatile organic compounds (VOCs) in the groundwater. The Township provided bottled water to nearby residents in 1982. Approximately 1,200 people live within a mile of the site. The closest residences are 900 feet from the farm.

Site Responsibility: This site was addressed through Federal, State, and municipal actions.

NPL LISTING HISTORY

Proposed Date: 07/23/82

Final Date: 12/30/82

Deleted Date: 02/22/89

Threats and Contaminants



Groundwater, soil, and site debris were contaminated with VOCs, pesticides, base and neutral compounds, and traces of polychlorinated biphenyls (PCBs). The State and the EPA have determined that, as a result of cleanup actions taken at Kryswaty Farm, the site does not pose threats to the public health or the environment. The site has been deleted from the National Priorities List.

Cleanup Approach

This site was addressed in two stages: an immediate action and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status _____



Immediate Action: In 1982, the Township began to provide bottled water to nearby residents affected by contaminated well water.



Entire Site: In 1984, the EPA selected a remedy to clean up the site which included: (1) excavating soil and wastes and disposing of them in an approved facility; (2) providing a permanent alternate water supply to the residents affected by contaminated well water; and (3) monitoring the site for five years to ensure the actions taken have been effective. The EPA extended the Elizabethtown Water Company water main to the affected residences. Approximately 13,700 cubic yards of contaminated soil were removed and disposed of an approved hazardous waste disposal facility. The site was backfilled, covered with clean soil, and seeded in 1986. Additionally, future development of the site area and installation of private wells have been prohibited to ensure that residents are protected from any residual contamination. The State of New Jersey will monitor the groundwater for five years to ensure the cleanup activities have been effective. This program commenced in 1987.

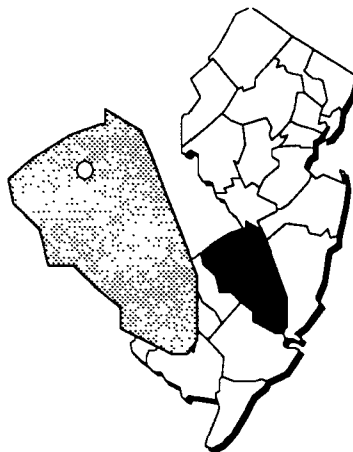
Environmental Progress _____



All cleanup activities have been completed at the Krysovaty Farm site. The EPA has determined that all groundwater and surface contamination has been cleaned to safety standards and that no further cleanup actions are required at the site. The site is now safe for nearby residents and the environment, and it has been deleted from the NPL.

LANDFILL AND DEVELOPMENT COMPANY NEW JERSEY

EPA ID# NJD048044325



EPA REGION 2 CONGRESSIONAL DIST. 13

Burlington County
Mt. Holly, Easthampton, and
Lumberton Townships

Other Names:
SCA Services
Mt. Holly Landfill

Site Description

The 200-acre Landfill and Development Company site consists of two sections: the Easthampton/Lumberton section and the Mt. Holly section. The site, originally a sand and gravel pit, accepted municipal refuse, industrial and commercial solid waste, and treated sewage sludge. In 1973, the State directed the landfill to conduct groundwater tests. The results indicated contamination by volatile organic compounds (VOCs). In 1977, the State ordered the company to correct the groundwater contamination by replacing private wells, installing a liner at the landfill, and pumping and treating the contaminated groundwater. The Easthampton/Lumberton section of the landfill was closed in 1981 when it reached its capacity. The State closed the Mt. Holly section in 1986. Approximately 20,000 people live within 2 miles of the site. Fifty homes are located 500 feet away. Ten of these houses use private water wells for drinking water; the rest use municipal wells. The landfill lies within the drainage basin of Rancocas Creek. The Smithville Canal is within the flood plain of the creek and discharges into it. Smithville Lake is located 1,600 feet away from the site. All these bodies of water are used for recreational activities.

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

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



The aquifers are contaminated with various VOCs and heavy metals including arsenic, cadmium, mercury, nickel, and silver. Sediments from Rancocas Creek and Smithville Canal contain heavy metals including cadmium, nickel, selenium, and zinc. Rancocas Creek is contaminated with cadmium and silver. The Smithville Canal contains silver. Although the majority of the residents are supplied by municipal water wells, some residences still use private wells. These wells are not contaminated; however, there is a potential for pollutants to migrate to them. Rancocas Creek and Smithville Canal are used for recreational activities. Seeps from the landfill have polluted these waters. People who come in direct contact with or accidentally ingest the water or sediments may be harmed.

Cleanup Approach

This site is being addressed in two stages: an initial action and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status



Initial Action: The Landfill and Development Company, under State oversight, placed residences on public water supplies and installed a liner at the landfill to prevent further migration of contaminants.



Entire Site: The State is conducting an investigation to determine the extent of groundwater, soil, and surface water contamination at the landfill. Once the investigation is completed in 1992, various cleanup measures will be recommended for the site.

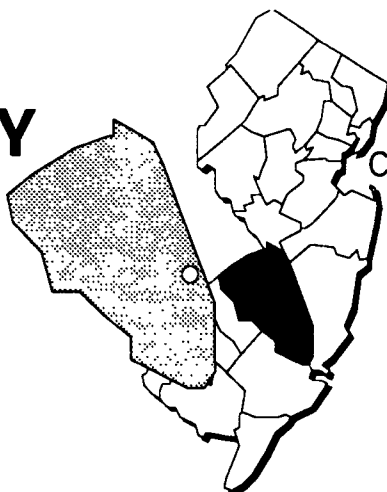
Environmental Progress



The connection of area homes to the public water supplies has greatly reduced potential health threats at the Landfill and Development Company site while studies are being completed.

LANG PROPERTY NEW JERSEY

EPA ID# NJD980505382



EPA REGION 2
CONGRESSIONAL DIST. 13
Burlington County
Pemberton Township

Site Description

The 2-acre Lang Property site is located on a 40-acre parcel of land and was used as an illegal dumping ground for abandoned vehicles, tires, and other debris. In 1975, between 1,200 and 1,500 drums of unidentified chemical waste were discovered on the property. The owners removed the drums in 1976. Before their removal, the drums were emptied into unlined pits or the contents were spilled on the ground. Tests conducted by the County and State confirmed groundwater and surface water contamination. The aquifer beneath the site supplies drinking water to 13,000 residents. As many as 20 private wells are located within 1 mile of the site. The site is drained by several man-made ditches that flow through wetlands before entering Rancocas Creek. The property is situated within New Jersey's Pineland National Reserve, a forest nationally recognized as a valuable environmental resource.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



The groundwater, soil, surface water, and sediments are contaminated with various volatile organic compounds (VOCs). Soil also is contaminated with pesticides. People who come in direct contact with or drink contaminated groundwater from wells may be at risk. People who enter the site and come in direct contact with or accidentally ingest the soil or sediments may be harmed. Surface water is used to flood the cranberry bogs in the area. Although cranberries and blueberries are not contaminated, they may become so if surface water contamination increases and migrates to cultivated areas. The site is in the Pinelands National Reserve, and the levels of contaminants detected may pose a hazard to wildlife inhabiting the forest.

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: In 1986, the EPA selected a remedy to clean up the site which included: (1) excavating contaminated soil and material and disposing of it in a federally approved facility; (2) extracting and treating the contaminated groundwater and then reinjecting the treated water into the aquifer; (3) filling and grading the excavated area; (4) installing a security fence; and (5) monitoring the site to ensure the cleanup actions have been effective. In 1988, the EPA excavated 13,200 tons of contaminated soil and transported it to a federally approved facility. The excavated area was backfilled and graded with clean soil. Contaminated site water also was treated. Storage drums were crushed and disposed of at an approved facility. The EPA is developing the engineering design for the groundwater treatment system. Once these technical specifications are completed in 1991, the system will be constructed and implemented.

Environmental Progress

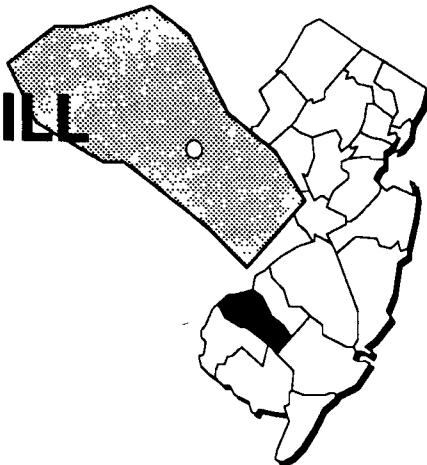


The removal of contaminated soil and drums, treatment of contaminated groundwater, and securing of the Lang Property site greatly reduced the potential health risks while the engineering design for the groundwater treatment system is being completed.

LIPARI LANDFILL

NEW JERSEY

EPA ID# NJD980505416



EPA REGION 2
CONGRESSIONAL DIST. 02

Gloucester County
Mantua Township

Other Names:
Lipari Landfill Nick

Site Description

The 15-acre Lipari Landfill is an inactive landfill that, between 1958 and 1971, accepted household waste, liquid and semi-solid chemical wastes, and other industrial materials. These wastes were disposed of in trenches originally excavated for sand and gravel. Approximately 3,000,000 gallons of liquid wastes and about 12,000 cubic yards of solid wastes were disposed of at the site. Some of the wastes included solvents, paints and thinners, formaldehyde, dust collector residues, resins, and solid press cakes from the industrial production of paints and solvents. Prior to the closing of the landfill in 1971 by the New Jersey Department of Environmental Protection, at least one explosion and two fires were reported at the site. Contaminants have seeped into the aquifers underneath the site and have leached into nearby marshlands, Chestnut Branch Stream, Rabbit Run Stream, and Alcyon Lake. The lake has been closed to recreational use. Approximately 11,000 people depend on groundwater for drinking water supplies within 3 miles of the site. Fruit orchards are adjacent to the site. Chestnut Branch is a tributary to the Delaware River.

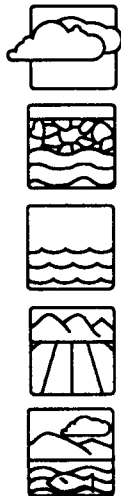
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 10/01/81

Final Date: 09/01/83

Threats and Contaminants



Air is contaminated with various volatile organic compounds (VOCs). Groundwater, surface water, and sediments are contaminated with VOCs and heavy metals including arsenic, chromium, and lead. Soil is contaminated with VOCs, heavy metals, and phthalates. Leachate contains VOCs; heavy metals including arsenic, beryllium, chromium, lead, zinc, and nickel; and phenols. People who come in direct contact with or drink the contaminated groundwater may suffer adverse health effects. Although Alcyon Lake has been closed because of contamination, people who trespass and swim in it or accidentally ingest the water may be at risk. Pollutants seeping into the marshlands and streams may harm the wildlife inhabiting the area.

Cleanup Approach

This site is being addressed in four stages: initial actions and three long-term remedial phases focusing on source control, cleanup of groundwater and leachate, and off-site cleanup activities.

Response Action Status



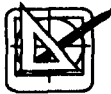
Initial Actions: The EPA drilled and sampled 16 monitoring wells to determine the groundwater flow and the extent of contamination. A security fence was installed by the EPA to restrict access to the landfill in 1982, and additional fencing was installed by the EPA between 1983 and 1985 to restrict access to neighboring wetlands areas.



Source Control: In 1982, the EPA selected a remedy to stop the pollutants from migrating from the landfill by constructing a landfill containment system made up of a cut-off wall around the area to divert surface water runoff and covering the landfill with a synthetic membrane landfill cover. The EPA completed the wall and covered the landfill in 1984.



Groundwater and Leachate: In 1985, the EPA selected a remedy to clean up the groundwater and leachate from the landfill including: (1) installing extraction and injection wells in the landfill containment system to flush the system and pump the contaminated groundwater and leachate; (2) treating the pumped water on site and then discharging it to a trunkline; (3) installing monitoring wells downhill from the site; and (4) continuing groundwater treatment to meet applicable standards. The EPA is installing the landfill injection and extraction wells. Construction of the treatment plant is scheduled to be completed in 1991. After the construction is completed, the groundwater will be flushed to remove contaminants for a period of approximately five to seven years.



Off-Site Contamination: In 1988, the EPA selected a remedy to clean up the off-site contamination including: (1) collecting the groundwater and leachate in the aquifers outside the containment system, treating it, and discharging the treated water into the county sewer lines; (2) excavating and dewatering the contaminated soils in Chestnut Branch Marsh and dredging and dewatering the contaminated sediments in Alcyon Lake, Chestnut Branch, and Rabbit Run and removing the pollutants by heating the soil and sediment; (3) instituting temporary measures, if necessary, to reduce vapors from the leachate seepage areas in Chestnut Branch Marsh; and (4) monitoring the off-site areas to ensure that the on-site cleanup is effective. The EPA is designing the technical specifications to clean up the marsh, aquifers, streams, and lake. Once the design phase is completed in 1991, the cleanup activities will begin.

Site Facts: In 1982, the EPA and Nicholas Lipari entered into a Consent Decree.

Environmental Progress

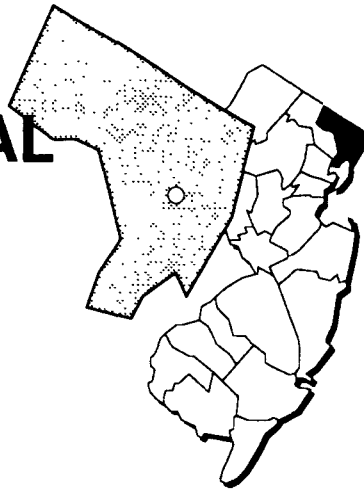


Securing of the site and construction of the landfill containment system have greatly reduced the potential for exposure to hazardous materials at the Lipari Landfill site while further cleanup activities are taking place.

LODI MUNICIPAL WELL

NEW JERSEY

EPA ID# NJD980769301



EPA REGION 2
CONGRESSIONAL DIST. 09
Bergen County
Borough of Lodi

Site Description

The Lodi Municipal Well site consists of 11 municipal wells that previously were used to provide drinking water to the Borough. One well, Garfield Avenue, was closed in 1981 due to volatile organic compound (VOC) contamination. In 1983, the Home Place Well was found to have elevated levels of radioactivity and was closed by the Borough, based on the recommendation of the New Jersey Department of Environmental Protection (NJDEP). Testing by the State in 1985 revealed tap water to be contaminated with VOCs. The remaining wells were tested and found to be contaminated; all the wells were closed by 1987. Approximately 95% of Lodi's drinking water now is supplied by the Passaic Valley Water Commission, and the remainder is purchased from the Hackensack Water Company. Approximately 24,000 people live in Lodi and depended on these wells for their drinking water. The Saddle River flows through the Borough, but it is not used for recreation or fishing. Lodi also is situated between the Hackensack and Passaic Rivers.

Site Responsibility: This site is being addressed through Federal, State, and municipal actions.

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 08/30/90

Threats and Contaminants



The wells contain various VOCs as well as uranium and radium-226. However, the Borough of Lodi has closed the wells that tap into the contaminated aquifer.

Cleanup Approach

This site is being addressed in two phases: an initial action and a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status _____



Initial Action: During the 1980s, the Borough of Lodi closed 11 wells, based on sampling data from the NJDEP and the Lodi Water Department. Additionally, alternate water supplies were put in place.



Entire Site: The EPA is conducting a study to determine the type, extent, and source of the groundwater contamination. At the request of the State, with EPA concurrence, secondary bedrock and groundwater sampling will be done to determine if radionuclide contamination is the result of natural or man-made sources. The sampling is expected to begin in mid-1991. The investigation is scheduled for completion in 1992. After review, various alternatives will be evaluated for site cleanup.

Environmental Progress _____

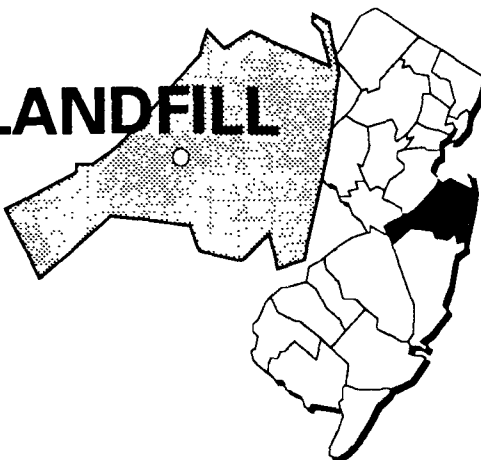


Closing contaminated wells and providing an alternate water supply have greatly reduced the potential for exposure to contaminants from the Lodi Municipal Well site while studies are being completed and cleanup activities are being planned.

LONE PINE LANDFILL

NEW JERSEY

EPA ID# NJD980505424



EPA REGION 2
CONGRESSIONAL DIST. 04
Monmouth County
Freehold

Site Description

The Lone Pine Landfill site is a former municipal landfill covering 63 acres in Freehold Township. The facility operated from 1959 until 1979, when it was closed by the New Jersey Department of Environmental Protection. The landfill accepted over 17,000 drums containing chemical wastes, along with municipal refuse, large volumes of septage, and millions of gallons of bulk liquid chemical wastes. Leachate contaminated with volatile organic compounds (VOCs) enters the groundwater and flows from the site to the Manasquan River; the headwaters of the Manasquan River are about 500 feet away. The heavily wooded area surrounding the site is sparsely populated, with the nearest residences approximately 1/4 to 1/2 mile away. The Turkey Swamp Fish and Wildlife Management Area and a local sportsman club are about 1,000 feet from the site. Drinking water in the area is obtained from groundwater resources. A 700-acre municipal water-supply reservoir, which will draw water from the river, is to be constructed about 16 miles downriver from the property. The two aquifers underneath the site are contaminated.

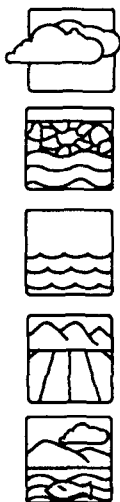
Site Responsibility: This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 10/01/81

Final Date: 09/01/83

Threats and Contaminants



Air may be contaminated with VOCs such as benzene and toluene, depending on weather conditions and proximity to the site. Groundwater is contaminated with VOCs and heavy metals such as cadmium and arsenic. The sediments of the Manasquan River and soils are contaminated with VOCs including benzene, chlorobenzene, and ethyl benzene. The Manasquan River is contaminated with low levels of VOCs and the heavy metals cadmium and lead. The wastes found in the excavated drums contained VOCs and cadmium, chromium, lead, and arsenic. People who come in direct contact with or ingest contaminated groundwater, soil, or wastes may be at risk. Because contaminants are leaching into the Manasquan River, those who use it for recreation may be exposed to the pollutants. People who inhale vapors from the site may suffer adverse health effects. The site is near a wildlife management area; any pollutants seeping into this area may harm the wildlife. Hunters from the nearby sportsman club may be exposed to contaminants should they consume any game caught in the area.

Cleanup Approach

The site is being addressed in two long-term remedial phases focusing on the on-site cleanup and cleanup of the groundwater and off-site contamination.

Response Action Status



On-Site Cleanup: In 1984, the EPA selected a remedy to clean up the aquifer by installing a shallow cut-off wall and sealing the surface of the landfill; installing an extraction system to collect the groundwater within the perimeter of the wall; treating the collected groundwater and then discharging the treated water into the Manasquan or Metedeconk rivers, or alternately, into a sewer line for treatment at the Ocean County Utilities Authority; and monitoring the site to ensure the cleanup has been effective. The EPA is reviewing engineering suggestions for the technical design and specifications. The potentially responsible parties are expected to begin cleanup in late 1991 and are scheduled to complete the work in 1993.



Groundwater and Off-Site Contamination: The parties potentially responsible for the contamination completed a study, under EPA monitoring, to determine the extent of groundwater contamination. In 1990, the EPA selected a remedy for cleanup which includes: extraction of contaminated groundwater, treatment using an activated carbon system, reinjection of the groundwater, and the installation of a 2,800-foot interceptor drain to prevent contamination of the Manasquan River. Engineering design for this remedy is expected to begin in late 1991. Once the design phase is completed in late 1992, cleanup will begin.

Site Facts: Under a Consent Decree in March 1990, the parties potentially responsible for contamination at the site will perform cleanup activities.

Environmental Progress

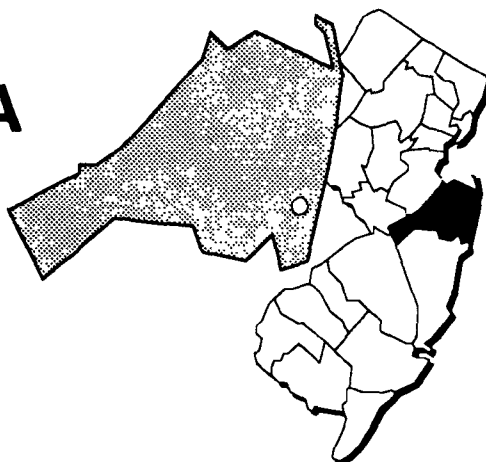


The remedies for the on-site contamination have been selected, and the EPA currently is reviewing the engineering and technical design aspects of these solutions. A remedy also has been selected for the groundwater and off-site contamination, and cleanup will begin shortly at the Lone Pine Landfill.

M & T DELISA LANDFILL

NEW JERSEY

EPA ID# NJD085632164



EPA REGION 2
CONGRESSIONAL DIST. 03
Monmouth County
Asbury Park

Other Names:
Seaview Square Mall

Site Description

The M & T Delisa Landfill accepted municipal waste from 1945 to 1975 on a 132-acre site in Asbury Park. Seaview Square Mall was constructed on about 25 to 30 acres of the landfill in 1976. Although the mall itself is situated on clean fill, the parking lot is built on refuse. Methane gas vents are located around the parking lot, and a system to collect leachate runs beneath it. In 1980, the EPA observed leachate seeping from the site into a nearby stream that empties into Deal Lake. However, investigations indicated that groundwater, surface water, and soil were not impacted by the site. In 1983, the mall and surrounding outside areas were tested for methane gas migration. The results indicated a plume of methane existed about 1 to 3 feet below the ground outside the mall. Approximately 2,300 people live within a 1-mile radius of the site. There are 34 private wells within 3 miles of the landfill, and approximately 120 people draw drinking water from these wells. Deal Lake is less than a mile away and is used for recreational activities, including fishing.

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

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83
Deleted Date: 03/06/91

Threats and Contaminants



Sampling at the site showed that groundwater contained heavy metals such as arsenic, chromium, and lead and methylene chloride. Sediments contained polynuclear aromatic hydrocarbons (PNAs) and the heavy metals arsenic, mercury, lead, and zinc. Storm drains and leachate seeping from the site contained methylene chloride, chromium, lead, and arsenic. Although there are no risks directly attributable to the site, people who drink water containing metals may be at risk.

Cleanup Approach _____

The site was addressed in a single long-term remedial phase directed at cleanup of the entire site.

Response Action Status _____



Entire Site: The owner of the site, under EPA monitoring, conducted a study to determine the extent of groundwater, surface water, and soil contamination at the site. This study revealed that there was no disposal of hazardous waste at the site in the past and that the site is not a source of significant concentrations of any hazardous substances. In September 1990, the EPA decided that the site would be addressed more appropriately by the State under its solid waste disposal regulations.

Site Facts: In 1983, the EPA issued an Administrative Order on Consent to the owner of the site, requiring that the owner conduct site studies and perform cleanup activities.

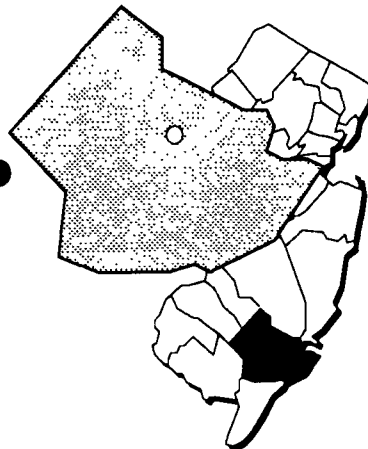
Environmental Progress _____



After the M & T Delisa site was added to the NPL, a study to determine the nature and extent of contamination at the site revealed that there were no significant concentrations of any hazardous substances. The site has been deleted from the NPL and will be addressed by State authorities.

MANNHEIM AVENUE DUMP NEW JERSEY

EPA ID# NJD980654180



EPA REGION 2
CONGRESSIONAL DIST. 02
Atlantic County
Galloway Township

Other Names:
Lenox China, Inc.

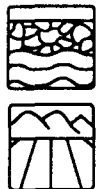
Site Description

The 2-acre Mannheim Avenue Dump site is located in Galloway Township. The site is a municipal landfill where approximately 300 drums (11,400 pounds) of degreasing sludge from Lenox China were disposed of in a 15-foot pit during the 1960s, and possibly, into the early 1970s. This waste was compacted into approximately 35 mounds and was covered with soil. Leaded glazed waste, plaster molds, and china and clay forms also were mixed in with the mounded waste piles. An aquifer that provides the source of water for local residents lies 20 to 30 feet below the site. Approximately 1,300 area residents depend on shallow groundwater under the site for drinking water, the majority of which comes from private wells. A public school well is located in the vicinity of the site. The nearest residence is 1/10 mile from the site.

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

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

Threats and Contaminants



The underlying aquifer contains trichloroethylene (TCE) and toluene from the site disposal areas. Soil was contaminated with TCE and lead. Residual levels still exist in the soils at a level below New Jersey Department of Environmental Protection (NJDEP) action levels. There is a risk of contaminants migrating through groundwater to residential wells in the future. The site is fenced, and warning signs have been posted around the perimeter.

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 1985, the parties potentially responsible for the site contamination removed approximately 25,000 pounds of asphaltic sludge from soil mounds for incineration. Approximately 2,700 cubic yards of residual contaminated soil remained. Other activities completed in 1985 include installing a fence around the site and sampling waste piles. The potentially responsible parties performed on-site sampling and installed monitoring wells, under EPA oversight, beginning in 1986. In 1989, the potentially responsible parties removed soil mounds containing residual lead and TCE contaminants from the site to an approved facility.



Entire Site: Under State and EPA supervision, the parties potentially responsible for the site contamination conducted an investigation to determine the nature and extent of contamination at the site. In 1990, the EPA selected a remedy for cleanup of the site which includes: extraction of the contaminated groundwater from the aquifer, on-site treatment using air stripping, and discharge of the treated groundwater into the aquifer; short-term monitoring of the groundwater during the engineering design of the treatment system; long-term monitoring of the groundwater during cleanup; and installation of individual carbon adsorption treatment units at residences, if monitoring indicates that groundwater contamination threatens residential wells. The engineering design for the cleanup will begin in 1991. Cleanup is scheduled to begin in 1992.

Site Facts: The NJDEP sent Information Request Letters to the parties potentially responsible for site contamination in 1983 and 1984. A Unilateral Administrative Order was issued to Lenox, Inc. and Galloway Township by the EPA and the State of New Jersey. This Order required these two parties to remove contaminants from the site. In 1987, the EPA issued Notice Letters to Lenox, Inc. and to the Township of Galloway. As a result, Lenox, Inc. agreed to perform an investigation into site contamination and the most effective cleanup methods. In 1988, the EPA entered into an Administrative Order on Consent with Lenox, Inc. and the Township of Galloway to perform the site investigation and cleanup.

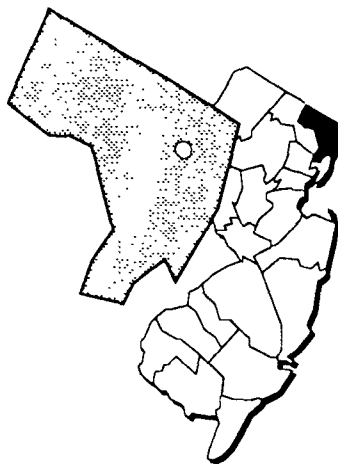
Environmental Progress



The removal of a large amount of contaminated sludge and the installation of a security fence have significantly reduced the potential for exposure to hazardous materials at the Mannheim Ave. Dump site while permanent remedy alternatives are being designed for the contaminated groundwater and the remainder of the site.

MAYWOOD CHEMICAL COMPANY NEW JERSEY

EPA ID# NJD980529762



EPA REGION 2
CONGRESSIONAL DIST. 05
Bergen County
Maywood and Rochelle Park

Other Names:
Maywood Residences
Stepan Chemical

Site Description

The Maywood Chemical Company site consists of several commercial and residential properties, all contaminated with radioactivity. Since 1916, Maywood processed radioactive thorium ore to produce the mantles in gas lanterns. Early in the century, operators knew thorium was radioactive, but did not consider it particularly dangerous. They pumped all process wastes to diked areas west of the plant. In 1932, State Route 17 was built through the disposal area. Some of the waste materials were excavated and used as fill dirt and mulch for nearby properties. The result was chemical and radioactive contamination over much of the local area. Radiological contamination was accidentally discovered by an area resident in 1980 on property formerly owned by Stepan Chemical. Testing by the State revealed extensive low-level contamination at several locations. The U.S. Department of Energy (DOE) now owns 11 3/4 acres of land along the Stepan property and has constructed the Maywood Interim Storage Site (MISS). Contaminated soils that have been removed from the various Maywood sites are stored there until a permanent storage facility can be identified. Contamination has been identified in seven different areas: (1) the Sears property; (2) the MISS; (3) the Ballod properties; (4) the Scanel property; (5) residential properties; (6) the Stepan Chemical property; and (7) other industrial properties. The Sears, Roebuck and Co. leases 31 acres of property just south of the MISS and Stepan Chemical property. Its warehouse covers about 1/3 of the grounds; 225 employees work there. The rest of the property is covered by grass and marsh, with several commercial facilities located to the south. Drums containing volatile organic compounds (VOCs) and phthalates were discovered buried under the property. The MISS is a fenced vacant lot of 11 3/4 acres. Low-level radioactive wastes have been piled on 2 acres, and another area was prepared as a second storage pile. The waste stored at the site is from cleanup actions conducted in 1984 and 1985 on several nearby properties. The MISS lies in a highly developed residential and industrial area that runs along the border between Maywood and Rochelle Park. The Ballod property is the site of the lagoons to which Maywood Chemical originally pumped its thorium processing wastes. When Stepan Chemical bought the Maywood facility, the waste materials were removed, and the facility was approved for unrestricted use by the Atomic Energy Commission. However, an area of radioactivity was found on the site, and further cleanup activities ensued. The Scanel property is in Maywood, to the east of the Sears site. Waste material from thorium processing was probably disposed of or included in fill here. In 1981 and 1983, radium and thorium were detected in Scanel soils. Eight residential properties in Maywood and nine in Rochelle Park were radiologically contaminated, mostly with thorium. The properties have been certified for unrestricted use by the DOE. The Stepan property also will be undergoing an official investigation. The DOE drilled monitoring wells here as part of their monitoring of the MISS; early indications are that this area also is contaminated with radioactivity and chemicals. Contamination has been found in three off-site areas as well. The Lodi Municipal Wells (now a site on the NPL) have been closed. VOCs were detected in the Maywood Municipal Pool in 1986, and similar contaminants were seen in a residential well upgradient of the site. The site surroundings are industrial and residential.

Approximately 30,000 people live within a 3-mile radius of the site. The local drinking water comes from municipal and private wells; the closest well is 1,500 feet from the site. Local surface water is used for recreation. Some brooks flow through the contaminated areas, eventually feeding the Saddle River.

Site Responsibility: This 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



Radon gas was present in a home near the site. Groundwater at the MISS has been contaminated with VOCs and heavy metals. Soil on various parts of the site is contaminated with radioactive wastes including thorium and radium, as well as VOCs and heavy metals. Drinking or otherwise coming into contact with contaminated groundwater, inhaling contaminated dusts and volatile gases, or coming into direct contact with contaminated soils may adversely affect the health of nearby residents.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on radiological contamination and non-radiological contamination.

Response Action Status



Immediate Actions: The DOE started removing contaminated soil from affected residences in 1984. These materials were stored at the MISS. Contaminated materials were excavated at the Ballod property and removed to the MISS in 1985. Additional cleanup efforts have continued as other contaminated properties were identified.



Radiological Contamination: The DOE is investigating the radiological contamination at the site. The investigation will determine the nature and extent of the contamination and will be the basis for recommending the final cleanup strategies when it is completed in 1994. Field work has been completed, and reports are being developed.



Non-Radiological Chemical Contamination: In 1990, under EPA monitoring, the work planning began for an intensive study of non-radiological chemical contamination at the site. This investigation will explore the nature and extent of contamination and will lead to recommending final cleanup remedies. Field work is expected to begin in mid-1991.

Site Facts: A special notice letter for conducting a study of the site was issued to Stepan Chemical Co. and all other owners of the contaminated property in 1987. After several negotiation meetings with the potentially responsible parties, Stepan Chemical Co. presented a good faith offer to conduct the study. As a result of further negotiations, an Administrative Order on Consent was issued. The Order was signed by Stepan Chemical and the EPA in 1987.

Environmental Progress

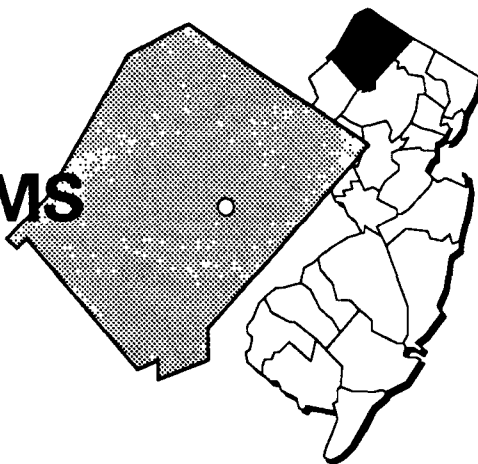


The removal of contaminated soil from residential areas has greatly reduced the potential for exposure to radioactive materials from the Maywood Chemical Company site while investigations are taking place.

METALTEC/ AEROSYSTEMS

NEW JERSEY

EPA ID# NJD002517472



EPA REGION 2
CONGRESSIONAL DIST. 05
Sussex County
Franklin Borough

Site Description

Metaltec, a subsidiary of Aerosystems Technology Corporation, produced metal ball point pen casings, paint spray guns, lipstick cases, and a variety of other goods on this 15 1/2-acre site from 1965 to 1980. While in operation, the facility consisted of the plant, a process well, an unlined wastewater lagoon, and a drum storage area. A pile of waste material called the "Green Powder Pile" also is known to have existed at the site. The company moved to an industrial park in 1980. In 1980, the New Jersey Department of Environmental Protection (NJDEP) inspected the site and began sampling. Results revealed the presence of volatile organic compounds (VOCs) and heavy metals in the facility's wastewater lagoon and surrounding soil. These contaminants leached from the lagoon into surrounding groundwater, and upon sampling residential wells, State analysts found VOCs at levels above Federal standards for drinking water. The Franklin Water Supply Well and polluted private wells were closed in 1980, and affected residents were connected to the Borough's primary water supply. The site lies in a valley drained by a small unnamed stream that flows into Wildcat Brook, a tributary of the Walkill River. The property now is abandoned. Franklin Pond lies 3/4 mile northeast of the site. The now-closed Franklin Water Supply Well, which served as a secondary water supply source, is about 400 feet east of the property. Approximately 4,000 people live within 3 miles of the site. Local surface water is used for recreation, fishing, and swimming.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater and soil are contaminated with various VOCs and heavy metals. Low levels of cadmium were detected in the water and sediment samples from the stream flowing through two of the contaminated areas. The drinking and normal use of contaminated groundwater pose the likeliest health hazard, but contaminated wells have been closed.

Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on source control of site pollutants and groundwater cleanup.

Response Action Status



Source Control: In 1986, the EPA selected a remedy for cleaning up the sources of pollution at the site. The remedy features: (1) excavating and treating 10,000 cubic yards of soils contaminated with VOCs in Parcel 1 and taking them off site for disposal at an EPA-approved landfill; (2) excavating 4,000 cubic yards of contaminated soils from Parcels 2, 3, and 4 and disposing of them off site at an EPA-approved landfill; (3) providing an alternate water supply for Franklin to replace lost drinking water capacity; and (4) studying the site further to identify the extent of groundwater contamination and to evaluate the best options for cleanup. The EPA conducted the engineering design for the first three parts of the remedy in 1987 and 1988. Cleanup activities then ensued, with removal of the contaminated soils. The EPA excavated 5,000 cubic yards and transported them to an approved landfill, treated contaminated site water, backfilled the excavated areas with clean fill, and disposed of drums stored on the surface. The engineering design for the final part of the remedy also was completed in late 1990. An alternate water supply pipeline providing water from two privately developed wells currently is being installed.



Groundwater: In 1989, the EPA completed a draft report for an intensive study of groundwater contamination at the site. This investigation explored the nature and extent of the groundwater pollution problem. A proposed plan for treating contaminated groundwater was completed in 1990. The remedy selected by the EPA includes extracting the contaminated groundwater and treating it by air stripping to remove the VOCs. Any remaining organic contaminants will be removed by carbon adsorption. The treated groundwater will be discharged into the unnamed tributary of Wildcat Brook. The site will be monitored to ensure the effectiveness of the remedy. Design of the selected remedy is scheduled to be completed in 1993.

Environmental Progress

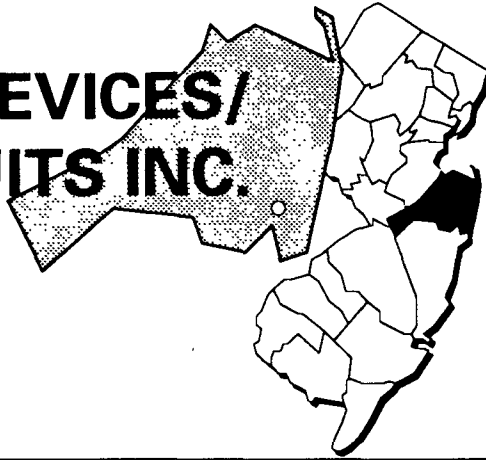


The source control actions and the completion of some cleanup measures described above have greatly reduced the potential for exposure to hazardous materials at the Metaltec/Aerosystems site while further cleanup activities are being planned and enacted.

MONITOR DEVICES/ INTERCIRCUITS INC.

NEW JERSEY

EPA ID# NJD980529408



EPA REGION 2
CONGRESSIONAL DIST. 04
Monmouth County
Lackwood Industrial Park

Site Description

From 1977 to 1981, Monitor Devices/Intercircuits Inc. manufactured printed circuit boards at this 2-acre site. The manufacturers were leasing the property from the site owner. Two structures stand on the property; the main building held the business office and production lines, while the other building is a small storage shed. Operators discharged process wastewater either into a small, unlined pond or directly on the ground at the rear of the building. The process involved the use of copper, tin, lead, nickel, and gold cyanide and treatment with sulfuric acid, fluoboric acid, and acetone. In addition, drums and plastic containers were improperly stored outdoors and were observed to be in poor condition. In 1980, after observing the company's waste handling practices, the State ordered it to sample groundwater and to clean up the site as necessary. The operation closed and moved in 1981 without fully complying with the order. In 1983, Monmouth County filed criminal charges against the company for violating environmental laws. The company went bankrupt in 1988. The site currently is an active furniture business employing 6 to 8 workers. It is unfenced, and no warning signs exist. The site is surrounded by industrial and commercial areas, and there are no residences within 1 mile. Two public water supply wells lie about 2 miles upgradient of the site; they supply drinking water to approximately 24,000 people. An industrial well is downgradient of the site.

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

NPL LISTING HISTORY

Proposed Date: 04/01/85

Final Date: 06/01/86

Threats and Contaminants



On-site groundwater and soil contain heavy metals including copper, chromium, and volatile organic compounds (VOCs). People may be at risk from direct contact with or accidental ingestion of contaminated soil.



Cleanup Approach _____

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

Response Action Status _____



Groundwater and Soil: In 1986, the State began an intensive two-phase investigation of soil and groundwater contamination at the site. This investigation is exploring the nature and extent of pollution problems and will result in recommendations for final cleanup. The first phase is completed; the second phase is scheduled to begin in late 1991. The first phase involved investigation of soil, subsurface soil, and groundwater contamination. The second phase will "fine-tune" the findings from the first phase investigation by sampling several more wells to define the extent of the groundwater plume.

Environmental Progress _____

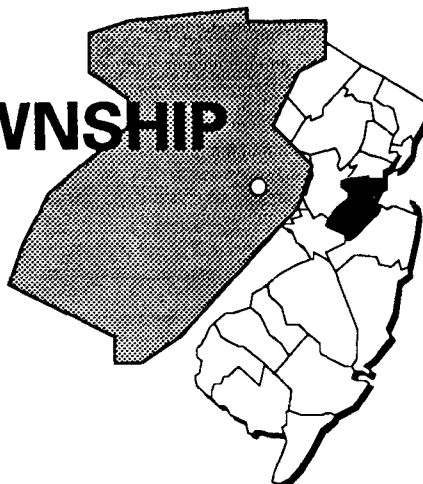


After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Monitor Devices/Intercircuits Inc. site to protect human health or the environment while further studies are being completed.

MONROE TOWNSHIP LANDFILL

NEW JERSEY

EPA ID# NJD980505671



EPA REGION 2
CONGRESSIONAL DIST. 04
Middlesex County
Monroe

Other Names:
Browning-Ferris Ind.
Princeton Disposal
International Disposal
BFI of South Jersey, Inc.

Site Description

The 86-acre Monroe Township Landfill first was operated by Monroe Township in 1955, leased to the Princeton Disposal Co. in 1968, and finally acquired by Browning-Ferris Industries, Inc. of South Jersey, Inc. in 1972. The New Jersey Department of Environmental Protection (NJDEP) ordered it closed in 1978, after liquids seeping from the landfill overflowed into a street. This leachate also was found to be contaminating streams that drain the landfill area. Analysis showed the liquids contained volatile organic compounds (VOCs). This off-site migration of leachate caused the abandonment of a housing construction project. Hydrochloric acid is known to have been stored in lagoons at the site. The State sampled six drinking water wells near the site in 1979 and found varying concentrations of VOCs. One well was closed, which prompted more investigative sampling. Although the next round of analysis showed considerably lower concentrations of pollutants, municipal water lines were provided to some area residents in 1979 and 1980. A cut-off wall and leachate collection drain were installed in 1980. Leachate was recycled to the landfill. Approximately 11,500 people are served by private and public wells in the vicinity. Groundwater also is used for irrigation. The closest residence is about 200 feet from the site.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Off-site groundwater is contaminated with phenols and VOCs. On-site leachate contains VOCs. Coming in direct contact with contaminated leachate and soil on the site or drinking contaminated groundwater may cause adverse health effects to people in the area.

Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on source control and groundwater cleanup.

Response Action Status



Source Control: Municipal water lines were hooked up to some residences in 1979 and 1980. In 1979, the State ordered the owner to undertake landfill closure and to install a leachate collection and treatment system. Phase I of the closure, completed in 1980, addressed the emergency situation at the northeastern section of the landfill. Workers built a compacted clay dike and leachate collection system. Phase II addressed cleanup efforts and closure of the entire area. This phase was completed in 1984 and activities included: (1) installing a leachate cut-off wall of varying depths around the landfill perimeter; (2) building an underground leachate collection drain; (3) temporarily discharging leachate into the sewer for treatment at the public wastewater treatment facility; (4) installing a clay cover to reduce the spread of contaminants; and (5) installing leachate seep collectors to channel liquid that might pool on the surface of the fill. The leachate is discharged to the Middlesex County Sewage Authority's Old Bridge Sewage Treatment Plant. Approximately 6,000 to 7,000 gallons of leachate are transported to the treatment plant each day. All source control remedies are expected to be completed by late 1991.



Groundwater: The owner conducted a hydrogeologic study in 1987 that was intended to assess the current and past effects of the landfill on groundwater in the vicinity. The owner installed a series of monitoring wells and began quarterly sampling at various sites. The data indicated that an additional hydrogeologic study was needed to determine off-site contamination. The State also ordered the owner to decommission the existing leachate lagoon, to replace it with an underground storage tank, and to install a standby generator to handle leachate collection in case of a power failure. The owner has written a contingency plan for leachate disposal in case of such an emergency. These studies are expected to be completed in late 1991, at which time a plan for site groundwater cleanup will be recommended.

Site Facts: In 1979, the NJDEP and BFI signed a Consent Order requiring landfill closure and cleanup measures. A 1986 Administrative Order on Consent between the NJDEP and BFI superseded the 1979 order and established post-closure activities.

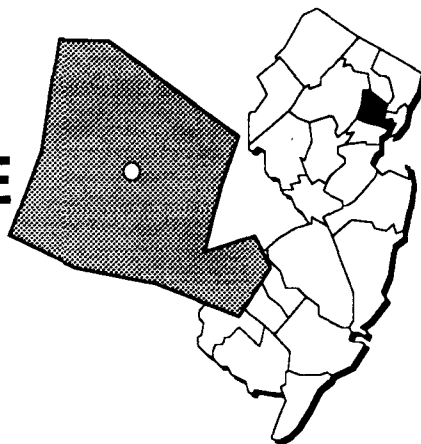
Environmental Progress



The actions described above to control the sources of contamination have greatly reduced the potential for exposure to hazardous wastes at the Monroe Township Landfill site while cleanup activities are completed and further investigation into groundwater contamination is taking place.

MONTCLAIR/ WEST ORANGE RADIUM SITE NEW JERSEY

EPA ID# NJD980785653



EPA REGION 2
CONGRESSIONAL DIST. 08
Essex County
Montclair and West Orange

Site Description

The Montclair/West Orange Radium site includes approximately 350 properties on 120 acres of residential land. The soil at the site is contaminated with radioactive waste materials suspected to have originated from radium processing facilities located nearby during the early 1900s. Some of the radium-contaminated soil was used as fill in low-lying areas or was mixed with cement for sidewalks and foundations. This site is similar to the nearby Glen Ridge Radium site, which also contains radium-contaminated soils from the same sources. More than 300,000 cubic yards of contaminated material are scattered on private and public lands. In 1983, the State discovered a number of homes with high levels of radon gas and radon decay products, as well as excessive levels of indoor and outdoor gamma radiation. Approximately 350 homes were identified as being affected by this site, and 32,000 people live within a mile of the site.

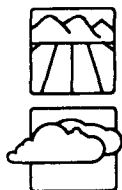
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 02/01/85

Threats and Contaminants



Soil is contaminated with radium, which decays to radon gas. Some properties on the site are contaminated with radium and exhibit excessive levels of radon gas and gamma radiation. People who are exposed to the radium, radon, and radon decay products may be at risk. Accidental ingestion of soil may cause adverse health effects. Vegetables grown in the contaminated soil also may pose a health threat.

Cleanup Approach

This site is being addressed in four stages: emergency actions and three long-term remedial phases focusing on cleanup of the soil and structures; groundwater; and the remaining properties, public area, and streets.

Response Action Status _____



Emergency Actions: In 1983, the EPA installed temporary ventilation systems to reduce the radon concentrations in 38 homes. In addition, shielding from gamma radiation has been installed in 12 homes. The EPA and the State continue to operate and maintain the temporary systems.



Soil and Structures: In 1989, the EPA selected a remedy to address the most extensively contaminated properties. This remedy includes: (1) excavating approximately 41,000 cubic yards of contaminated soil and debris at the most extensively contaminated properties and disposing of them in a licensed facility; (2) installing and maintaining indoor engineering controls at less contaminated properties; (3) monitoring the site to ensure the remedy has been effective; and (4) continuing alternative treatment remedies for future actions at the site. Cleanup of the most extensively contaminated areas currently is underway.



Groundwater: The EPA is conducting a study to determine whether the groundwater has become tainted by the contaminated soil. Once the study is completed, scheduled for 1992, the EPA will recommend remedies for groundwater cleanup, if necessary.



Remaining Properties, Public Areas, and Streets: In mid-1990, a remedy was selected for the cleanup of the remaining properties as well as public areas and streets. This remedy includes the excavation and off-site disposal of all radium-contaminated soil from public and private properties. Once the cleanup activities are completed, the area will be monitored to ensure the remedy has been effective. The EPA currently is designing the technologies for the cleanup.

Site Facts: The EPA continues seeking parties that may be responsible for site contamination. No conclusive evidence links a potentially responsible party to the contamination at the site.

Environmental Progress _____



The emergency actions described above have greatly reduced the potential for exposure to radioactive contamination in affected homes near the Montclair/West Orange Radium site while further cleanup efforts and studies are taking place.

MONTGOMERY TOWNSHIP HOUSING DEVELOPMENT NEW JERSEY

EPA ID# NJD980654164



EPA REGION 2
CONGRESSIONAL DIST. 12
Somerset County
Montgomery Township

Site Description

Originally, the 71 homes at the 72-acre Montgomery Township Housing Development site depended on private wells drawing from the underlying aquifer. In 1978, volatile organic compounds (VOCs) were detected in the public well of neighboring Rocky Hill. State officials also sampled the housing development's wells. Results indicated widespread contamination with various VOCs. Because of their proximity and the similarity of the contaminants present, it was agreed to address the Montgomery Township Housing Development site and the Rocky Hill Municipal Well site, also on the NPL, jointly. The area surrounding the site is wooded and predominantly residential. Beden Brook skirts the northwestern corner of the site, and the Millstone River bounds it on the east. The site includes not only the 71 homes in the original development, but six more homes nearby.

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

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

Threats and Contaminants



Private wells in the housing development contain various VOCs as well as lead. Drinking or otherwise coming in contact with contaminated water may result in adverse health effects.

Cleanup Approach

This site is being addressed in three stages: emergency actions and two long-term remedial phases focusing on providing an alternative water supply and cleaning up the groundwater.

Response Action Status _____



Emergency Actions: In 1981, the Township of Montgomery connected 20 homes in the development to the Elizabethtown Water Company. The State began a study of the contamination in 1984, and by 1987, had completed an investigation of the site. A total of 38 residences were hooked up to the Elizabethtown public water supply before the alternate water supply remedy described below was implemented.



Alternate Water Supply: The EPA selected a remedy for supplying clean water to the housing development in 1987. This remedy, a continuation of the emergency actions conducted throughout the 1980s, was started in 1988 and was completed in 1990. It featured extending the Elizabethtown Water Company distribution system already serving a portion of the development to all residents using contaminated or threatened wells and sealing affected private wells. Extension of the public water supply is completed. Sealing of the wells was deferred to the groundwater cleanup phase.



Groundwater: The EPA selected a remedy for cleaning the contaminated groundwater plume in 1988. This stage of the cleanup covers not only the housing development areas, but also the Rocky Hill Municipal Wellfield located nearby and similarly contaminated. The remedy features: (1) extracting contaminated groundwater from the primary source area; (2) treating it to Federal and State cleanup standards using an air stripper; (3) reinjecting the cleaned water into the underlying aquifer; (4) connecting additional residences to the public water supply as needed; (5) sealing private wells and monitoring wells within the contaminant plume; and (6) starting a groundwater sampling program to monitor the effectiveness of the cleanup. The State took the lead on design and implementation of the cleanup activities. Design is scheduled for completion in late 1992. Cleanup is expected to begin at that time.

Environmental Progress _____

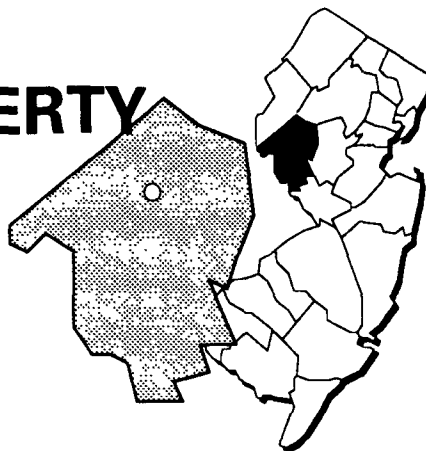


By supplying residences affected by contaminated groundwater with municipal water supplies, the potential for exposure to contaminated groundwater has been greatly reduced while final cleanup activities are taking place at the Montgomery Township Housing Development site.

MYERS PROPERTY

NEW JERSEY

EPA ID# NJD980654198



EPA REGION 2 CONGRESSIONAL DIST. 12

Hunterdon County
Franklin Township

Other Names:
Elko Chemical Company

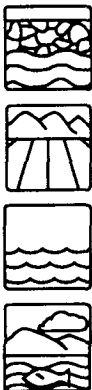
Site Description

Several companies used the 8-acre Myers Property site to manufacture pesticides, beginning in the early 1940s. The present owner purchased the property in 1971 and is using it as a residence. Various drummed chemicals, as well as uncontained asbestos, were present at the site. Drinking water wells on the property are not contaminated. Access to the site is restricted by a fence, but people currently live adjacent to the fenced area. Cakepoulin Creek, a trout production stream, flows next to the site and drains to the south branch of the Raritan River. Springs surface on the property and flow into the creek and toward a wetland. Approximately 250 people live within a 1-mile radius of the site. Area surface water is used for swimming and fishing.

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

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

Threats and Contaminants



Extensive groundwater contamination has been identified in the aquifer, including various volatile organic compounds (VOCs) and pesticides. Contaminants have not migrated to potable wells. Building surfaces are contaminated with pesticides, while soils are contaminated with pesticides, metals, and dioxin. The pesticides also were detected in on-site surface spring samples. Part of the wetland is highly contaminated. People living or having business on site could come in contact with or accidentally ingest contaminants. DDT, one of the identified pesticides, poses a substantial environmental threat.

Cleanup Approach

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

Response Action Status



Initial Actions: In 1984, the EPA removed contaminated material and packed it for disposal. All identified contaminants were removed, including polluted soil, drummed wastes, asbestos, and debris. The EPA installed a fence around the site and spread crushed stone over low areas where rainwater had collected, as well as over parts of a dirt road. Warning signs were posted on the fence. These response actions were completed by 1988.



Entire Site: The EPA completed a study of the nature and extent of contamination at the site in 1990. Based on the results of this study, the EPA chose a remedy to address contaminated soil, sediment, buildings, and groundwater in the shallow aquifer. The remedy also includes an interim cleanup action for contaminated groundwater in the deeper bedrock aquifer. The cleanup activities consist of excavating soils and sediments, treating organic-contaminated soil by dechlorination, and then using soil washing to remove the inorganic contaminants. The treated soils will be backfilled on site. After backfilling the treated soil, the wetlands will be restored. Shallow groundwater will be extracted, treated on site, and either will be reinjected into the ground or discharged into Cakepoulin Creek. The deeper bedrock groundwater also will be extracted, treated, and reinjected into the ground or discharged to Cakepoulin Creek. A second long-term remedial phase will be required to develop a final deep groundwater remedy. Once the treatment is completed, the groundwater will be monitored to ensure it does not pose a threat to potable wells in the area. The on-site buildings also will be decontaminated.

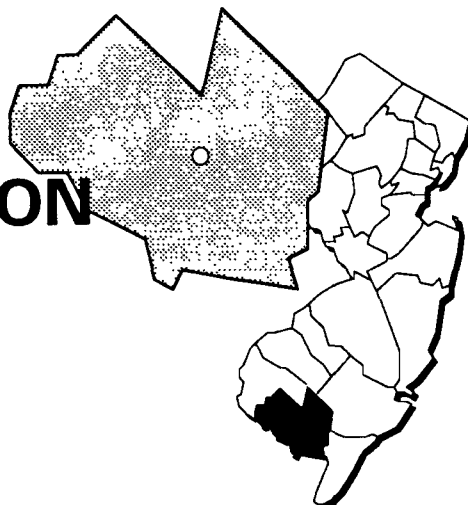
Environmental Progress



The removal of contaminated soil, drummed wastes, asbestos, and debris, and the installation of a fence have greatly reduced the potential for exposure to contaminated materials at the Myers Property site while further cleanup activities are being planned.

NASCOLITE CORPORATION NEW JERSEY

EPA ID# NJD002362705



EPA REGION 2
CONGRESSIONAL DIST. 02
Cumberland County
In the cities of Millville and Vineland

Site Description

From 1953 to 1980, Nascolite Corporation manufactured polymethyl methacrylate (MMA) sheets, commonly known as plexiglass or acrylic, at this 17 1/2-acre site. The property lies on Doris Avenue in both Millville and Vineland, in an area zoned residential and industrial. Approximately 7 acres were used for production; the rest of the site is wooded. Operators stored waste residues from the distillation of scrap acrylic in buried tanks on the site. One of the tanks excavated was perforated, an indication that liquid wastes may have leaked into the soils. In 1980, Nascolite ceased operations after being cited and fined by the New Jersey Department of Environmental Protection for illegal discharges. State investigations in 1981 and 1983 disclosed significant concentrations of volatile organic compounds (VOCs) in soil and groundwater. Inspectors also found more than one hundred 55-gallon drums and several buried tanks, as well as asbestos, on the site. Much of the waste subsequently was removed by the property owner, and the EPA removed the rest in 1987. EPA studies in the mid-1980s confirmed the presence of VOCs and acid and base/neutral extractables in soil and groundwater. Groundwater contamination is moving southward, but as of 1987, had not yet crossed the site boundaries. Drinking water wells are situated downgradient of the site. The population within a 3-mile radius of the site is 20,000. Most people live about a mile south of the site, but an apartment complex borders the property on the south, and one home lies within the current site boundaries. There also are several residences near the site, along Doris Avenue, and another residential area within 1/2 mile of the site. The area relies on public and private wells for drinking supplies; groundwater also is used for irrigation and for commercial and industrial purposes.

Site Responsibility:

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

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



MMA has been detected in air samples. Groundwater and soils are contaminated with MMA; phthalates; VOCs including benzene, toluene, and trichloroethylene (TCE); and lead. Surface soil samples from a ditch that was alleged to have received wastes from surface water runoff showed high concentrations of lead. Sampling of the excavated sludge wastes revealed MMA, phthalates, VOCs, lead, and naphthalene. These buried wastes reportedly have been disposed of. Nearby residents may be exposed to chemicals by coming in direct contact with or accidentally ingesting any of the contaminated soil, sludge, or groundwater.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the groundwater and cleanup of the soils and on-site structures.

Response Action Status



Immediate Actions: In 1981, under State orders, Nascolite removed some contaminated soil from the site. The owner also removed much of the waste materials from the site. In 1987, EPA workers placed a tarp above the lead-laden soil, cleared and disassembled the tanks, removed remaining drums, disposed of asbestos wastes, and fenced the site. Solid wastes were landfilled, and liquid wastes were incinerated. In 1989, the potentially responsible parties extended a water line to residences where drinking water was threatened, installing taps, water meters, service connections, and fire hydrants. Workers also repaved the roadways and reseeded private lawns.



Groundwater Cleanup: The EPA selected a remedy for cleaning up groundwater in 1988. It features: (1) extracting groundwater and treating it on site, then reinjecting the cleaned water into the aquifer; (2) performing additional studies to determine the appropriate cleanup measures for contaminated soils and buildings on the site; and (3) providing an alternative water supply for potentially affected residents. The Army Corps of Engineers began the engineering design for this remedy in 1988. The design work is expected to be completed in 1993.



Soils and Buildings: The EPA completed a study of contaminated soils and buildings on the site in 1990. The remedies are expected to be selected in 1991. Initial study results indicate that solidification and stabilization of lead-contaminated soils, wetlands, and demolition of the contaminated building on site are likely remedies.

Site Facts: In September 1987, the EPA sent the property owner a Notice Letter to offer the opportunity to conduct emergency cleanup actions at the site. The owner declined to participate in the site cleanup. The EPA has identified additional potentially responsible parties who have performed cleanup actions on the site.

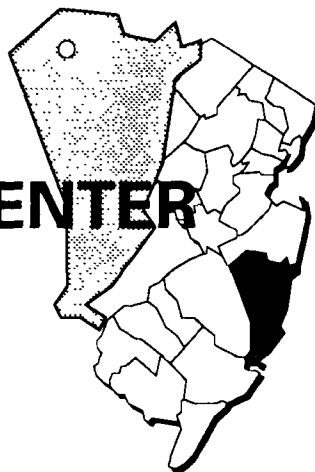
Environmental Progress



Initial cleanup work, including removal and isolation of contaminated soils, disposal of solid and liquid wastes, fencing the site, and the provision of an alternate drinking water supply, has been done at the Nascolite Corporation site. These actions have eliminated the immediate threats to the nearby public and the environment while work continues on designing a groundwater treatment system and additional investigations are underway.

NAVAL AIR ENGINEERING CENTER NEW JERSEY

EPA ID# NJ7170023744



EPA REGION 2
CONGRESSIONAL DIST. 13
Ocean County
Lakehurst

Site Description

The Naval Air Engineering Center (NAEC) site covers 7,382 acres and has been used continuously for various research, maintenance, firefighter training, testing, and disposal activities conducted by the U.S. Navy since the 1920s. Although the size of the Lakehurst facility and its operations have changed over the years, its major function always has been development and testing of weapons systems. On the basis of historical records, aerial photographs, field inspection, and personnel interviews, the Navy identified 45 potentially contaminated areas at the Naval Air Engineering Center. The 45 areas included landfills, open pits, unlined lagoons, and drainage ditches, several of which appear to be in or near freshwater wetlands. The Navy reports that fuels, oils, metals, solvents, and various other organic compounds were disposed of on the Center property. In 1988, the EPA and the NAEC agreed that 42 areas at the facility should be subject to further investigation. Fort Dix Military Reservation, agricultural lands, landfills, and a State wildlife refuge area are adjacent to the site. The facility makes up a major portion of the Toms River drainage basin, and several headwater tributaries originate on site, including Manapaqua Brook, Obhanan Ridgeway Branch, Harris Branch, and North Ruckels Branch. Several ponds, both natural and excavated, are on the site. The NAEC employs 4,800 people, and 1,370 people live on base. Most of these residents are trainees who leave after about 6 months. Water supplies within a 3-mile radius of the site are from public wells; the system serves approximately 7,100 people. The closest well is about 200 feet from the site. Monitoring has not detected any well contamination. Local surface water is used for recreation and irrigation.

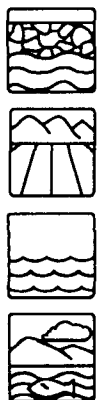
Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 09/01/85

Final Date: 07/22/87

Threats and Contaminants



Groundwater and soil sampling has revealed the presence of metals and other inorganics, volatile organic compounds (VOCs) including benzene and trichloroethylene (TCE), phenols, and petroleum hydrocarbons. Some stream sediments show levels of heavy metals such as chromium, lead, mercury, and nickel and petroleum hydrocarbons above background levels. People who come into direct contact with or accidentally ingest contaminated groundwater, sediments, soil, or surface water may suffer adverse health effects. An extensive, environmentally sensitive pineland preserve supporting recreational, wildlife habitat, and agricultural uses surrounds the site and could be subject to pollution from contaminated runoff.

Cleanup Approach

The site currently is being addressed in seven long-term remedial phases focusing on cleanup of 42 areas of contamination across the site. Additional remedial phases continue to be added, based on results of the ongoing studies.

Response Action Status



Site Area C: In 1991, the EPA and the Navy agreed on the technologies that will be used as an interim measure to clean up the groundwater, employing groundwater pump and treatment technologies. Cleanup technologies currently are being designed and activities are expected to begin in fall 1991.



Site Area H: In 1991, the EPA and the Navy agreed to an additional pump and treatment phase, as an interim measure, for contaminated groundwater in Site Area H. The cleanup design is expected to be complete in the fall of 1991. A final set of cleanup actions for this area will be chosen in 1993. Other contamination will be addressed in future agreements.



Ten Areas: In 1989, the Navy began an investigation into the extent of contamination at ten areas at the Naval Air Engineering Center that were considered potentially contaminated. The study will recommend cleanup alternatives as they are needed.



Site Area 28: In 1989, the Navy began an investigation into the nature and extent of petroleum contamination of the groundwater in Site Area 28. The EPA is expected to make a decision on appropriate interim cleanup activities in late 1991.



Site Areas A and B: In 1989, the Navy began an investigation of groundwater contaminated with petroleum and solvents for interim cleanup actions in Site Areas A and B. The EPA is expected to approve the proposed interim measures to restrict water flow into a stream and sensitive wetlands in late 1991.



Soil: In 1989, the Navy began investigations at 5 areas of the site, where prior cleanup actions have removed contaminated soils, to determine if there is residual contamination. Preliminary results indicated that no further cleanup actions will be required at these areas. Final decisions for each area is expected in 1992.



Additional Areas: The Navy is conducting investigations to determine the nature and extent of contamination at additional site areas. This investigation is expected to split into several additional cleanup stages with separate remedy selections. All studies and selection of final cleanup remedies are expected to be completed in 1993.

Site Facts: The NAEC is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DoD facilities. Under an Interagency Agreement with the EPA, the Navy has agreed to deadlines, timetables, and EPA review of decisions involving cleanup technologies.

Environmental Progress

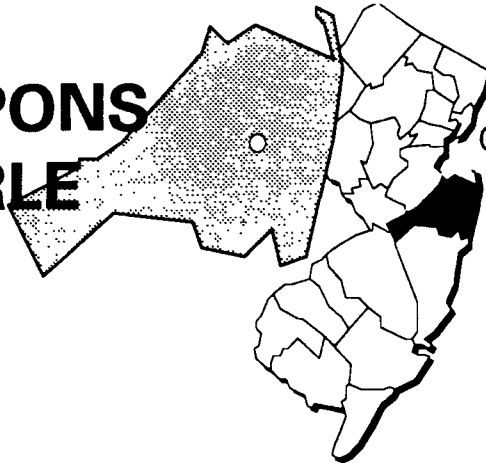


The Navy is conducting studies to determine final cleanup strategies and is beginning to conduct cleanup activities for the Naval Air Engineering Center site. While these investigations and cleanup activities are underway, the EPA has determined that the site does not pose an imminent threat to the surrounding communities or the environment.

NAVAL WEAPONS STATION EARLE (SITE A)

NEW JERSEY

EPA ID# NJ0170022172



EPA REGION 2
CONGRESSIONAL DIST. 04

Monmouth County
Colts Neck

Other Names:
Earle Naval Weapons Station

Site Description

The Naval Weapons Station Earle covers 10,428 acres in Colts Neck. Since the early 1940s, the U.S. Navy has handled, stored, and renovated munitions at the station. These operations involve preserving and maintaining ammunition, missile components, and explosives. The station also has conducted activities unrelated to weaponry, such as radiological operations, materials storage, and waste disposal processes. The site encompasses 29 waste areas identified by the Navy; 27 of the waste areas are being studied for cleanup activities as part of this site, and two are being licensed under the Resource Conservation and Recovery Act (RCRA). Wastes generated include weapons materials, grit and paint, paint scrapings, solvent and paint sludges, lead bullets from small arms ranges, and metals including lead, zinc, and titanium. There was a polychlorinated biphenyl (PCB) spill in one area, and contaminated soil was removed off site for disposal. The area lies over six hydraulically connected aquifers. About 300 people are served by surface water within 3 miles downstream of contaminated areas of the site; a water supply intake lies 2 miles downriver. Approximately 1,900 residents live within a 3-mile radius of the station, and there are 500 homes on the base. An estimated 320 private and municipal wells serve 1,200 people within a 3-mile radius, and groundwater also is used for irrigation. Local surface water is used for recreation and also for crop irrigation. The headwaters and drainage basins of three major Coastal Plain rivers, the Swimming, the Manasquan, and the Shark, are present on the Main Base.

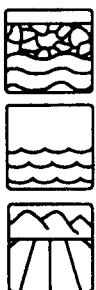
Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 08/30/90

Threats and Contaminants



Groundwater, surface water, sediments, and soils are suspected to contain lead, zinc, and titanium. People who come into direct contact with or accidentally ingest contaminants could suffer adverse health effects. Since the facility is an active munitions storage site, public access is restricted, although hazardous areas may not be off-limits to base personnel.

Cleanup Approach

This site is being addressed in two long-term remedial phases directed at the cleanup of two distinct groups of waste areas.

Response Action Status



11 Waste Areas: In late 1989, the Navy submitted draft investigative work plans to the EPA. These investigations began in 1991 and are exploring the nature and extent of contamination in 11 separate areas of the site where contamination is suspected in the groundwater, soil, and sediment. The Navy has installed groundwater monitoring wells and has performed soil, sediment, and groundwater sampling. The EPA is expected to choose a cleanup approach in 1993.



16 Waste Areas: The Navy submitted a work plan in spring 1991 for an investigation of the nature and extent of contamination and to identify cleanup alternatives at 16 other waste areas. Field work is expected to begin later in 1991.

Site Facts: The Station is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DoD facilities.

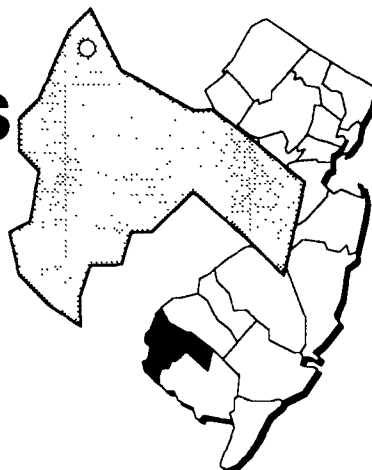
Environmental Progress



The Navy is conducting investigations to identify cleanup strategies for 27 of the 29 areas of contamination. The two remaining areas will be addressed under RCRA guidelines. The EPA has determined that the Naval Weapons Station site does not pose an imminent threat to the surrounding population or the environment while the investigations leading to the selection of a final cleanup remedy are taking place.

NL INDUSTRIES NEW JERSEY

EPA ID# NJD061843249



EPA REGION 2
CONGRESSIONAL DIST. 02

Salem County
Pedricktown

Other Names:
National Smelting of New Jersey

Site Description

The 46-acre NL Industries site is a former secondary lead smelting facility that operated from 1972 to 1982 off Penns Grove-Pedricktown Road. In 1983, the site was sold to National Smelting of New Jersey, Inc., which operated it until 1984. During its years of operation, the company recycled lead from spent automotive batteries and separated the plastic from the rubber casings. After the rubber and plastic were separated, the plastic was reprocessed, and the rubber was placed in a membrane-lined landfill. The landfill contains process wastes, including slag and rubber materials from the batteries and contaminated soils. Railroad tracks run through the center of the site. Two streams are near the site, and there is a marshy area on site. The site is located in a rural area, with approximately 2,500 people living within 3 miles of the site boundary. The Cape May aquifer underlies the site and serves as a source of drinking water, crop irrigation, and process water. Most of the area residents are served by municipal water wells, although some nearby homes rely solely on private wells. The Delaware River is approximately 1 1/2 miles from the site.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater and soils are contaminated with heavy metals including lead and cadmium. Sampling at the on-site marshy area and the two nearby streams has identified elevated levels of lead in the surface water and sediments. Municipal water wells and nearby residential wells have not been affected by the site; however, the migration of contaminants in the groundwater may threaten these wells in the future. Moreover, people may be exposed to health risks if contaminated soils, surface water, or sediments in and around the site are accidentally ingested or contacted.

Cleanup Approach

The site is being addressed in three stages: initial actions and two long-term remedial phases focusing on cleanup of surface water, groundwater, soils, and sediments; and ponded water, slag piles, building structures, and debris.

Response Action Status



Initial Actions: In 1989 and 1990, the EPA restricted access to the site by installing a fence, temporarily capping the on-site slag piles to prevent the migration of contaminants, removing over 40,000 pounds of the most hazardous materials at the site for recycling or proper disposal, removing 2,200 empty steel drums for incineration and recycling, emptying on-site containers holding materials that potentially could be released and storing the containers in a bermed area, and removing copper wire and other items of value to discourage trespassing.



Surface Water, Groundwater, Soils, and Sediments: NL Industries, Inc., under EPA monitoring, is investigating the nature and extent of contamination at the site and is evaluating various cleanup alternatives. The first phase of the investigation included the installation of two on-site monitoring wells; the sampling of on-site and selected off-site residential wells; and sampling of surface water, soil, sediment, slag and waste materials. The second phase of the investigation included additional groundwater and surface water sampling to further characterize the nature and extent of contamination at the site. Field work has been completed and is undergoing EPA review. The EPA is expected to designate cleanup technologies in late 1992.



Ponded Water, Slag Piles, Building Structures, and Debris: The EPA currently is conducting a focused investigation to identify and evaluate cleanup alternatives for an early action targeted at further site stabilization. The field work is completed and recommendations are expected in the summer of 1991.

Site Facts: In 1982, the State issued an Administrative Order on Consent requiring NL Industries to clean up the site, conduct groundwater monitoring, and install a groundwater abatement system. The Order was amended in 1983 to reflect the purchase of the site by National Smelting of New Jersey. National Smelting and its parent corporations filed for bankruptcy in 1984. In 1985, the responsibility for cleanup of the site was transferred from the State to the EPA. In 1986, NL Industries signed a Consent Order with the EPA under which the company agreed to investigate the site.

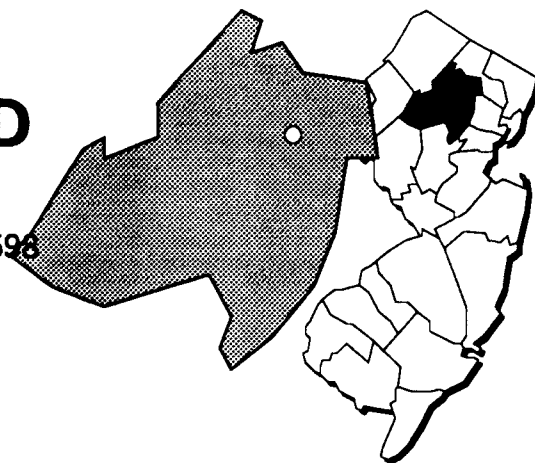
Environmental Progress



Access restrictions and removal activities have significantly reduced the threat of exposure to hazardous materials at the NL Industries site while further investigations leading to selection of the final cleanup remedy are taking place.

PEPE FIELD NEW JERSEY

EPA ID# NJD980529598



EPA REGION 2
CONGRESSIONAL DIST. 11
Morris County
Town of Boonton

Site Description

Pepe Field covers approximately 3 acres in a marshy area. The site was used by E.F. Drew Co. as a landfill from the 1920s until 1950. The company disposed of unknown quantities of processing waste from the manufacture of edible oils and cleansing and soap products for household and industrial use. From 1950 until the mid-1960s, the site remained an open, unused area until the Town of Boonton purchased the property. During the mid-1960s, the Town filled and covered the site with up to 10 feet of soil in preparation for construction of a recreational facility. This facility included tennis courts, a baseball field, a playground area, and a refreshment stand. In 1969, the Town implemented an odor abatement plan for the area, which consisted of a 14-foot gravel curtain drain extending 150 feet around the site, with a sump for leachate collection and treatment with hydrogen peroxide. The pumphouse discharges into a culvert that ultimately discharges into the Rockaway River, upstream of the Jersey City Reservoir, a potable water source. Presently, the recreation field is inactive and is enclosed by a 4-foot chain-link fence, although access can be gained through a break in the enclosure. The area around the site is mainly suburban. Approximately 90,000 people within a 3-mile radius of the site depend primarily on groundwater for drinking purposes.

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

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

Threats and Contaminants



The groundwater and soils are contaminated with the heavy metals arsenic, barium, cadmium, lead, and mercury. The soil also is contaminated with volatile organic compounds (VOCs). Metals and VOCs are contaminating the surface water.



Accidental ingestion or direct contact with the contaminated groundwater, surface water, or soil could pose a health hazard to individuals. Field investigations showed that concentrations of combustible gases are often present on the site.



Cleanup Approach

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

Response Action Status



Entire Site: The State plans to clean up the site in compliance with New Jersey's regulations governing closure and post-closure of sanitary landfills. The cleanup will include maintaining a site cover; installing a landfill gas collection and treatment system; upgrading and maintaining a leachate collection and treatment system; and monitoring the groundwater, leachate, and off-site soil gas. Design of these remedies began in 1991, and are expected to be completed in 1993. The State expects to complete cleanup activities in 1995 and plans to continue monitoring the groundwater, leachate, and off-site soil gas after the site cleanup is completed.

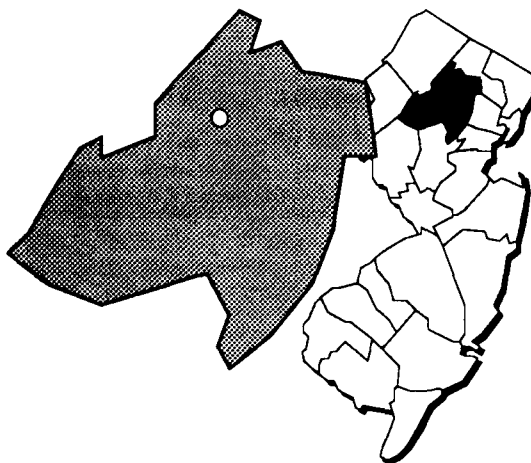
Environmental Progress



The New Jersey Department of Environmental Protection, with EPA assistance, has ensured that Pepe Field does not present an imminent threat to the surrounding community or the environment while the design of the final remedies is being prepared.

PICATINNY ARSENAL NEW JERSEY

EPA ID# NJ3210020704



EPA REGION 2
CONGRESSIONAL DIST. 13
Morris County
Rockaway Township

Site Description

The Picatinny Arsenal covers 6,491 acres in Morris County. The arsenal has been in operation for over 100 years, and it was a major source of ammunitions in wartime. Currently, its primary mission is research, development, and pilot plant production of explosives and propellants for the Army. At least 54 potentially hazardous locations exist on the site, according to a 1987 New Jersey Department of Environmental Protection report. They include areas for testing rocket fuels, munitions, and propellants; areas where chemicals and shells were buried; surface impoundments; landfills; drum storage areas; and a sludge bed. The arsenal's 6,400 employees obtain their drinking water from two wells upgradient from an area of confirmed groundwater contamination. The surrounding areas are suburban, as well as summer vacation areas. There are several homes that depend on private wells for drinking water located at the southern end of the facility. The Army and the State have sampled the wells several times, and no contamination has been detected. Lake Denmark and Picatinny Lake, which is on the base, are used for recreational activities. Groundwater contamination does not appear to have migrated off site.

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



Monitoring wells and soils adjacent to unlined lagoons, which until 1981 held wastewater from metal plating and etching facilities, are contaminated with volatile organic compounds (VOCs) and heavy metals. Polychlorinated biphenyls (PCBs) and an organic pesticide were found in the sediments of the Green Pond Brook. In 1982, the brook was dredged, and the materials were piled nearby. Site studies have found metals, explosives, and trace amounts of dioxin in a defined area; access to that area has been restricted. The contaminated groundwater, soil, and sediments could pose a health hazard through direct contact with or accidental ingestion. In addition, the contaminants from the site could pollute the waters of Green Pond Brook, Lake Denmark, and Picatinny Lake.

Cleanup Approach

The site is being addressed in four long-term remedial phases directed at cleanup of Building 24, Building 95, the Burning Ground areas, and the remaining areas of contamination discovered during the 1989 site investigation.

Response Action Status



Building 24 Area: In 1989, the Army selected the following remedies for cleaning up the area around Building 24, with agreement of the EPA and the State: (1) extraction of contaminated groundwater; (2) installation of a pre-treatment system for the removal of metals and solids; (3) air stripping to remove VOCs; (4) filtering to remove VOCs from the air stripper exhaust and additional VOCs from the air stripper effluent; (5) discharging treated water via a holding tank and piping it to Green Pond Brook; (6) operation and maintenance of the system; and (7) effluent monitoring. The Army completed the design requirements for the cleanup of the area. Construction of the groundwater remedy began in December 1990, with operation of the system expected to start in 1991. Cleanup of soils contaminated with heavy metals is being addressed under the Resource Conservation and Recovery Act (RCRA).



RCRA.

Building 95 Area: The Army is conducting a study to determine the extent and the nature of contamination in this area. The study is expected to be completed in late 1992, when cleanup methods will be chosen. Contaminated soils are being investigated under



Burning Ground Area: The Army is investigating this area of the site to determine the nature and extent of contamination in soil groundwater, surface water, and sediment. This study is expected to be completed in early 1992.



Remaining Areas: A site investigation was completed for 35 areas in 1989. Information from this investigation, as well as information from the U.S. Geological Survey on the Building 24, Building 95, and the Burning Ground areas was used as background information for a plan submitted to the EPA in 1991. The concept plan prioritized areas for investigation and listed over 100 new areas for potential cleanup. Several other areas may require cleanup and will become future remedial phases. The investigation will be split into three phases because of the size of the area. The first phase will begin in 1991.

Site Facts: Picatinny Arsenal is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DoD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DoD facilities. An Interagency Agreement was signed by the Army and the EPA in May 1991.

Environmental Progress

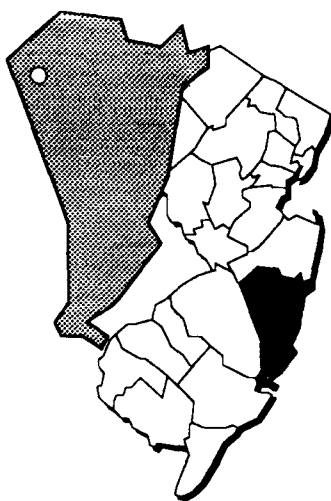


Construction of the groundwater cleanup remedy currently is underway at the Picatinny Arsenal site. While further investigations leading to the selection of final remedies for the remaining contaminated areas are being conducted, the EPA has determined that there is no immediate danger to the nearby residents or the environment.

PIJAK FARM

NEW JERSEY

EPA ID# NJD980532808



REGION 2
CONGRESSIONAL DIST. 13
Ocean County
Plumsted Township

Site Description

The Pijak Farm site is located on Fischer Road, approximately 2 miles northeast of New Egypt. The site area consists of approximately 87 acres and is relatively flat, with portions that drop off into a marshy, wooded flood plain. From 1963 to 1970, drums and free-flowing liquids from a facility disposing of specialty and research chemicals were dumped into a natural ditch that ran through the site and later were covered with soil. There are approximately 3,740 drums on the site. The deteriorated remains of drums are visible along the edge of the flood plain. In 1980, the State found that groundwater was contaminated by organic chemicals. Groundwater is the only source of drinking water in the vicinity of the site. Pijak Farm is one of four NPL sites, including Goose and Spence Farms and the Friedman Property, within a 2-mile radius. An estimated 6,600 people reside within 3 miles of the site, and 1,500 residents depend on groundwater, found only 12 feet below the surface, for drinking water and other domestic purposes. The nearest well is 700 feet from the site. Groundwater also is used for irrigation and stock watering in surrounding agricultural areas. Municipal drinking water wells are located about 2 miles away from the site. Also nearby are Crosswicks Creek and its two unnamed tributaries, which are used for recreation.

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: 09/01/83

Threats and Contaminants



The groundwater is polluted with the volatile organic compound (VOC) benzene and phthalates, a plastics by-product. The sediments and surface waters are contaminated with VOCs and the pesticide DDT. Groundwater is contaminated near the ravine that discharges to Crosswicks Creek and thereby contributes to sediment and surface water contamination. Soil contaminants include the VOC xylene, organic acids, and low concentrations of polychlorinated biphenyls (PCBs). Accidental ingestion or inhalation of airborne dust from DDT-contaminated sediments, drinking the polluted groundwater, or being exposed to the contaminated creek during recreational activities could pose a health threat. The site lies on a flood plain, and if flooding occurs, contamination could migrate from the site. The pollutants may seep deeper into the groundwater, causing further sediment and surface water contamination.

Cleanup Approach

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

Response Action Status



Entire Site: Based on the results of the site investigation, the EPA selected the following methods for cleanup of the site: (1) removal and off-site disposal of all drums and lab packs at a federally approved disposal facility; (2) excavation and off-site disposal of visibly contaminated soil at a federally approved disposal facility; (3) pumping and removal of contaminated groundwater, as necessary, during excavation; (4) monitoring of on-site wells annually for a five-year period; and (5) sediment control during excavation and sampling efforts. The party potentially responsible for the site contamination, under State monitoring, completed the removal and disposal of on-site contaminated drums, lab packs, and soil to an approved facility in late 1990. Monitoring of on-site wells will be continued for an additional four years to ensure the effectiveness of the groundwater treatment remedy.

Site Facts: An Administrative Order on Consent between Morton Thiokol and the New Jersey Department of Environmental Protection was signed in 1985. The EPA filed a suit against Morton Thiokol in December 1986 to recover costs that had been spent thus far in the cleanup process and reached a settlement in 1990.

Environmental Progress

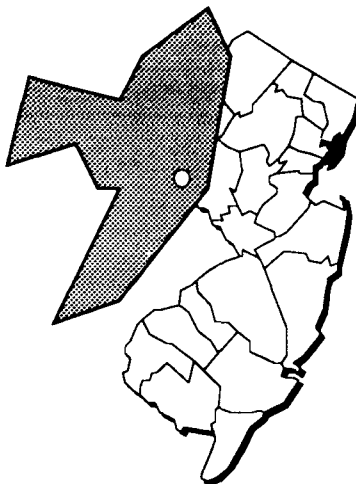


All contaminated surface materials and soils have been removed from the site and were transported to an EPA-approved disposal facility. All cleanup goals have been met, and the Pijak Farm site will be closely monitored to assure the effectiveness of these remedies.

PJP LANDFILL

NEW JERSEY

EPA ID# NJD980505648



EPA REGION 2
CONGRESSIONAL DIST. 14

Hudson County
Jersey City

Other Names:
Pulaski Skyway

Site Description

The PJP Landfill covers 87 acres in Jersey City. The landfill has a history of underground fires. The site may have been used since 1968 to dispose of an unknown quantity of chemical and industrial wastes. The State certified the landfill to receive solid wastes in 1971. The site is presently closed, and it is fenced with an unguarded entrance gate that prevents vehicular access but does not control pedestrian access. Approximately 11,900 people reside within a 1-mile radius of the site. The closest residence is within 1,000 feet of the site. A high-rise apartment complex and a park are within 1/2 mile. The site is bordered by the Hackensack River on the west. The river is used for boating and for commercial shipping.

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

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

Threats and Contaminants



The groundwater in the vicinity of the site is contaminated with the heavy metal chromium, phenols, various pesticides, and volatile organic chemicals (VOCs). The leachate from the site is contaminated with VOCs including benzene and chlorobenzene and the heavy metal lead. Potential health risks exist through the accidental ingestion of or direct contact with contaminated groundwater and leachate. Because it is used for recreational boating, pollution of the Hackensack River could present a health threat.

Cleanup Approach

The site is being addressed in two stages: initial actions and a long-term remedial phase directed at cleanup of the entire site.

Response Action Status _____



Initial Actions: Interim cleanup actions involving major excavation work and capping, were conducted by the State in 1985 to extinguish the fires. In addition, a gas venting system was installed to prevent the buildup of gases under the landfill surface.



Entire Site: The State began an investigation to determine the nature and extent of contamination and to identify alternatives for cleanup. The first phase of the site investigation, which included field sampling, was completed in 1991. Additional studies may be required before the State can select a final cleanup remedy.

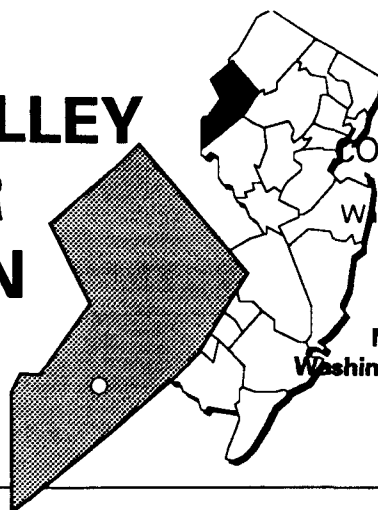
Environmental Progress _____



Initial actions to extinguish the underground fires and the installation of a gas venting system have reduced the potential for exposure to hazardous contaminants at the site. The State currently is conducting an investigation that will lead to the selection of final cleanup remedies for the PJP Landfill site. The EPA has determined that while these investigations are ongoing, the site does not pose an imminent threat to the surrounding communities or the environment.

POHATCONG VALLEY GROUND WATER CONTAMINATION NEW JERSEY

EPA ID# NJD981179047



EPA REGION 2
CONGRESSIONAL DIST. 05

Warren County
Washington and Franklin Townships

Other Names:
Brass Castle-Broadway
New Jersey Water Company
Washington Borough Well Contamination

Site Description

The Pohatcong Valley Ground Water Contamination site involves the contamination of the Kittatinny Limestone Aquifer underlying the Pohatcong Valley. The shallow aquifer serves as the sole source of drinking water for public and private wells in the area. The site includes those portions of Franklin Township, Washington Township, and Washington Borough lying in the Valley and encompasses approximately 5,600 acres. Pohatcong Creek is the primary surface water drainage for the Valley. The creek meanders through the valley in the direction of the Delaware River. Analyses of two public water supply wells in 1978 and 1979 revealed high levels of tetrachloroethylene, prompting the closing of one well and the installation of a carbon filtration system at the other. In 1984 and 1985, the Warren County Health Department identified a number of volatile organic compounds (VOCs) in 79 private wells throughout the Valley. Approximately 12,000 people obtain drinking water from public and private wells within 3 miles of the site. The Kittatinny Limestone Aquifer serves as the sole source of drinking water for both private and public wells in the area.

Site Responsibility: This site is being addressed through Federal, State, and County actions.

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 03/30/89

Threats and Contaminants



The groundwater is polluted with various VOCs. The Pohatcong Valley residents are currently on a new potable water supply. However, a health risk may be present for the 40 residents who refused hookup to newly installed public wells.

Cleanup Approach

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

Response Action Status _____



Immediate Action: In cases where the drinking water exceeded human health safety standards, Warren County supplied bottled water to affected residences. In 1988, the New Jersey Department of Environmental Protection began to hook up affected residences to public water supply wells.



Entire Site: The EPA has begun an extensive investigation to determine the nature and extent of groundwater contamination and to identify alternatives for cleanup. The investigation is scheduled for completion in 1993. Once completed, the EPA will review the study findings and cleanup alternatives and will select the final cleanup remedy.

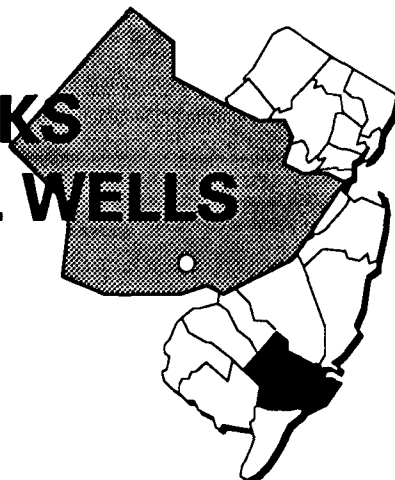
Environmental Progress _____



The provision of a safe drinking water supply has eliminated the potential of exposure to hazardous substances in the drinking water and will continue to protect the households near the Pohatcong Valley Ground Water Contamination site until cleanup activities are completed and groundwater resources are returned to safety standards.

POMONA OAKS RESIDENTIAL WELLS NEW JERSEY

EPA ID# NJD980769350



EPA REGION 2
CONGRESSIONAL DIST. 02
Atlantic County
Galloway Township

Site Description

The Pomona Oaks Residential Wells site provides well service to about 200 single-family homes in a rural residential area of Galloway Township. The residential lots range in size from 1/4 to 1/2 acre and the wells are 50 to 60 feet deep. Initially, nearly all of the 200 homes in the residential area relied upon private wells as the sole source of drinking water. In 1982, residents complained to the State about a foul taste and odor in their drinking water. Subsequent sampling showed the presence of volatile organic compounds (VOCs) in the water, which resulted in bottled water being provided to some of the area residents. By 1985, all Pomona Oaks subdivision residences were connected to the nearby Absecon water supply. A new primary water well for the community was designed and constructed by the State and is now operative. Existing wells at the site have been sealed. Approximately 8,000 people live within 3 miles of the site.

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

NPL LISTING HISTORY

Proposed Date: 10/01/84

Final Date: 06/01/86

Threats and Contaminants



Testing for a variety of indoor air contaminants detected the presence of the VOCs benzene and xylenes, as well as aromatics. The groundwater is contaminated with VOCs. Actions taken in 1984 and 1989 to replace private wells with a public water supply and the installation of a new primary well have eliminated any health threat from contaminated groundwater.

Cleanup Approach

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

Response Action Status



Immediate Actions: In 1985, the EPA began providing bottled water to area residents. The local water supplier, New Jersey Water Co., extended water lines, and the distribution system was installed in 1985 to serve the affected homes. Existing wells at the site have been sealed. A new primary water well for the community was designed by the State, and construction was completed in 1988. The well was put in service in August 1989.



Groundwater: The EPA began a study into the nature and extent of air and groundwater contamination at the site in 1986. A report detailing the study results was issued in 1990. It was determined that no further action is necessary at this site because contamination levels have fallen below levels requiring cleanup action, and nearby residents have been provided with safe drinking water. The New Jersey Department of Environmental Protection is overseeing groundwater monitoring and conducting sampling downgradient of the site to ensure there is no threat to the public or the environment. The EPA currently is developing a groundwater monitoring plan, which is scheduled to be put in place in late 1991.

Environmental Progress

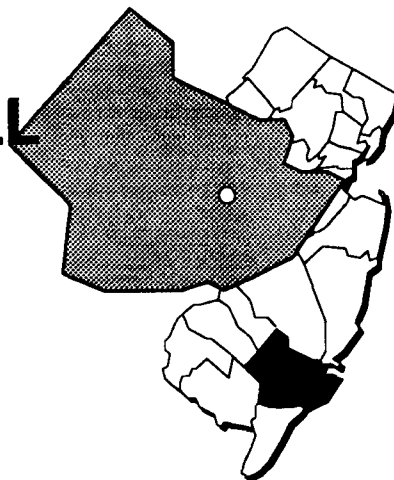


By providing an alternate safe drinking water source to the residents of the Pomona Oaks subdivision, the possibility of exposure to polluted water was virtually eliminated. The investigations into the extent of the contamination have been completed, and it was determined that the site no longer poses a threat to the surrounding community or the environment. Procedures to remove the site from the NPL are underway, and the EPA will continue to monitor conditions at the site and will report the results to the public.

PRICE LANDFILL

NEW JERSEY

EPA ID# NJD070281175



EPA REGION 2

CONGRESSIONAL DIST. 02

Atlantic County
Egg Harbor Township

Other Names:
Price Chem Dump
Price's Pit

Site Description

The 26-acre Price Landfill site is located in Egg Harbor Township. The site originally was a sand and gravel excavation operation that closed in 1968. Beginning in 1971, the Price landfilling operation began to accept a combination of both drummed and bulk liquid wastes. Initial listings of wastes consisted of industrial chemicals, sludges, oil, grease, septic tank, and sewer wastes. Tank trucks emptied bulk waste into the pit, and others dumped punctured and unpunctured drums. Chemical waste disposal ended in late 1972, sludge disposal in spring 1973, and municipal waste disposal ended in 1976. During its operation, it is estimated that over 9 million gallons of chemical waste were disposed of at the site. Groundwater in the area is seriously contaminated. The drinking water supply for Atlantic City had been threatened until relocation of the water supply wells took place. Approximately 100 houses are located within 1 1/2 miles of the site, with a total population estimated at 380. Land use in the immediate area consists of residential properties, small business properties, sand and gravel excavations, and undeveloped rural lots. There are four sites on the NPL and three other landfills in the drainage basin feeding Absecon Creek, which runs near the site. Illegal dumping still is occurring.

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: 09/01/83

Threats and Contaminants



Groundwater is contaminated with heavy metals including lead and cadmium, and the volatile organic compounds (VOCs) benzene, chloroform, vinyl chloride, and methylene chloride. Health risks may exist for individuals accidentally drinking or coming in direct contact with contaminated groundwater. Groundwater contamination also may threaten Absecon Creek and other nearby creeks.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on wells/plume management/source control and cleanup of the entire site.

Response Action Status



Immediate Actions: The EPA provided drinking water from tank trucks to the affected residences and, in 1981, 37 affected residences were connected to the New Jersey Water Company (NJWC) system. To ensure that the contaminant plume would not reach the Atlantic County Municipal Utilities Authority (ACMUA) public water supply well field, the EPA and the State of New Jersey constructed an interconnection with the NJWC System, redeveloped three ACMUA production wells, installed granular activated carbon filtration units, and implemented a water conservation program.



Wells/Plume Management/Source Control: From 1983 to 1985, the State replaced and relocated the ACMUA water supply well field and transmission facilities and conducted additional analysis of the plume management, source control, and treatment alternatives.



Entire Site: The EPA has selected the following site cleanup actions: (1) installation of a security fence around the landfill site; (2) installation of groundwater extraction wells adjacent to the landfill to control the contaminant source; (3) installation of groundwater extraction wells hydraulically downgradient from the landfill to stop the contaminant plume; (4) construction of a groundwater/leachate pre-treatment facility at or near the site; (5) construction of a force main to the ACMUA interceptor system; (6) extraction of contaminated groundwater followed by pre-treatment and ultimate disposal and treatment at the ACMUA wastewater treatment plant; (7) quarterly monitoring of groundwater for approximately 25 years; and (8) construction of a landfill cap at the conclusion of the groundwater extraction process. The State began design of the various cleanup alternatives in 1987. Design activities recently were halted when the ACMUA wastewater treatment plant refused to accept wastewater from the on-site treatment facility. The New Jersey Department of Environmental Protection currently is reviewing alternatives for on-site disposal of the groundwater.

Site Facts: Notice letters were sent to potentially responsible parties in February 1982, and in January 1987. The EPA, the State of New Jersey, and the ACMUA reached an agreement with approximately 50 companies and individuals to provide for the payment of part of the costs of cleaning up the landfill. This sum will remain in an escrow account, subject to the final negotiation of a judicial Consent Decree.

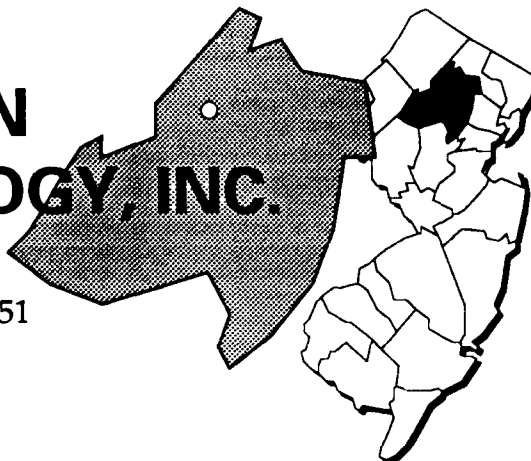
Environmental Progress



An interceptor system was installed to prevent the migration of the contaminant plume from the Price Landfill site from reaching the Atlantic City Municipal Utilities Authority water system, and affected residents have been supplied with a safe drinking water source, thus significantly reducing the potential for exposure to contaminated groundwater while the site awaits final cleanup actions.

RADIATION TECHNOLOGY, INC. NEW JERSEY

EPA ID# NJD047684451



EPA REGION 2
CONGRESSIONAL DIST. 11
Morris County
Rockaway Township

Site Description

Radiation Technology, Inc. (RTI) is located on a 15-acre site close to Lake Denmark in Rockaway Township. Since 1970, operations on the site have included radiation sterilization, production of architectural products, and production and finishing of hardwood flooring. Radiation sterilization is the only activity currently performed at the facility. Beginning in 1980, the New Jersey Department of Environmental Protection (NJDEP) and the Rockaway Township Health Department (RTHD) conducted numerous inspections of the site. These inspections revealed that the company improperly stored and disposed of waste drums containing solvents and other organic chemicals. In 1981, the RTHD sampled two RTI water supply wells. Results indicated that volatile organic compounds (VOCs) had contaminated the groundwater supplying these wells. They subsequently were condemned by the New Jersey Department of Health and the NJDEP and were closed. The area is totally dependent upon groundwater for drinking supplies. The size of the population within a 2-mile radius of the site is 20,000. The area around the site is generally rural and light industrial. The site is immediately northeast of the U.S. Army Picatinny Arsenal facility, which also is on the NPL. The wooded areas surrounding the site are used for hunting.

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

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Groundwater has been contaminated with VOCs including benzene, carbon tetrachloride, and trichloroethylene (TCE). A surface water stream, originating from a production well and connected to Lake Denmark, also was found to be contaminated with VOCs. Lake Denmark and its aquatic life may be threatened from groundwater and surface water VOC contamination. Health risks may exist for individuals who drink the contaminated well water or come into direct contact with the contaminated waters. Although the two on-site wells at the site are not used now for drinking water, one of them previously was used as a drinking well. Thus, individuals drinking from this well prior to 1981 may have been exposed to VOCs.

Cleanup Approach

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

Response Action Status



Entire Site: The State initiated an investigation to determine the type and extent of contamination on the site and to identify alternative technologies for the cleanup. The majority of the remaining field work involves sampling and analysis of the monitoring wells. The investigation is expected to be completed in 1992.

Site Facts: On July 6, 1983, the NJDEP and Radiation Technology, Inc. signed a judicial Consent Order. This Order required Radiation Technology to install groundwater monitoring wells and to collect samples for VOC analyses to determine the source of the contamination. On March 12, 1987, Radiation Technology entered into an Administrative Order on Consent with the NJDEP and agreed to pay the cost of an investigation into the nature and extent of contamination at the site.

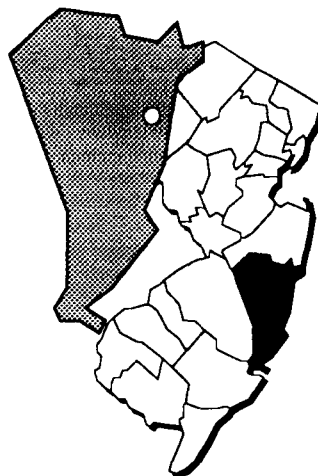
Environmental Progress



The investigation leading to the selection of final cleanup technologies is underway. While these studies are taking place, the EPA has determined that the Radiation Technology site does not pose an imminent threat to the surrounding residents or the environment.

REICH FARMS NEW JERSEY

EPA ID# NJD980529713



EPA REGION 2 CONGRESSIONAL DIST. 03

Ocean County
1 mile northeast of Toms River
in Dover Township

Site Description

The Reich Farm site is an open, relatively flat, sandy area covering approximately 3 acres in Dover Township. The site is surrounded by commercial facilities and wooded areas. During a 5-month period in 1971, the site, which had been leased from the Reich Farm owners by an independent waste hauler, was used illegally for the disposal of drums containing organic solvents, still bottoms, and residues from the manufacturing of organic chemicals, plastics, and resins. In December 1971, the owners of the property discovered approximately 4,500 drums containing wastes on a portion of the land that they had rented out. These drums bore labels indicating that they belonged to the Union Carbide Corporation. Trenches into which wastes were believed to have been dumped also were found. From 1972 to 1974, drums, trench waste, and contaminated soil were removed from the site by Union Carbide. In addition, contaminated private wells were closed and a zoning ordinance was passed preventing further groundwater use in the area. Approximately 565 people work or live within a 1/4-mile radius of the site. The population served by groundwater within a 3-mile radius of the site is 106,500. The nearest residence is about 1,500 feet southwest of the site. Land use in the general vicinity of the site is predominantly commercial, residential, and agricultural. The area overlies the Cohansey aquifer, a major source of drinking water for Dover Township and the surrounding area. The site is located 1,000 feet from an intermittent stream draining into the Toms River.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater is contaminated with low levels of organics, including trichloroethylene (TCE). The volatile organic compounds (VOCs) toluene and TCE were detected in soils just east of a construction company shop building located on site. The surface soils on site show no significant contamination; however, hot spots are present in the subsurface soils. These hot spots are contaminated with both VOCs and semi-volatile organics. Potential health risks exist for individuals, especially on-site workers, who make direct contact with or accidentally ingest the contaminated soils or groundwater.

Cleanup Approach

The site is being addressed in two stages: initial actions and a long-term remedial phase directed at the cleanup of the entire site.

Response Action Status



Initial Actions: In 1972, approximately 5,095 drums and trench wastes were removed. In 1974, about 50 drums and approximately 1,100 cubic yards of contaminated soil were removed from the site by Union Carbide. Also in 1974, 148 private wells near the Reich Farm site were ordered closed by the Dover Township Board of Health after sampling of a number of wells indicated the presence of organic contaminants. A zoning ordinance restricting groundwater use was established in the area of Reich Farm, based on a recommendation by the New Jersey Department of Environmental Protection. Residences in the immediate vicinity of the site are connected to a permanent alternate water supply.



Entire Site: The remedies selected by the EPA to clean up the site include: (1) the installation of extraction wells; (2) treatment of extracted groundwater by air stripping and carbon adsorption; (3) discharge of the treated groundwater into injection wells upgradient of the site; (4) excavation of approximately 1,100 cubic yards of soil contaminated with VOCs and treatment in an enhanced volatilization unit; (5) backfilling the excavated area with the treated soils; (6) excavation of approximately 900 cubic yards of soil contaminated with semi-volatile organics and off-site incineration; and (7) off-site disposal of the soil at an EPA-approved facility and backfilling with clean fill. Under EPA monitoring, Union Carbide is undertaking additional sampling and performing treatability studies on alternate soil treatment technologies, as well as treatability studies on the chosen soil remedy. Based on these studies, the EPA will approve the most appropriate soil treatment method. Union Carbide will complete the technical design in late 1992.

Site Facts: Notification/Information Request Letters were sent to the parties potentially responsible for the contamination in October 1983. A Consent Decree between the potentially responsible parties and the EPA was entered in court in March 1990. Under this decree, Union Carbide will perform cleanup activities at the site, and the property owners will provide access.

Environmental Progress

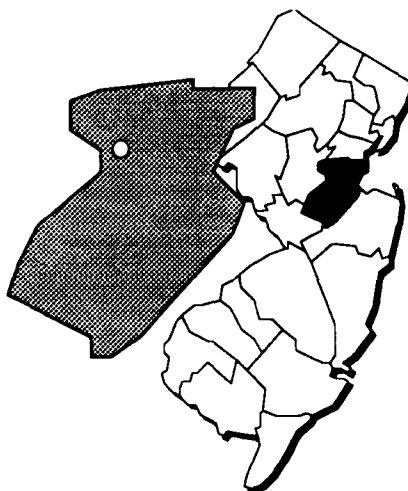


The removal of drums, wastes, and contaminated soil and the restriction of groundwater use have reduced the threat of exposure to contaminants at the Reich Farms site. The remedy selections have been made and reviewed by the EPA. The potentially responsible party has begun the design of the selected technologies. While these activities are taking place, the EPA has determined that the site does not pose an imminent threat to the surrounding residents or the environment.

RENORA, INC.

NEW JERSEY

EPA ID# NJD070415005



REGION 2
CONGRESSIONAL DIST. 06
Middlesex County
Edison Township

Site Description

The 1-acre Renora, Inc. site was used for the collection and hauling of waste oil and hazardous wastes from 1978 to 1982. During its operation, oils and hazardous waste materials were accepted, stored, blended, and, ultimately, placed in drums and abandoned at the site. The New Jersey Department of Environmental Protection (NJDEP) inspection reports consistently noted lack of site security, poor housekeeping, and leaking drums and tankers. The NJDEP detected several minor spills on site in 1978 and subsequently determined that Renora lacked the proper registration to act as a special waste transfer station. In 1980, the NJDEP ordered Renora to cease all activities and clean up the site. Subsequent investigation by the NJDEP showed that, while Renora had ceased operations, it had not begun any efforts to clean up the site. As a result, Renora's license was revoked. All cleanup activities at the site by the owner ceased in 1980 due to lack of funds. The site was abandoned in 1982, after more than a year of inactivity. The site presently is enclosed by a chain-link fence. The site is located in a heavily populated area of Edison Township. Approximately 2,200 people live in Bonhantown within the Township.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater underlying the site area is contaminated with various heavy metals and volatile organic compounds (VOCs). Sediments are contaminated with polycyclic aromatic hydrocarbons (PAHs) and heavy metals including cadmium and zinc. The soil was contaminated with polychlorinated biphenyls (PCBs) and still is contaminated with PAHs, VOCs, and heavy metals including zinc and cadmium. Surface water is contaminated with cadmium and zinc. On-site workers and, to a lesser extent, area residents could be exposed to site-related contaminants through direct contact.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the entire site and cleanup of PAH-contaminated soils.

Response Action Status



Immediate Actions: The EPA started removing site contaminants in 1984, and the potentially responsible parties took over these actions under EPA monitoring shortly thereafter. Approximately 1,000 drums, 20 to 30 tankers, truck trailers, and 200 tons of visibly contaminated soils have been removed from the site.



Entire Site: The EPA selected cleanup remedies for contamination at the site, which include: removal of PCB-contaminated soils and placement in an EPA-approved hazardous waste landfill; on-site treatment of PAH-contaminated soils using bioremediation; and decontamination of the groundwater by using it as an irrigation mechanism in the bioremediation. The removal of PCB-contaminated soils was completed in 1990. Approximately 2,000 cubic yards of soil containing PCBs was excavated and transported to an off-site federally approved facility. Remaining contaminated soils will be cleaned up by the potentially responsible parties, under EPA monitoring.



PAH-Contaminated Soils: Additional studies showed bioremediation of the PAH-contaminated soils to be an ineffective treatment; therefore, new studies are underway to re-define this contamination and to investigate alternatives for cleanup. These new studies are expected to be completed in late 1991.

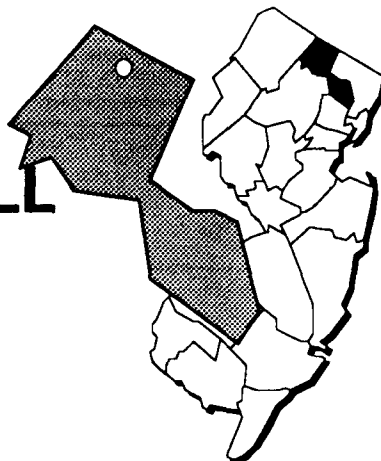
Environmental Progress



The cleanup actions described above have removed the exposed sources of contamination and have greatly reduced the potential for exposure to hazardous materials at the Renora, Inc. site. Continuing actions at the site will reduce soil and groundwater contamination to safety levels.

RINGWOOD MINES/LANDFILL NEW JERSEY

EPA ID# NJD980529739



EPA REGION 2
CONGRESSIONAL DIST. 05
Passaic County
Ringwood Borough

Site Description

Magnetite mines were operated on the 500-acre Ringwood Mines/Landfill site as early as the 1700s, and wastes have been disposed of at the site since the 1960s. The site is about 1/2 mile wide and 1 1/2 miles long and consists of rugged forested areas, open areas overgrown with vegetation, abandoned mine shafts and surface pits, an inactive landfill, an industrial refuse disposal area, small surficial dumps, a municipal recycling center, the Ringwood Borough garage, and about 50 private homes. Two abandoned mines, Peter's Mine and Cannon Mine, have been filled with garbage over the years. Peter's Mine also contains paint sludges, solvents, and scrap metal. Several drums have been observed in Cannon Mine. Mining ended at the site in the early 1900s, and the history of the site is unclear from then until the late 1930s. The site was purchased by the U.S. Government prior to 1940 and later was sold to a succession of owners. From 1967 until 1974, Ringwood Realty, one of the former owners, deposited waste products for Ford Motor Company including car parts, solvents, and paint sludges, on the ground surface and in abandoned mine shafts. In 1970, Ringwood Realty donated 290 acres in the southern portion of the site to the Ringwood Solid Waste Management Authority, which began operating a permitted municipal disposal area in 1972. The landfill was closed by the State in 1976. Groundwater beneath the site discharges to surface streams and the Wanaque Reservoir, located 1/2 mile southeast of the on-site sludge disposal area. The area around the site is primarily residential, with about 50 residences located on or near disposal areas. Approximately 20 water supply wells draw water from the bedrock aquifer, which supplies a few residences and industries in the area. Approximately 13,000 people live in Ringwood Borough. The Wanaque Reservoir provides drinking water to about 650,000 people.

Site Responsibility: This 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



Stream sediments are contaminated with the heavy metals cadmium and lead, while streams on and near the site are contaminated with the volatile organic compound (VOC) methylene chloride. On-site soils are contaminated with lead. VOCs and heavy metals have been found in the groundwater. The primary health concern associated with this site is the risk to people who accidentally ingest contaminated soils. The removal of contaminated soil eliminated the health threat from direct contact with soil. There is a potential health risk associated with eating garden-grown foods that were watered with contaminated groundwater.

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: From 1987 to 1988, a potentially responsible party, Ford International Services, Inc., removed 7,000 cubic yards of surficial paint sludge containing lead and arsenic from four on-site areas and disposed of it off site.



Entire Site: Cleanup technologies selected to address groundwater, surface water, soil, and sediment contamination include: sampling of soil, with excavation and off-site disposal of soil confirmed to be contaminated; backfilling and revegetation of soil; and groundwater, surface water, and wetlands monitoring. Long-term groundwater and surface water monitoring has begun at the site and will last a minimum of 30 years. Groundwater treatment is not needed because area groundwater is not used as a drinking water source. Also, attenuation of contaminants through natural biodegradation is expected to reduce levels adequately once the source of contamination is cleaned up. In early 1990, during soil excavation, 60 drums containing wastes were discovered. The drums were removed and disposed of off-site. Although further testing of the site may be required, the potentially responsible party, under EPA supervision, is proceeding with an oversight and maintenance phase for the site. The EPA anticipates deleting the site from the NPL in 1995.

Site Facts: The EPA issued an Administrative Order to Ford International Services, Inc. to clean up soil contamination and to eliminate health and environmental risks associated with the site.

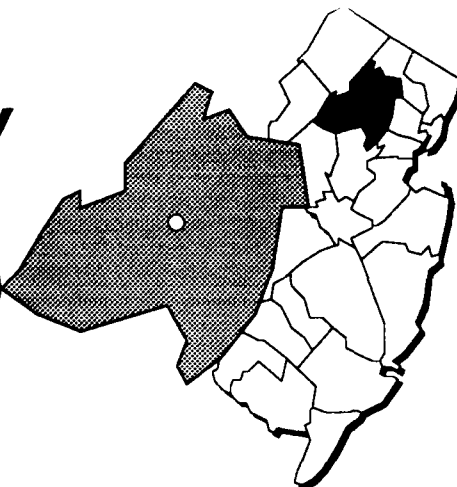
Environmental Progress



By removing the contaminated soil and drums containing hazardous wastes and disposing of it off site, the potential for exposure to hazardous materials from the Ringwood Mines/Landfill site has been virtually eliminated. Since the groundwater is not used as a drinking water source, it does not pose a threat to any of the surrounding residents. Continuous monitoring of the site will ensure the safety of public health and the environment.

ROCKAWAY BOROUGH WELL FIELD NEW JERSEY

EPA ID# NJD980654115



EPA REGION 2
CONGRESSIONAL DIST. 11
Morris County
Rockaway Township

Site Description

The Rockaway Borough Well Field site covers a 2-square-mile area and consists of three municipal water supply wells, which are located in a glacial aquifer designated by the EPA as the sole source aquifer for Rockaway Borough and the surrounding communities. Eight other wells previously used for potable water supply by the Borough were abandoned because of their lack of productivity. In 1980, volatile organic compounds (VOCs) were detected in the municipal wells. The contaminated wells are close to the Rockaway River, which runs through the center of the Borough. The site is located in a suburban residential setting and is surrounded by homes, businesses, and municipal property. The Borough of Rockaway's municipal wells supply potable water to about 11,000 people.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Although thirteen VOCs have been detected in the well water, trichloroethylene (TCE) and tetrachloroethylene (PCE) are the primary contaminants of concern. Threats to the health of people include exposure to TCE and PCE through drinking or direct contact with groundwater.

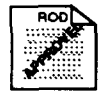
Cleanup Approach

This site is being addressed in three stages: initial actions and two long-term remedial actions focusing on cleanup of the wells and the source of the contamination.

Response Action Status



Initial Actions: In 1981, an emergency was declared, and the residents supplied by the distribution system were advised not to use their tap water for drinking and cooking. Temporary drinking water supplies were trucked in by the National Guard. In 1981, the Borough installed an activated carbon water treatment system to reduce contaminant concentrations.



Wells: Rockaway Borough is maintaining the existing filtration system to ensure compliance with Safe Drinking Water Act standards. The water is being monitored by the Borough on a monthly basis since the installation of a carbon water treatment system.



Source Control: The EPA currently is continuing its study into the identification of contaminant sources, further delineation of the full extent of contamination, and evaluation of additional alternatives for final groundwater cleanup. The study is planned to be completed in late 1991.

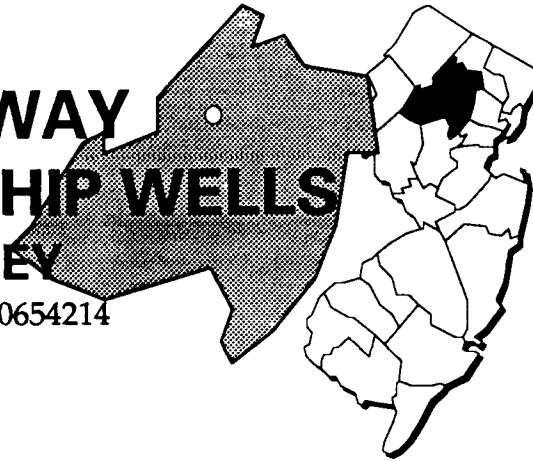
Environmental Progress



The installation of a water filtration system has significantly reduced the threat of exposure to contaminants in drinking water while investigations leading to the selection of a final cleanup remedy at the Rockaway Borough Well are being continued.

ROCKAWAY TOWNSHIP WELLS NEW JERSEY

EPA ID# NJD980654214



EPA REGION 2
CONGRESSIONAL DIST. 08
Morris County
Rockaway Township

Site Description

The Rockaway Township Wells site is a 2-square-mile well field area containing a cluster of three municipal wells within 100 feet of each other. In 1979 and 1980, the wells were found to contain a variety of volatile organic compounds (VOCs). Two gasoline service stations, freight and transit facilities, and industrial properties are located near the well field. Groundwater contamination in the area appears to have resulted from several sources, including the gasoline stations and industrial facilities. Monitoring wells in the area indicated widespread contamination by chlorinated solvents and fuel components. In 1980, a treatment system for the combined pumping of the wells was installed and included an air stripping unit and an activated carbon filtration system. Only two of the three wells currently are in operation. The two operative wells serve 12,500 people and are located adjacent to White Meadow Brook, between Green Pond and Ford Roads. The Valley Fill aquifer is the only water supply source capable of meeting the Township's water demand.

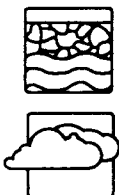
Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater is contaminated with VOCs including trichloroethylene (TCE). Inhaling volatilized organics released into indoor air during water use and ingesting and direct contact with contaminated water were potential health threats prior to the installation of the water treatment systems.

Cleanup Approach

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

Response Action Status



Immediate Actions: The Shell Oil Company, under EPA and State monitoring, installed an air stripping system to remove ether contamination from the water. The Township installed an activated carbon system to remove other volatile organics.



Entire Site: The EPA and the State currently are conducting a study into the nature and extent of groundwater contamination at the site. The study will define the contaminants of concern and will recommend effective alternatives for final groundwater cleanup. The investigation is planned to be completed in 1992. Once completed, the EPA will evaluate the study findings and select a final remedy for groundwater treatment and any other contaminated areas identified in the study.

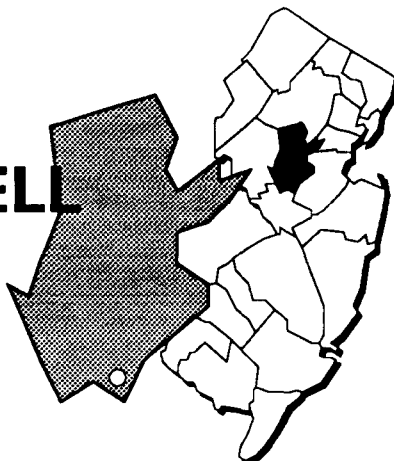
Environmental Progress



An activated carbon system to remove contaminants has been installed at the Rockaway Township Water Department, which has proven to be effective in reducing the potential for residents to be exposed to contaminated groundwater. A study leading to a final remedy selection for the groundwater contamination currently is taking place.

ROCKY HILL MUNICIPAL WELL NEW JERSEY

EPA ID# NJD980654156



EPA REGION 2
CONGRESSIONAL DIST. 12
Somerset County
Rocky Hill Borough

Site Description

The Rocky Hill Municipal Well site covers 2 acres in Somerset County and consists of two wells that were constructed in 1936 to supply the residents of the Borough of Rocky Hill with a source of drinking water. In 1978, the first well was sealed and abandoned because it was contaminated with trichloroethylene (TCE). The second well continued to operate until 1979, when it was also closed due to high levels of TCE. The well reopened for a short time when TCE levels declined, only to be closed again in 1982, when contamination levels increased in the groundwater. The Borough temporarily used a private municipal water supply until an air stripper could be installed on the municipal well. Studies of the site in 1988 found that a septic tank in the area was a probable source of the TCE contamination. Approximately 7,200 people depend on the Rocky Hill Municipal Well as a drinking water resource. The area that surrounds the site is wooded, and land use is primarily agricultural and residential.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater at the site is contaminated with the heavy metals arsenic and beryllium; chlordane, a pesticide; and TCE. TCE is the main contaminant at this site and the presence of other chemicals may be unrelated to it. The contaminated groundwater is treated before the residents of Rocky Hill receive it. However, they could inhale air contaminated with TCE and other volatile organic compounds (VOCs) if the volatile contaminants were to migrate into enclosed spaces. Part of the Borough of Rocky Hill is located on the State and National registers of historic places.

Cleanup Approach

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

Response Action Status



Entire Site: Following the closure and temporary treatments of the wells, the State conducted an investigation into alternatives for groundwater cleanup. The remedy chosen for this site includes: (1) continuing groundwater extraction and on-site treatment through air stripping and reinjecting the treated water into the ground; (2) connecting residences still using private well water to the public water supply; and (3) sealing private water supply wells that are affected and installing wells to monitor the contaminant plume. Residents using private wells have been connected to alternate water supplies. The design of the cleanup method began in 1989 and is expected to continue until late 1992. The EPA expects to start the cleanup of the contaminated groundwater shortly thereafter.

Environmental Progress

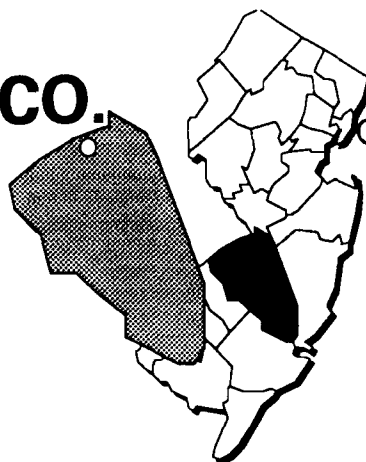


The affected residences have been supplied with an alternate safe drinking water supply, thereby reducing the potential for residents to be exposed to contaminated groundwater at the Rocky Hill Municipal Wells site. The air stripping treatment system continues to remove contamination from impacted groundwater and will be operated until safety levels are achieved.

ROEBLING STEEL CO.

NEW JERSEY

EPA ID# NJD073732257



EPA REGION 2
CONGRESSIONAL DIST. 04
Burlington County
Florence

Other Names:
John A. Roebling Steel Co.
JARSCO

Site Description

The Roebling Steel Company site occupies 206 acres of a former manufacturing plant for steel and wire products located next to the Delaware River on 2nd Street in Florence. The Roebling Steel Co. has been producing steel wire and cable at this site for the last 75 years. Fifty-five buildings occupy most of the site and are connected by a series of paved and unpaved roads. More recently, portions of the site were used for housing polymer reclamation operations, storing insulating products, refurbishing refrigerated trailers and shipping containers, and construction equipment storage. The raw materials and waste products that these operations produced are stored or buried in several on-site locations. The site includes two inactive sludge lagoons, a steel furnace slag pile, a baghouse containing dust from plant emissions, various electrical transformers that contain oil tainted with polychlorinated biphenyls (PCBs), several trailer trucks with unknown contents, soils soaked with oils, storage tanks and drums that contain oil and other potentially hazardous materials, an abandoned landfill, and a slag pile. Sporadic vandalism has occurred since the plant stopped operations; several buildings have been partially destroyed, a pile of old tires was set on fire, and a building housing a chemical laboratory was destroyed by fire. The site is next to the Delaware River, and the groundwater under it is only about 10 feet below the ground surface. Approximately 12,000 people in the area depend on the groundwater for their drinking water, supplied by private and municipal wells within 3 miles of the site. The distance from the site to the nearest well is 2,000 feet. Residents in the area use the Delaware River and a wetland next to the site for recreation.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Buildings on the site contained exposed asbestos and chemical dust. Transformers near some of the buildings have leaked oils tainted with PCBs onto the ground. Groundwater under the site potentially is contaminated with various heavy metals including chromium, lead, cadmium, nickel, zinc, and copper. Sediments on the site potentially are contaminated with lead and polycyclic aromatic hydrocarbons (PAHs). The soil at the site and an adjacent playground is contaminated with heavy metals including lead. People on or off site could come into direct contact with hazardous materials or could accidentally inhale contaminated materials from exposed asbestos, aboveground storage tanks, PCB-containing transformers, and piles of chemicals. Runoff from precipitation on the site may have contaminated the Delaware River, which is next to the site.

Cleanup Approach

The site is being addressed in four stages: immediate actions and three long-term remedial phases focusing on interim action plans, cleanup of the slag area and Southeast Park, and cleanup of the remaining site contamination.

Response Action Status



Immediate Actions: Approximately 300 lab pack containers of chemicals were collected, removed, and properly disposed of by the EPA. Approximately 3,200 full and empty drums were sampled and disposed of at federally permitted facilities, and 120 cubic yards of crushed and emptied drums were removed to an EPA-approved hazardous waste landfill. Three pounds of metallic mercury were collected, repackaged, and sent to a recycling facility for distillation and reuse. Over 35 tons of baghouse dust were secured with tarps and barriers. One drum of hazardous waste-containing cyanide was shipped to an approved treatment facility, and 10 compressed gas cylinders were returned to manufacturers for proper reuse and recycling or were treated on site. Approximately 3,000 gallons of sulfuric acid and 2,150 gallons of phosphoric acid were sampled, analyzed, and removed from two large aboveground tanks and sent off site for reuse; 239,000 pounds of base neutral solids in drums were consolidated and shipped to a permitted facility. The New Jersey Department of Environmental Protection packaged and removed picric acid and other chemicals found in the labs and shipped them to an approved treatment facility. Exposed asbestos in a potential personnel entry zone was wrapped and contained.



Interim Action: In 1990, the EPA selected a remedy to address contaminated materials remaining on the site which included: (1) overpacking drums and off-site disposal; (2) off-site shipment of transformers; (3) bulking of tank contents and off-site disposal; (4) off-site treatment and disposal of baghouse dust and chemical piles; (5) off-site disposal of tires; and (6) excavating, off-site treatment, and disposal of water tower soil. The EPA plans to take measures to restrict access to the slag pile by installing a fence and removing and disposing of lead-contaminated soils from the adjacent playground. The EPA completed the technical designs for the cleanup and began construction in late 1990. Excavation of contaminated water tower soil also has been completed. Cleanup activities are scheduled to be completed in mid-1991.



Slag Area and Southeast Park: An investigation into the nature and extent of contamination at the 34-acre slag disposal area and the southeast portion of the park began in 1990. This study is planned for completion in mid-1991. The EPA will then decide on the best cleanup approach for this area.



Remaining Contamination: The EPA started to study the site contamination and options for cleaning up remaining contamination areas in 1984. The study addresses surface and subsurface soils, surface water, sediments, groundwater, air quality, buildings, landfills, lagoons, and other remaining contamination sources at the site. The first phase of this study is expected to be completed by the end of 1991.

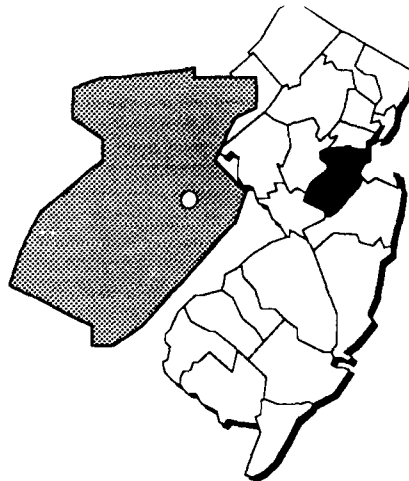
Environmental Progress



The EPA initiated and carried out numerous waste removal actions at the Roebling Steel Company site, thereby significantly reducing the potential for exposure to hazardous materials on or off the site. A fence has been installed to restrict access to areas of the site. Other actions to remove the contaminated materials at the site currently are being designed and will eliminate surface contamination. Investigations leading to a final remedy for the entire site cleanup currently are underway and will address remaining contamination and will lead to final cleanup of the site.

SAYREVILLE LANDFILL NEW JERSEY

EPA ID# NJD980505754



EPA REGION 2
CONGRESSIONAL DIST. 06
Middlesex County
Sayreville

Site Description

The Sayreville Landfill is an inactive municipal landfill covering approximately 30 acres in a moderately industrialized area. The site is one of a series of disposal operations located along the tidal South River. The town owned and operated the site as a municipal landfill beginning in 1970. It was licensed to receive municipal waste and light industrial waste; however, hazardous waste allegedly also was disposed of during operations and after closure in 1977. Part of the site is in a wetland adjacent to the South River. Approximately 67,000 people live within a 3-mile radius of the site, and the closest residence is located 1/2 mile away. Because of the tidal influence and the infusion of salt water, private wells in the area are not used. The Sayreville and Perth Amboy well fields are within 3 miles of the site. Sayreville has not detected any contamination in its municipal well. There are other municipal wells in the vicinity, which are tested regularly. These wells draw from aquifers as yet unaffected by the site.

Site Responsibility: This 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



Heavy metals including iron and manganese, phenol, the volatile organic compound (VOC) benzene, and polycyclic aromatic hydrocarbons (PAHs) were detected in on-site groundwater. Iron also was detected in off-site well water. The VOC toluene and pesticides including aldrin and endrin were detected in on-site landfill liquids. Sediments contain toluene and trichloroethylene (TCE). Surface water is contaminated with cadmium and lead. Benzene, arsenic, and chloroform were detected in on-site soils.



Groundwater and leachate from the landfill discharge into the South River; however, due to mixing in the river, the contamination from the landfill was not detected in the river waters. The South River flows into the Raritan River, which already has been condemned for fishing because of contamination from a source other than this site.



Potential risks may exist for those individuals coming in direct contact with the contaminated leachate and surface water or those individuals consuming fish or other aquatic life from the contaminated river.



Cleanup Approach

The site is being addressed in three stages: initial actions and two long-term remedial phases directed at cleanup of the entire site, as well as leachate collection and cleanup of river sediments.

Response Action Status



Initial Actions: The New Jersey Department of Environmental Protection in coordination with the New Jersey Division of Criminal Justice, excavated and sampled 30 drums from the site in 1982. More drums may exist on site.



Entire Site: The EPA selected a remedy for cleanup of the site in 1990. The remedy includes the removing of hazardous waste drums and thermal treatment of the wastes off site, capping the site, and installing a stormwater control system and a methane gas collection system. Design of the remedy was initiated later that year. Cleanup activities will begin once the design of the remedy is completed.



Leachate Collections and River Sediments: Investigations leading to the final selection of a leachate collection system and cleanup of river sediments have been underway since late 1990. These investigations are expected to be completed in 1993.

Site Facts: The State signed an Administrative Order on Consent with the potentially responsible parties in 1986 requiring that they fund the investigation to determine the type and extent of contamination.

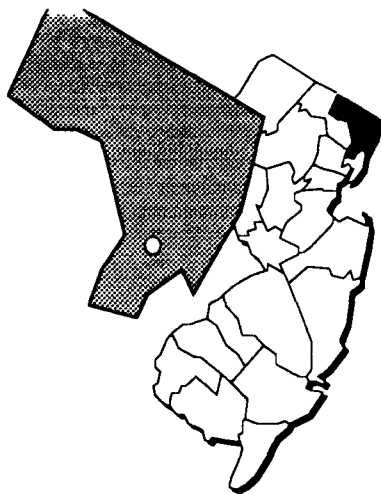
Environmental Progress



Initial actions have been completed to remove drums from the surface of the site. The EPA has determined that the Sayreville Landfill site does not pose an imminent threat to the surrounding community or the environment while the design of cleanup activities for the hazardous wastes is underway and further studies are being completed.

SCIENTIFIC CHEMICAL PROCESSING NEW JERSEY

EPA ID# NJD070565403



EPA REGION 2
CONGRESSIONAL DIST. 09
Bergen County
Carlstadt

Site Description

The Scientific Chemical Processing site covers 6 acres and is located in a light industrial area of Carlstadt. This site is a former waste processing facility that accepted various wastes for recovery and disposal. About 375,000 gallons of hazardous substances were stored on site in tanks, drums, and tank trailers. The site shut down operations in 1980 in response to a court order. Some company officials have received fines and jail terms for illegally dumping hazardous waste. In 1979 to 1980, drums and contaminated soil were removed. The site now is vacant, except for two small buildings, a roll-off container holding a polychlorinated biphenyl (PCB) sludge tank, several concrete slabs, and piles of construction rubble left from the demolition of other site structures. The site is located within a coastal wetlands management area, bordered on the northeast by Peach Island Creek, a tidal waterway. Local surface water is used for recreation and industrial water supplies. Three private residences are within a mile of the site. All nearby businesses and residences are believed to be on public water supplies. There are 60 wells, with 11 possibly used for drinking water purposes. The population within a 2-mile radius is approximately 14,500.

Site Responsibility: This 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



On-site groundwater and soil contamination consists of volatile organic compounds (VOCs) including benzene, chloroform, and trichloroethylene (TCE); PCBs; polycyclic aromatic hydrocarbons (PAHs) including naphthalene; and heavy metals. Off-site sediment contamination along Peach Island Creek consists of VOCs, phenol, PAHs, petroleum hydrocarbons, heavy metals, and the pesticide dieldrin. Surface water contamination in Peach Island Creek consists of VOCs, petroleum hydrocarbons, and heavy metals including nickel and zinc. The site is fenced on three sides and bordered by Peach Island Creek on the fourth side, thereby reducing public access to the site. Health risks may exist for those who come into direct contact with site pollutants, specifically those who accidentally ingest or come in direct contact with contaminated soils, surface waters, groundwater, and sediments. The coastal wetlands also may be threatened by the site contaminants.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of the on-site groundwater and soil and cleanup of the aquifer and off-site groundwater contamination.

Response Action Status



Immediate Actions: To address the immediate threats posed by the contaminants, Inmar Associates, the property owner, removed 55 tanks and one tank trailer under New Jersey Department of Environmental Protection supervision between 1985 and 1986. Some delays were caused due to the high PCB concentrations in one of the tanks.



On-Site Groundwater and Soil: Under EPA monitoring, the potentially responsible parties began conducting an investigation in 1985 to determine the type and extent of on-site groundwater and soil contamination. In 1990, the EPA selected an interim remedy for cleanup of the on-site groundwater and soil which includes construction of a slurry wall, infiltration barrier, and groundwater collection system to retrieve groundwater for treatment off site. This interim remedy, scheduled for completion in late 1991, will contain the contamination until a permanent remedy can be selected. Investigations to identify final cleanup alternatives are ongoing.



Aquifer and Off-Site Groundwater: The parties potentially responsible for the contamination began an investigation in 1988, under EPA monitoring, to determine the type and extent of contamination to the underlying aquifer and off-site groundwater and to identify alternative technologies for the cleanup. This investigation is expected to be completed in late 1991.

Site Facts: A Federal District Court trial resulted in the conviction of three corporate officials of Scientific Chemical Processing on charges arising out of the disposal of bulk solvents into the Newark sewer systems and drummed wastes into Lone Pine Landfill. In 1983, the State Court ruled that the site owner/operators are liable for the cleanup and must submit a cleanup plan by July 1983 or show poverty. In September 1985, the EPA issued an Administrative Order on Consent to 108 respondents for the performance of an investigation to determine the type and extent of contamination at the site and to identify alternative technologies for the cleanup. In October 1985, the EPA issued a Unilateral Administrative Order to an additional 31 respondents, requiring them to cooperate with the 108 parties and to participate in the investigation. A civil complaint against Inmar was filed by the United States in January 1987. The complaint seeks reimbursement for the EPA's oversight costs as well as penalties for violation of the EPA's Administrative Order. A settlement was reached in 1988.

Environmental Progress

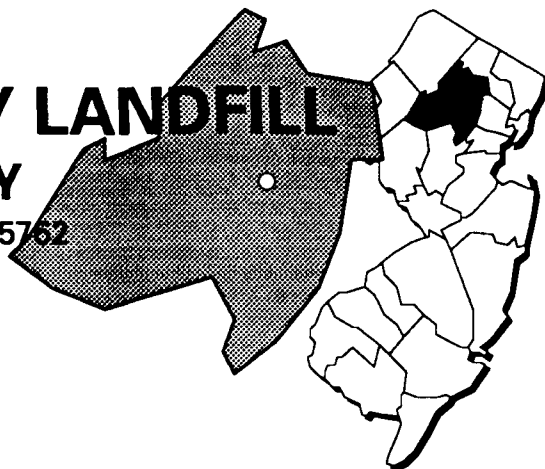


The owner of the property addressed any immediate threats posed by the Scientific Chemical site by removing contaminated tanks and a tank trailer. An interim remedy for on-site groundwater and soil contamination cleanup will reduce migration of the contamination until final remedies are chosen. Further investigations leading to the selection of final remedies for the off-site groundwater and aquifer contamination are being conducted by the parties potentially responsible for the site contamination.

SHARKEY LANDFILL

NEW JERSEY

EPA ID# NJD980505762



EPA REGION 2 CONGRESSIONAL DIST. 11

Morris County
Townships of Parsippany-Troy Hills
and East Hanover

Other Names:
Sharkey Farm Landfill

Site Description

The Sharkey Landfill site, approximately 90 acres in size, is divided into five separate sections: the North Fill, South Fill, Northwest Fill (South), Northwest Fill (North), and the Southwest Fill. The North Fill is a 26-acre island surrounded by branches of the Rockaway River. The sides of the landfill are steep and contain leachate seeps and erosion gullies. The South Fill area is bordered by the Rockaway and Whippany Rivers and the Parsippany-Troy Hills Sewage Treatment Plant. The total area of South Fill, including the sewage treatment plant, is approximately 64 acres; however, the area containing landfill material consists of about 29 acres out of the 64. The Northwest Fill area is separated by Interstate Route 280 into two sections totalling about 26 acres. The Southwest Fill is in East Hanover Township and covers about 9 acres. This fill is bordered by the Whippany River and a river channel. Sharkey Landfill began operation in 1945, accepting municipal wastes from several surrounding counties and some hazardous or toxic materials. These materials included more than 100,000 gallons of various volatile organic compounds (VOCs). The landfill also accepted wastes from sewage treatment plants. There are reports that a chemical manufacturer disposed of several million gallons of wastewater in the landfill from 1972 to 1974. From 1979 to 1981, refuse was removed from the South Fill portion of the site and disposed of in the North Fill area because of expansion of the sewage treatment plant. Landfill contaminants have migrated, and continue to migrate, into the shallow aquifer beneath the site. The Parsippany-Troy Hills area has a total population of about 50,000. The towns of Montville and East Hanover have populations of about 12,000 each. The area to the west and north of the site is mainly light industrial, although there are scattered residential properties in the area.

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

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater contamination beneath the site is a primary concern. On-site groundwater is contaminated with VOCs including benzene, semi-volatile compounds, and heavy metals including lead, cadmium, and chromium. Soil is contaminated with heavy metals. People who ingest contaminated groundwater may suffer adverse health effects. The Whippany and Rockaway Rivers are the major surface waters in the area. Leachate from landfill seeps, surface water runoff from rainfall, and the undercutting action on the landfill sides may contaminate the rivers.

Cleanup Approach

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

Response Action Status



Entire Site: The groundwater, surface water, and soil cleanup remedies selected to address site contamination include: (1) capping of the landfill with a 2-foot clay cap that conforms to Federal requirements; (2) installation of a venting system for landfill gases and extraction and treatment of shallow groundwater and leachate; (3) surface water controls to handle rainfall, storm runoff, and erosion of river banks; (4) installation of security fencing to restrict site access; and (5) a long-term groundwater monitoring program. The State, in conjunction with the EPA, is preparing the technical specifications and design for the cleanup. The design is expected to be completed in 1992.

Environmental Progress

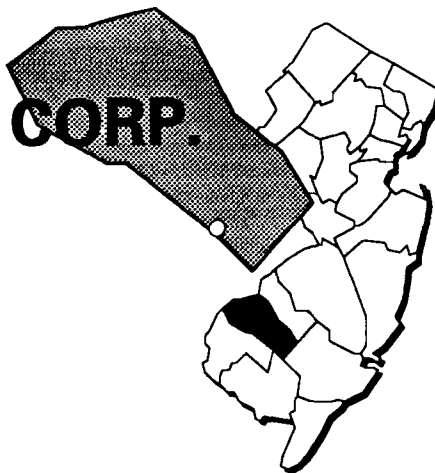


The EPA has selected the final cleanup technologies for the Sharkey Landfill site. While these planning activities are taking place, the EPA has determined that the site does not pose an imminent threat to the surrounding community or the environment.

SHIELDALLOY CORP.

NEW JERSEY

EPA ID# NJD002365930



EPA REGION 2
CONGRESSIONAL DIST. 02
Gloucester County
Borough of Newfield

Site Description

The 61-acre Shieldalloy Corp. site houses an active specialty plant making chromium alloy products. Past disposal practices included the release of process wastewater directly to an unlined lagoon, surface water, and groundwater. This resulted in extensive chromium contamination in an area that is totally dependent upon groundwater for drinking supplies. In 1979, the plant constructed a decontamination plant for the treatment of chromium-contaminated groundwater. The plant pumped and treated the groundwater prior to discharge into the Hudson's Branch Tributary of the Maurice River. The backwash from the ion-exchange treatment system is placed in three lined surface impoundments for final treatment. The decontamination system has experienced numerous operational problems over the years that have caused efforts to contain or remove the chromium plume to fail. There are slag piles and other wastes, including low-level radioactive wastes on site; the site is licensed by the Nuclear Regulatory Commission. There are approximately 56,000 people living within a 2-mile radius of the site. The closest residence is located less than 1/5 mile away. Private wells are located within a mile, and a municipal well is within 400 feet of the site. Private and municipal wells in the vicinity of the site have been shown to be contaminated. Area surface waters are used for swimming and fishing, and these waters are contaminated.

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



Both on- and off-site groundwater are contaminated with volatile organic compounds (VOCs) and hexavalent chromium. Soil is contaminated with VOCs and possibly radionuclides. On-site sludge contamination includes the heavy metal chromium. The Hudson's Branch Tributary of the Maurice River contains hexavalent chromium and VOCs including trichloroethylene (TCE). There is a risk from radionuclides to on-site workers if they are not properly protected. Off-site threats to health include drinking or direct contact with groundwater and surface water, inhaling contaminated air particles, and consuming contaminated fish from the nearby surface waters.

Cleanup Approach

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

Response Action Status



Initial Actions: The potentially responsible party has been pumping and treating chromium-contaminated groundwater since 1979. The party also designed and built a new treatment facility. However, the facility is not working properly, and Shieldalloy still is performing studies to upgrade the groundwater treatment system. The party also replaced lined underground storage tanks with aboveground tanks.



Chromium Plume: The potentially responsible party completed a preliminary study of the chromium contaminant plume. During this initial study, VOC contamination was detected in groundwater both on and off site. The extent of the contamination currently is being evaluated and is expected to be completed late in 1991.



Source Control: The potentially responsible party and the State, under EPA monitoring, currently are conducting a study into the nature and extent of contamination at the site. The study will define the contaminants of concern and will be the basis for recommending alternatives for the final cleanup. Surface water, sediments, air, and soil sampling has been completed. Groundwater and radiological sampling are continuing. The investigation is planned for completion in 1991.

Site Facts: In 1984, the State and the potentially responsible party, under EPA supervision, entered into an Administrative Order on Consent requiring the party to prepare a study of the site's groundwater contamination problems and to develop systems to address the plume. In 1986, the State directed the party to improve its groundwater decontamination system by modifying and upgrading it immediately and expanding the groundwater monitoring program. In 1986, the EPA filed an action against the party in Federal District Court for failure to certify compliance with groundwater monitoring and financial assurance requirements for the three surface impoundments used for groundwater and process water treatment. In 1988, the New Jersey Department of Environmental Protection and Shieldalloy signed an Administrative Order on Consent to implement an upgraded pump and treatment system and to perform a site-wide study.

Environmental Progress

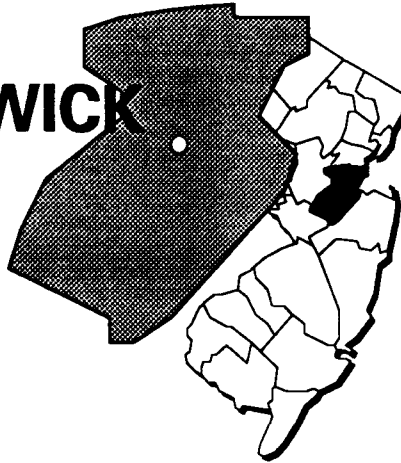


The initial treatment of contaminated groundwater and the removal of underground storage tanks have reduced the threat to human health and the environment while studies leading to the final selections of cleanup technologies for the Shieldalloy Corp. site are taking place. The EPA has determined that the site does not pose an immediate threat to the surrounding communities or the environment.

SOUTH BRUNSWICK LANDFILL

NEW JERSEY

EPA ID# NJD980530679



EPA REGION 2
CONGRESSIONAL DIST. 12

Middlesex County
1/2 mile northwest of Route 1

Other Names:
Browning-Ferris Industries

Site Description

The South Brunswick Landfill covers 68 acres in Middlesex County. The site was a landfill for over 20 years before it was closed by the State in 1978. The landfill received municipal refuse, pesticides, chemical wastes, and hazardous wastes. In 1980, the EPA conducted an investigation and found volatile organic compounds (VOCs) and iron in the groundwater and surface water. The landfill is adjacent to a school, a park, and private residences, although a substantial portion of the property is surrounded by woods. Residences are located as close as 100 to 200 feet from the site. A nearby brook feeds into a public drinking water supply 10 miles downstream.

Site Responsibility: This 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, sediments, soils, leachate, and surface water are contaminated with VOCs and heavy metals including iron. People who come in direct contact with or accidentally ingest contaminated water and soil may be at risk. Systems to collect the leachate are in place; therefore, the threat of contaminants migrating from the site is minimal.

Cleanup Approach

The site is being addressed in two long-term remedial phases focusing on controlling the source of contamination and cleanup of the off-site contamination.

Response Action Status _____



Source Control: In 1983, the EPA selected a remedy that called for the installation of a system to collect the leachate and treat it; construction of a trench, known as a slurry wall, filled with materials that prevent seepage; covering the landfill with clay; and the installation of a system to vent gas buildup. The EPA completed all of the remedies to control the source of the contamination in 1985. The EPA plans to monitor the site for 30 years to ensure the effectiveness of the cleanup



Off-Site Contamination: The EPA will be investigating the extent of contamination that migrated off the site. Once the investigation is completed and the results are evaluated, cleanup measures will be recommended, if necessary, to address contamination in the area around the landfill.

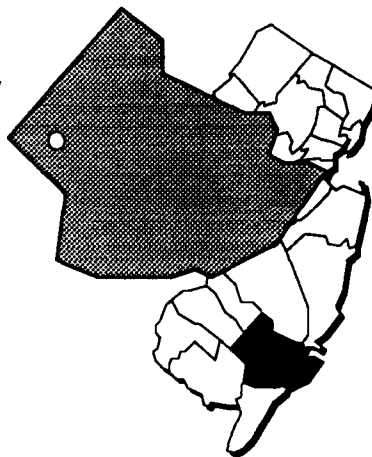
Environmental Progress _____



The EPA has completed all work required to control the source of contamination. The site will be monitored for the effectiveness of these remedies for a period of 30 years. The EPA also plans to conduct an investigation into the extent of off-site contamination and will recommend any needed remedies for cleanup of the area surrounding the South Brunswick Landfill site.

SOUTH JERSEY CLOTHING CO. NEW JERSEY

EPA ID# NJD980766828



EPA REGION 2
CONGRESSIONAL DIST. 02
Atlantic County
Minotola

Site Description

The South Jersey Clothing Co. (SJCC) is an active facility that makes military uniforms. As part of the manufacturing process, assembled garments were treated by a dry cleaning unit that utilizes trichloroethylene (TCE). These operations generated TCE-contaminated wastewaters and sludges that were routinely discharged onto the ground behind the process building and along the adjacent railroad tracks. In addition, a fire in 1979 may have released an estimated 275 gallons of TCE from a storage tank located on site. In 1981, various sampling efforts by the New Jersey Department of Environmental Protection (NJDEP) and the Atlantic County Department of Health and Institutions revealed significant contamination of groundwater and soils in the vicinity of the site. Later the same year, a number of drums and contaminated soils were excavated and removed from the SJCC site by the site owners. The following year the SJCC agreed to install 12 groundwater monitoring wells in the vicinity of the site between 1981 and 1984. Also, the SJCC agreed to install a groundwater pump and treatment system. This system remains in operation. Buena Borough began construction of a municipal water supply system in 1985 independent of NJDEP efforts. The borough began installation of the system in 1985 and expanded it in 1988 to serve approximately 75% of its population. A sampling program conducted by the Borough revealed that many of the wells sampled failed to meet EPA safety standards for volatile organics. The SJCC is located 500 feet from Garden State Cleaners, also on the National Priorities List. South Jersey Clothing and Garden State Cleaners are being addressed in a combined investigation due to their proximity to one another and similar contamination. The surrounding area is predominately rural and one of New Jersey's prime agricultural areas. Approximately 9,000 people obtain drinking water, and 3,800 acres of farmland are irrigated from wells within 3 miles of the site.

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

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 10/04/89

Threats and Contaminants



The groundwater is contaminated with volatile organic compounds (VOCs), primarily TCE. Use of contaminated groundwater for domestic purposes and agricultural irrigation may pose a health threat. There are potential public health concerns associated with homes that have not yet been hooked up to the area-wide water supply. Only those homes located south of Wheat Road, downgradient from the site, are not connected to the municipal water supply system.

Cleanup Approach

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

Response Action Status



Entire Site: The EPA began an intensive investigation in 1989 to determine the nature and extent of contamination and to identify alternatives for cleanup of the SJCC site. This investigation is expected to be completed in 1991 and will be the basis for the EPA's cleanup decisions.

Site Facts: The EPA sent a special Notice Letter to the owners in 1988 requesting a proposal to conduct or finance site studies. In 1989, the SJCC declined to take responsibility.

Environmental Progress

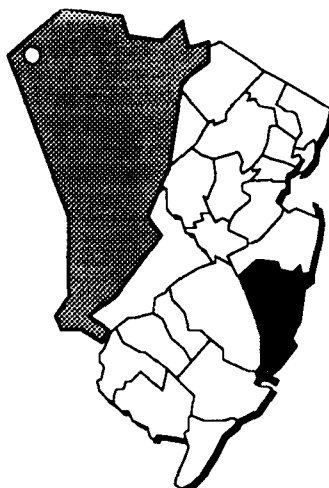


The EPA performed preliminary evaluations and determined that, as a result of previous actions taken to treat contaminated groundwater, the immediate threat to the surrounding residents or the environment has been reduced. Investigations leading to the selection of final cleanup remedies are taking place at the South Jersey Clothing Co. site to determine the final cleanup strategy.

SPENCE FARM

NEW JERSEY

EPA ID# NJD980532816



EPA REGION 2
CONGRESSIONAL DIST. 13
Ocean County
Plumsted Township

Other Names:
Thiokol Corporation Site

Site Description

The Spence Farm site covers about 20 acres in Plumsted Township, 2 miles northeast of New Egypt. From the 1950s to the 1970s, hazardous wastes in drums, bulk, and free-flowing liquid form were disposed of in the wooded and low-lying areas of the site. Some of the drums were intact, while others appeared to have been opened prior to dumping. Other drums rusted enough to allow their contents to leak out. Laboratory wastes were scattered throughout the disposal area. State investigations found volatile organic compounds (VOCs) in groundwater and surface water. Spence Farm, the Friedman Property, Goose Farm, and Pijak Farm, all on the National Priorities List, are called the "Plumsted Sites" and are within a 2-mile radius of each other. The site is in a rural area, and the land is used for agriculture. The Town of New Egypt has a population of 2,100. Two municipal water wells are about 1 1/2 miles from the farm. On the site are two tributaries to Crosswick Creek.

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

NPL LISTING HISTORY

Proposed Date: 10/01/81

Final Date: 09/01/83

Threats and Contaminants



Groundwater and sediments were contaminated with the VOC acetone; phthalate, a plastics by-product; phenol; and the heavy metals zinc, chromium, and mercury. Soil was contaminated with VOCs including methylene chloride and polycyclic aromatic hydrocarbons (PAHs). Polychlorinated biphenyls (PCBs), may still be contained in the soil. Crosswick Creek contains mercury, zinc, and toluene.

Because the farm is operating, there is a chance that the groundwater is used for domestic purposes and irrigation. Coming in direct contact with or ingesting the water, as well as sediments, may have posed a health threat. Individuals who come into direct contact with PCB-contaminated soils may be at risk.

Groundwater at the site flows toward tributaries of Crosswick Creek, which allowed the contamination in the groundwater to migrate to the surface water.

People who use the creek for recreation may suffer adverse health effects through direct contact or ingestion of the water. In addition, wildlife in and around the creek may be harmed by the pollutants.

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 1982, the State installed 16 monitoring wells for sampling of groundwater.



Entire Site: In 1984, the EPA selected a remedy to clean up the site by: (1) removing all drums and laboratory wastes and disposing of them at a federally approved facility; (2) excavating contaminated soil and disposing of it at a federally approved facility; (3) installing a system to control the sediment so contaminants do not migrate during excavation; and (4) monitoring the groundwater for 5 years to ensure the effectiveness of the cleanup. Morton-Thiokol, under State supervision, completed soil and material removal activities at the site in 1990. However, recent sampling shows that additional site soils may be contaminated with PCBs. Further investigation to determine the need for addressing this potential contamination is underway. Although the groundwater has now been determined to be clean, monitoring will continue for four years.

Site Facts: In 1985, the State and Morton-Thiokol entered into an Administrative Order on Consent requiring the company to clean up the site.

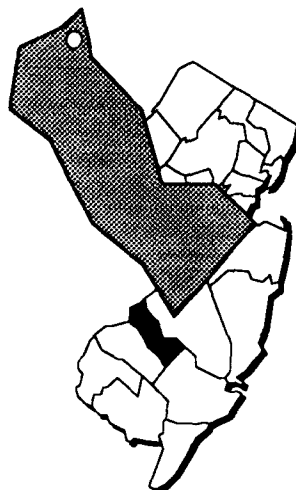
Environmental Progress



Removal of the sources of contamination has reduced the potential for future migration of contaminants into surface water and groundwater. The potentially responsible party, under State supervision, will monitor the Spence Farm site for another four years to ensure the groundwater pollution has dissipated.

SWOPE OIL & CHEMICAL CO. NEW JERSEY

EPA ID# NJD041743220



EPA REGION 2
CONGRESSIONAL DIST. 01
Camden County
Pennsauken Township

Site Description

The Swope Oil & Chemical Co. is located in an industrial area north of Pennsauken. The 2-acre site is bordered by a railway and National Highway. Swope Oil Co., a chemical reclamation facility, operated from 1965 until 1979, processing solvents, oils, paints, and other chemical compounds. The site included one main building, a "distillation house," a drum storage area, an unlined lagoon, a diked tank farm, and an area containing buried sludge waste. The soil and shallow groundwater in the area are contaminated, as well as the deeper aquifer beneath the site. Waste liquids and sludges were discharged to an excavated, unlined lagoon. Contaminated materials also were placed within a diked tank farm and in an exposed drum storage area. In 1975, after several inspections, Swope was cited for operating without proper permits. Four years later, it was cited again, this time for failure to prepare, maintain, and implement a Spill Prevention, Containment, and Countermeasure Plan. The company ceased operations in late 1979. The site is in a predominantly industrial area. Approximately 17,000 people reside in the area and depend on groundwater from a municipal well located 175 feet from the site.

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

NPL LISTING HISTORY

Proposed Date: 07/01/82

Final Date: 09/01/83

Threats and Contaminants



The groundwater and soils are contaminated with polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), phthalates, and metals. Railroad employees and trespassers may be exposed to contaminants through direct contact and accidental ingestion of contaminated soils. The contamination in the aquifer beneath the site could lead to drinking water contamination.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on removal of contaminants and cleanup of the groundwater and soil.

Response Action Status



Immediate Actions: In 1982, the EPA removed two fuel storage tanks and approximately 180,000 gallons of liquid sludge containing hazardous material. In addition, a temporary cap was placed over contaminated sludge lagoons to prevent the further migration of contaminants. A security fence was built around the site.



Removal of Contaminants: The EPA has selected the following cleanup methods: (1) removal of tanks and buildings with off-site incineration, treatment, or disposal of tank contents, and off-site disposal of tanks and building debris; (2) construction of a cap at the site; (3) preparation of a supplemental investigation to determine the nature and extent of groundwater contamination and to identify alternatives for cleanup; (4) excavation of up to 1 1/2 feet of contaminated soil containing PCBs and off-site disposal; (5) excavation of up to 1 1/2 feet of PCB-contaminated soils below the lagoon and off-site disposal; and (6) sampling, excavation, and off-site disposal of contaminated soils containing PCBs from the parking lot area and along the railroad right-of-way adjacent to the lagoon. Should additional sampling during the technical design determine that cleanup of soil to these depths will not achieve the cleanup goals, the cleanup action for this area will be re-evaluated. As part of the surface cleanup effort, the following actions have been completed: excavation and off-site disposal of more than 24,000 tons of PCB-contaminated soils and backfilled excavations; removal and disposal of 70 tanks and their contents; removal of asbestos-containing insulation; and removal of cesspool and septic structures with associated hazardous liquids. A cap will be installed over the site after cleanup of the contaminated subsurface soils is completed.



Groundwater and Soil Investigation: An investigation to determine the nature and extent of groundwater contamination migrating from the site and to assess whether there is any remaining soil contamination is underway by the Swope Oil Cleanup Committee. Activities conducted under the investigation include monitoring groundwater quality, soil sampling, and treatability studies such as a pilot soil vapor extraction study to determine the feasibility of this technology for final cleanup. This investigation, as well as an evaluation of alternatives for the cleanup of contaminated subsurface soils and groundwater, is scheduled to be completed in 1991.

Site Facts: Cleanup activities at the Swope Oil site are being conducted by a group of potentially responsible parties, collectively known as the Swope Oil Cleanup Committee, under monitoring by the EPA.

Environmental Progress

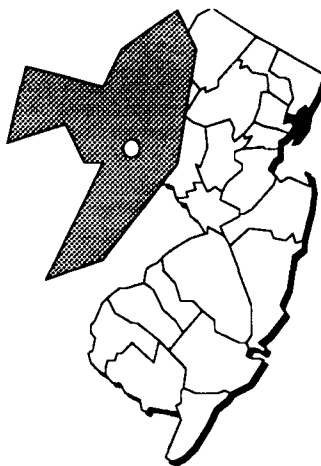


The EPA and potentially responsible parties have removed large quantities of the contaminated materials and soils from the Swope Oil & Chemical Co. site and have capped the contaminated sludge lagoons to prevent the further migration of contaminants from the site. These measures, as well as building a security fence around the site, have significantly reduced the potential for exposure to hazardous materials at the site while cleanup proceeds.

SYNCON RESINS

NEW JERSEY

EPA ID# NJD064263817



EPA REGION 2
CONGRESSIONAL DIST. 14

Hudson County
Kearny

Site Description

The Syncon Resins site encompasses approximately 15 acres and is located on a heavily industrialized area of northern New Jersey. The site is situated on the peninsula formed by the Passaic and Hackensack Rivers. In addition to the buildings on site, there are two unlined lagoons, numerous large bulk storage tanks, underground storage tanks, at least two chemical reactor buildings housing stainless steel vessels, and approximately 12,800 drums. Investigations indicate that many drums contain hazardous substances that are volatile and flammable, posing the threat of air pollution and fire. Some of the 55-gallon drums have rusted, spilling their contents onto the soil. The Syncon Resins facility produced alkyd resin carriers for pigments, paints, and varnish products. In the production process, excess xylene or toluene was separated from the wastewater and was reused in subsequent reactions. The remaining wastewater was pumped to an unlined lagoon to evaporate or percolate into the soil. Investigations of the site have found that there is extensive contamination of the groundwater, soil, building dirt and dust, and stainless vessels and tanks. The site is in an industrial area, with 10,000 people residing within 3 miles of the site. The closest residential area is a mile to the west in Newark. There are no municipal water supply wells in the immediate area.

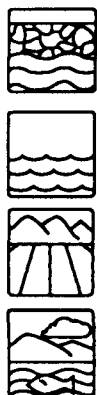
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 07/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater is contaminated with volatile organic compounds (VOCs) including toluene, xylenes, and trichloroethylene (TCE) and heavy metals such as lead and nickel. Contaminants in the sediments include heavy metals, VOCs, and polychlorinated biphenyls (PCBs). Soil is contaminated with the pesticides DDT and aldrin, as well as heavy metals, VOCs, and PCBs. Potential health threats exist through direct contact, inhalation of contaminated dust, and accidental ingestion of soils. The site is situated within a coastal wetland area, which could be at risk from contaminant runoff.

Cleanup Approach

This 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: Starting in late 1982, the State removed all of the exposed 55-gallon drums from the site, cleaned up the lab area, and stored the materials found on site. This was completed in early 1984. In early 1990, the site was fenced to provide additional security during cleanup.



Entire Site: Based on the results of the site investigation, the EPA selected the following methods for site cleanup: (1) remove the contents of the storage tanks and vessels for off-site disposal; (2) decontaminate buildings and tank structures as necessary; (3) excavate lagoon liquids, sediments, and contaminated surface soil and dispose of off site; (4) install a cover over the site that allows natural flushing of underlying soil and groundwater contaminants; (5) collect and treat contaminated water from the shallow aquifer, with discharge to the Passaic River; and (6) conduct supplemental studies to evaluate methods to enhance the effectiveness of flushing and/or treatment and destruction of the contaminated soils. Cleanup activities have begun at the site and are slated for completion in late 1991. To date, the building has been decontaminated, asbestos has been removed, and the groundwater collection system has been installed.

Site Facts: In December 1982, the EPA and the State of New Jersey entered into a Cooperative Agreement for the State to perform site investigations and cleanup activities.

Environmental Progress

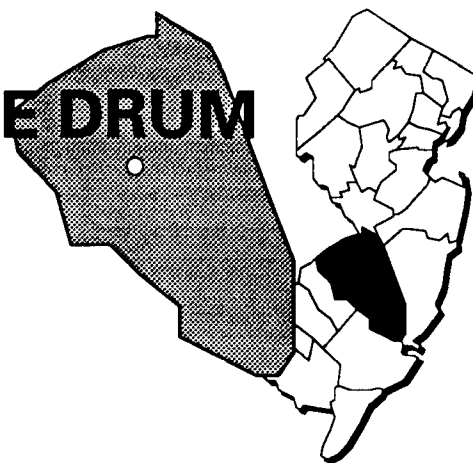


By removing all the visible contaminated 55-gallon drums, cleaning up the lab area, storing the contaminated materials found on the Syncon Resins site, and securing the site, the threat of exposure to hazardous materials has been greatly reduced. The EPA has determined that the site is safe to the surrounding community and the environment while final cleanup actions are being taken.

TABERNACLE DRUM DUMP

NEW JERSEY

EPA ID# NJD980761357



EPA REGION 2
CONGRESSIONAL DIST. 13
Burlington County
1/2 mile from Bozarthtown

Site Description

The Tabernacle Drum Dump covers 1 acre in a farmland and wooded area in Tabernacle Township. In 1976 or 1977, approximately 200 containers (55-gallon drums, 20-gallon containers, and several 5-gallon pails) of solvents, paint, and paint sludges were deposited on a 2,000-square-foot portion of the site. These containers were stored at the site until 1984. Deterioration and leakage of some containers resulted in visible soil contamination and, ultimately, groundwater contamination. Based on a referral from Tabernacle Township officials, the Burlington County Health Department conducted a site inspection in 1982 and discovered over 100 abandoned drums. In 1982, the New Jersey Department of Environmental Protection conducted a more detailed site inspection. Land in the area is used primarily for agriculture and recreation. There are approximately 100 residences within a 1/2-mile radius of the site, and an estimated 25 residences use wells that draw water from the Cohansey aquifer.

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 heavy metals lead, chromium, and cadmium and volatile organic compounds (VOCs) have been detected in on-site groundwater. On-site soils are contaminated with chromium, cyanide, and lead. Ingestion of contaminated groundwater, especially by residents downgradient of the site, poses the greatest threat to the community. Since the site is unfenced, individuals entering the site are at risk when coming in direct contact with or accidentally ingesting contaminated soil. However, this risk has been reduced by the excavation of the contaminated soil and the removal of all the drums and containers.

Cleanup Approach

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

Response Action Status



Immediate Actions: In 1984, under EPA supervision, Atlantic Disposal Services (ADS), a potentially responsible party, numbered, logged, and sampled on-site containers. ADS completed surface cleanup in 1984 that consisted of removing containers, 40 yards of drummed materials, 8 truckloads of excavated soil, and approximately 3,000 gallons of liquid material.



Groundwater and Residual Soil: The plan selected by the EPA to clean up the site includes: (1) installation of groundwater monitoring wells and a monitoring program to trace the groundwater plume; (2) groundwater pump and treatment using air stripping and possibly carbon adsorption followed by reinjection, groundwater monitoring, and exhaust gas analysis; and (3) soil sampling of the former drum dumping and storage area to determine if residual contamination is present. The EPA has performed, and continues to perform, residential well sampling and analysis in the area of the site. USX Corporation, one of the potentially responsible parties, began designing the site-specific technologies to be used in the cleanup in 1988. The design includes an additional investigation to determine the horizontal and vertical extent of the contaminant plume, continuation of the residential sampling program, and soil sampling in the former drum disposal area. Final cleanup activities are expected to begin in 1992.

Site Facts: A Unilateral Order was issued in 1984 to ADS, requiring the company to remove the containers and to excavate contaminated soil. The EPA sent Notice Letters to the potentially responsible parties in 1985. In 1989, the EPA and USX Corporation signed a Consent Decree, requiring the company to perform the cleanup at the site.

Environmental Progress

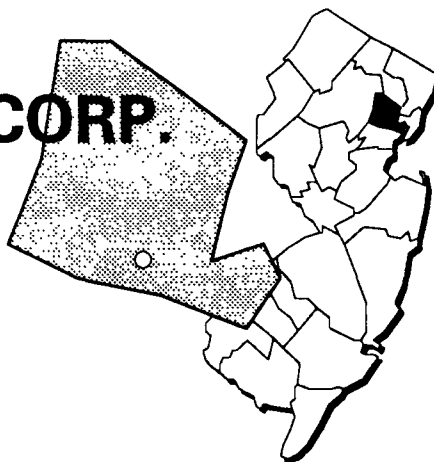


By removing the contaminated containers, soil, and liquids from the Tabernacle Drum Dump site, the EPA and the potentially responsible parties have greatly reduced the potential for exposure to hazardous materials at the site while further cleanup activities are taking place.

U.S. RADIUM CORP.

NEW JERSEY

EPA ID# NJD980654172



EPA REGION 2
CONGRESSIONAL DIST. 10

Essex County
City of Orange

Other Names:
U.S. Radium-West Orange

Site Description

The U.S. Radium Corp. site covers 2 acres in the City of Orange. The site is a former processing facility where radium extraction, production, application, and distribution took place from about 1918 through 1926. Approximately 1/2 ton of ore per day was processed and disposed of on and off the site. The original buildings on the site have been removed or incorporated into the seven buildings that still exist. Other areas identified as being potentially contaminated include 140 adjacent properties covering around 21 acres, and approximately 20 satellite properties located throughout the Cities of Orange, East Orange, West Orange and South Orange. Approximately 50,000 people live within a mile of the site. The adjacent and satellite properties are occupied by light industries, offices, houses, grocery stores, and apartments. The main site is located in a heavily residential area.

Site Responsibility: This 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



Soil contains radium-226 and, possibly, other radioactive materials and volatile organic compounds (VOCs). The radium-226 decays to radon gas and radon decay products, which have contaminated the air. People who are directly exposed to radiation, inhale radioactive dust particles, or inadvertently ingest radioactive particles on the site may suffer adverse health effects.

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 1989, the party potentially responsible for the contamination began constructing a fence around the perimeter of the site to prevent trespassers from coming into contact with contaminated material. Part of the fence was not installed, and additional work will be required to complete this task.



Entire site: The EPA is conducting an investigation to determine the extent of the radionuclide contamination on the main site and also on the adjacent and satellite properties. Once the study is completed in late 1992, measures will be recommended to clean up the affected areas.

Environmental Progress _____



By constructing a fence around the site, access has been restricted, thereby making the site safer while the investigations leading to the final selection of cleanup technologies for the U.S. Radium Corp. site are taking place.

UNIVERSAL OIL PRODUCTS (CHEMICAL DIVISION) NEW JERSEY

EPA ID# NJD002005106



EPA REGION 2
CONGRESSIONAL DIST. 09
Bergen County
East Rutherford

Other Names:
UOP Chemical Division

Site Description

Universal Oil Products (Chemical Division) is located on a 75-acre site along Route 17. Various chemicals were manufactured from 1932 until 1979, when the company ceased operations and dismantled the plant. The company also recovered solvents and waste chemicals at the site from 1960 through 1979. Approximately 4 1/2 million gallons of waste solvents and solid chemical wastes were dumped into two unlined lagoons during this time, which resulted in contamination of the soil, surface water, and groundwater. The wells for Wellington Township are located approximately 2 1/2 miles from the site. Approximately 36,500 people within 3 miles of the site depend on groundwater for their source of drinking water. Groundwater also provides process cooling water to local industry and drinking water to the residents of the Township. The site is in the coastal wetland management area of the Hackensack River Basin. Berry's Creek borders the southeastern part of the site, and Ackerman's Creek, which is a tributary to Berry's Creek, passes through the site. Berry's Creek joins the Hackensack River about 3 1/2 miles downstream from the site. Local residents use the area's surface water for recreation.

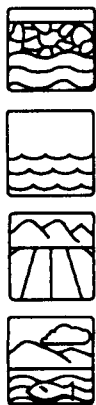
Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82

Final Date: 09/01/83

Threats and Contaminants



Groundwater is contaminated with volatile organic compounds (VOCs) including benzenes, trichloroethylene (TCE), vinyl chloride, and toluene; polychlorinated biphenyls (PCBs); and the heavy metals lead and arsenic. Sediments contain PCBs. Soil contains VOCs, PCBs, and the heavy metal manganese. Surface water is contaminated with VOCs and lead. People who come into direct contact with or accidentally ingest contaminated soil, sediments, groundwater, or surface water may suffer adverse health effects. The wetland management area also may be at risk from site runoff.

Cleanup Approach

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

Response Action Status



Immediate Actions: Universal Oil Products removed contaminated materials from the lagoon areas of the site in 1990. The EPA is awaiting final sampling results on the cleanup levels achieved.



Entire Site: Universal Oil Products, under EPA monitoring, is conducting a study of the nature and extent of contamination at the site. Based on the results of the study, site cleanup may be divided into multiple long-term response actions. The study is scheduled for completion in 1993.

Site Facts: Under an Administrative Order on Consent from the New Jersey Department of Environmental Protection, Universal Oil Products has taken the lead in studying the nature and extent of contamination at the site.

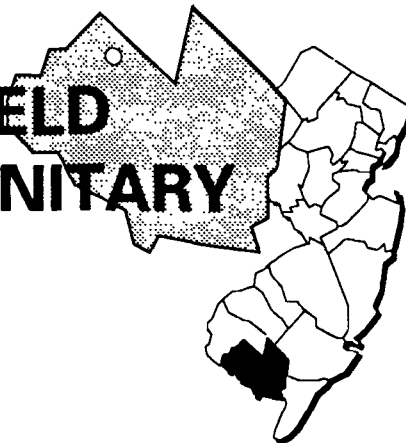
Environmental Progress



By removing waste materials from two lagoon areas responsible for site contamination, the potentially responsible parties and the EPA significantly reduced the threat of exposure to hazardous materials and prevented further environmental degradation at the Universal Oil Products site. The investigations leading to the final remedies for the site currently are taking place.

UPPER DEERFIELD TOWNSHIP SANITARY LANDFILL NEW JERSEY

EPA ID# NJD980761399



EPA REGION 2
CONGRESSIONAL DIST. 02
Cumberland County
Upper Deerfield Township

Site Description

The Upper Deerfield Township Sanitary Landfill site is an inactive landfill covering 14 acres on a 23-acre tract of land. The site originally was used as a gravel pit from 1938 to 1960, when the Township purchased 12 acres; the remaining acreage was purchased by the Township in 1977. The property was operated as a municipal landfill licensed to accept normal household waste until it closed in 1983. Residents became concerned over the quality of their water, and in response to requirements by the New Jersey Department of Environmental Protection, the Township installed three monitoring wells. The County sampled residential wells and the monitoring wells and found them to be contaminated with mercury and volatile organic compounds (VOCs). In 1983, the State and the County advised residents to discontinue using their wells, and the Township began supplying the affected residents with bottled water. The Township began construction of a public water supply well and distribution system for all residents in 1985. Approximately 100 people live within a mile of the site, and the nearest residence is about 100 feet away. Deerfield Township has a population of approximately 6,800 people.

Site Responsibility: This site is being addressed through Federal, State, and Municipal actions.

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Groundwater is contaminated with VOCs such as benzene, trichloroethylene (TCE), and vinyl chloride and heavy metals including mercury. Initial sampling data indicated low-level soil contamination in the fill area. The majority of the area residents have been hooked up to the public water supply wells uphill from the site. People who drink or come in direct contact with contaminated groundwater may suffer adverse health affects. In addition, people whoc ome in direct contact with or accidentally ingest the contaminated soils may be at risk.

Cleanup Approach

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

Response Action Status



Immediate Actions: After detection of residential well contamination in 1983 and before the completion of the public water supply and distribution system in 1986, the Township supplied affected residents with bottled water and subsequently installed permanent water lines. All hookups to the new water system were completed in 1986, and the bottled water was discontinued.



Entire Site: In 1987, the EPA began a study to determine the type and extent of the contamination by sampling the groundwater, soil, sediments, and air. Once the study is completed in 1991, measures to clean up the site will be recommended. A decision outlining the selected remedy is expected in late 1991.

Site Facts: Notice letters have been sent to potentially responsible parties known to have utilized the site. To date, no viable potentially responsible parties have been located, with the exception of the Township, which operated the landfill.

Environmental Progress

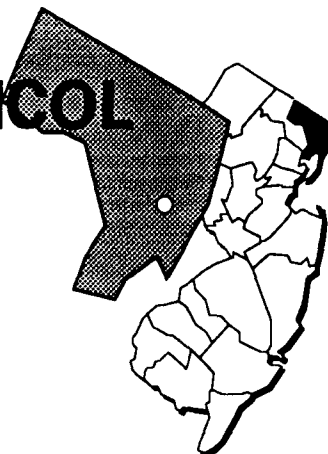


Provision of an alternate water supply has reduced the threat of exposure to contaminants in drinking water. The Upper Deerfield Township Sanitary Landfill site therefore is safe to the surrounding community and the environment while the investigations leading to the selection of a final cleanup remedy are taking place.

VENTRON/VELSICOL

NEW JERSEY

EPA ID# NJD980529879



EPA REGION 2
CONGRESSIONAL DIST. 09

Bergen County
Wood-Ridge Borough

Other Names:
Berry's Creek
Thiokol Chemical
Wood-Ridge Chemical

Site Description

The 40-acre Ventron/Velsicol site operated as a chemical processing plant from 1953 until 1974. During this time, approximately 160 tons of process waste were buried on site. The Ventron facilities were abandoned and demolished in 1974. Ventron sold a 7-acre parcel of property, where two buildings subsequently have been built. Presently, one of these buildings is used as a food distribution center. Presently, one of these warehouses is used as a food distribution center. Contaminants still remain on site and are suspected of migrating off site in groundwater and air. The Ventron/Velsicol Site is located in a densely populated and industrialized area; however, access to the site is restricted. There are approximately 11,600 people living within a 1-mile radius of the site.

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

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Groundwater and sediments are contaminated with mercury. Off-site sediments are contaminated with mercury and zinc. Soils and surface water contain various heavy metals. Private wells located in the vicinity of the site are believed to be contaminated. The potentially responsible parties are suspected of discharging raw process waste into a nearby creek where local residents fish; nearby residents could be exposed to site-related contaminants when drinking or coming in direct contact with the water or sediments in the creek. Because wastes were dumped directly onto the ground, on-site workers also may be exposed to contaminants located in soils and sediments. Migration of site-related contaminants is threatening nearby wetlands.

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 EPA has commenced investigations into site contamination and the most effective methods to clean up the site. An outline of the investigations and work that will be performed to determine the extent and nature of site contamination has been completed. An initial study concerning the amount and the effects of mercury accumulation in fish, as well as other organisms in the food chain of the affected area, was completed in 1988. Aquatic organisms were found to have bioaccumulated mercury and polychlorinated biphenyls (PCBs) from the food chain. Contaminants have not bioaccumulated in fish. All investigations are planned to be completed in 1994. The EPA will review these study findings as well as other site investigation results to select final technologies and cleanup strategies to address site contamination and potential health threats.

Site Facts: The EPA approved a Cooperative Agreement made between the State of New Jersey and the potentially responsible parties in 1984.

Environmental Progress



After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Ventron/Velsicol site while further studies are being completed and cleanup activities are being planned.

VINELAND CHEMICAL CO., INC.

NEW JERSEY

EPA ID# NJD002385664



EPA REGION 2
CONGRESSIONAL DIST. 02
Cumberland County
Vineland

Site Description

The Vineland Chemical Co., Inc. (ViChem) has manufactured arsenic-based herbicides since 1950 on this 54-acre site in a residential and industrial area of Vineland City. The plant site includes several manufacturing and storage buildings, a laboratory, several lagoons, and a former chicken coop. The majority of the site is covered with vegetation, with the exception of the parking lots and a paved manufacturing area. A security fence surrounds the main part of the plant, including the manufacturing buildings and lagoon area. Prior to 1977, the company stored by-product arsenic salts in open piles and in the chicken coop. As a result of water contacting the exposed piles, arsenic has contaminated the subsurface soils, groundwater, and the nearby Maurice River system downstream of the site. Also downstream from the site is Union Lake, which covers approximately 800 acres. The Maurice River system extends 26 miles from the lake to the Delaware Bay. By 1982, ViChem, in response to State actions, instituted some cleanup actions and modified the production process. These modifications included: installing a non-contact cooling water system, lining two of the lagoons, installing a storm water runoff collection system, and disposing of piles of waste salts. Also in 1982, ViChem, under a State Administrative Order, began operating a wastewater decontamination system to remove arsenic. The decontamination system receives contaminated process water and groundwater from two lined surface impoundments and discharges treated water to percolation lagoons under a State permit. However, the decontamination system can treat only 35,000 gallons of contaminated water per day, while an estimated 150,000 gallons leave the site daily, and the system has been unable to reduce arsenic concentrations to acceptable levels. Approximately 57,000 people depend on the groundwater system in the area, either through private or municipal wells, for drinking water. Residential areas are located on all sides of the site. Numerous towns and villages are close to the Maurice River.

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

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



The groundwater is contaminated with heavy metals including arsenic, antimony, cadmium, and lead and the volatile organic compound (VOC) trichloroethylene (TCE). The surface soil on the site is contaminated with arsenic and small amounts of other heavy metals. The subsurface soil is contaminated with arsenic alone. Arsenic also has contaminated Union Lake and the Maurice River. Results of a health screening study showed that ViChem employees had elevated concentrations of arsenic in their blood and urine. Accidental ingestion, direct contact, or inhalation of the contaminants may expose workers or trespassers to increased carcinogenic and non-carcinogenic risks. Nearby residents downstream of the plant site using well water also may be subject to health risks. Because of the contamination migrating from the site to the Maurice River and Union Lake, recreational activities have been restricted at Union Lake.

Cleanup Approach

The site is being addressed in four long-term remedial phases focusing on source control, migration management, and cleanup of the river and Union Lake sediments.

Response Action Status



Plant Site Source Control: The EPA plans to clean up the arsenic-contaminated soil, which is a continuing source of groundwater contamination, by using in-place soil flushing. This process will accelerate natural soil flushing in four active zones that will be bermed and flooded. The engineering design of the remedy is currently being prepared and is expected to be completed by late 1992.



Plant Site Management of Migration: The EPA plans to clean up the arsenic-contaminated underlying shallow groundwater and stop its migration to the Blackwater Branch, a tributary to the Maurice River. The methods used to complete this will involve pumping groundwater at a high flow rate, which will then be treated and recharged to the aquifer and, if required, to the river. The engineering design of the treatment process is underway and is expected to be completed in 1992. Construction is expected to be completed by late 1993. After construction, the groundwater cleanup is expected to take 13 years of treatment.



River Areas Sediments: In the Blackwater Branch tributary, the EPA plans to clean up those areas with unacceptably high arsenic concentrations by excavating contaminated flood plain sediments and removing the arsenic. The sediment then will be redeposited in the flood plain. At the same time, the submerged contaminated sediments will be dredged, cleaned, and deposited in undeveloped areas of the site. The water used to treat the sediment will be treated to remove arsenic, which would then be transported, in the form of sludge, to an off-site hazardous waste facility. After the cleanup action is completed, a 3-year period for natural river flushing will then be implemented for the rest of the river areas.



Union Lake Sediments: After the river areas are cleaned, the EPA plans to clean up those areas of the lake with unacceptably high arsenic concentrations by lowering the water level and then dredging. High public access areas, including the public beach and the sailing club, will be cleaned up by treating the contaminated materials with clean water, and then returning the cleaned material to the lake. The extraction water used for treatment will be treated to remove and convert arsenic to a sludge form for off-site treatment and disposal. The treated water will be returned to the lake.

Site Facts: The EPA is performing environmental studies to determine the need to cleanup the river and lake sediments. These long-term studies will use data collected before and during the cleanup activities for the soil and groundwater.

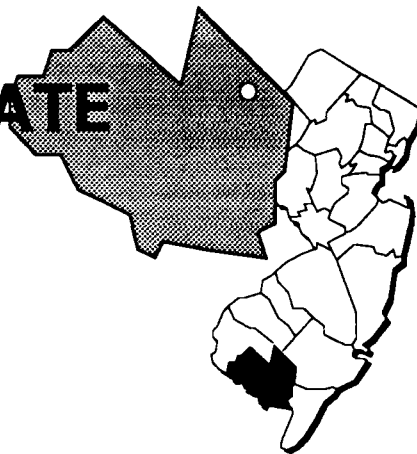
Environmental Progress



After placing the Vineland Chemical site on the NPL, the EPA performed an evaluation and determined that the site does not pose an imminent threat to the surrounding community or the environment while investigations leading to the selection of final cleanup remedies are taking place.

VINELAND STATE SCHOOL NEW JERSEY

EPA ID# NJD980529887



EPA REGION 2
CONGRESSIONAL DIST. 02
Cumberland County
Vineland

Other Names:
Vineland Development Center (VDC)

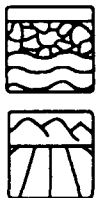
Site Description

The Vineland State School site is a residential and treatment facility for mentally handicapped women. The State's Department of Human Services runs the facility, which sits on a 195-acre campus located in a primarily suburban and residential setting on East Landis Avenue in Vineland. The school operated an unregulated incinerator and landfill on the property to dispose of its waste. The incinerator has been dismantled, and the pit was filled in and graded. In the early 1980s, hazardous chemicals including polychlorinated biphenyls (PCBs) may have been dumped at the site. The school property consists of five distinct subsites, where the following activities took place: (1) the school dumped between 6,000 and 8,000 one-quart containers of mercury-based pesticides into ponded water, about 20 feet below the ground; (2) an on-site contractor spilled approximately 150 gallons of PCB-laced transformer oil onto the ground when four large transformers were removed in the mid-1970s; (3) starting in the 1950s, the school used a part of the site as a general dump for any type of wastes, including chemicals produced and used at the school; (4) during the early to mid-1950s, the school dumped an unknown amount of transformer oil laced with PCBs from out-of-service electrical transformers into a 10- to 15-foot-deep pit; and (5) approximately 10 cubic yards of pesticides and possibly other chemicals the school used for farming may have been dumped into a 10-foot-deep pit some time during the 1950s. The State of New Jersey investigated a PCB spill that occurred in subsite 2, which led to an extensive cleanup of PCB-contaminated soil, building rubble, concrete and construction material, soil contaminated with gasoline, and asbestos roofing. Approximately 13,620 people within 3 miles of the site depend on groundwater as their primary source of drinking water. The school itself houses approximately 1,050 residents.

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

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

Threats and Contaminants



Groundwater contains low levels of the pesticides DDT and dieldrin; volatile organic compounds (VOCs); phthalate, which is a plastics by-product; and heavy metals including lead and mercury. Soils in the subsite 2 area contained PCB-contaminated oil and fluid from electrical transformers. Soils also contained heavy metals, polycyclic aromatic hydrocarbons (PAHs), and pesticides. As a result of the State investigation, it was determined that the very low levels of contaminants in the soil and groundwater do not pose a threat to human health or the environment.

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: The New Jersey Department of Environmental Protection (NJDEP) installed three monitoring wells and sampled soils at the site. The City of Vineland extended its water main to several homes near the site that previously used water from private wells. In 1988, the NJDEP removed PCB-contaminated soil at subsite 2 and installed a permanent cap over the area. A fence was installed around subsite 2.



Entire Site: The State completed a study of contaminants at the site in 1989. The EPA selected a “no action” remedy at the site because of the following conditions: (1) subsite 2 was cleaned up by the immediate actions described above; (2) the State’s study of the four areas that remain shows that low contamination levels do not pose a threat to human health; and (3) the City extended its public water supply system to the affected residences near the site. The State will monitor groundwater and the disposal areas on site to ensure that the cleanup effort is effective and that the groundwater under the site remains free of contaminants.

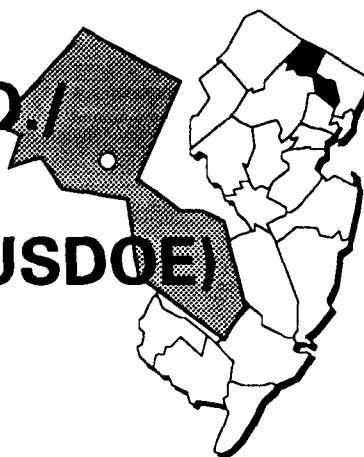
Environmental Progress



After studying conditions at the Vineland State School site, the EPA and the State determined that the actions already taken to provide the affected area residences with a safe alternate drinking water supply and the low contaminant levels in the remaining areas of contamination did not warrant any further cleanup actions at the site. The Vineland State School site is being closely monitored, however, to ensure that the steps taken to clean up subsite 2 remain effective.

W.R. GRACE & CO./ WAYNE INTERIM STORAGE SITE (USDOE) NEW JERSEY

EPA ID# NJ1891837980



EPA REGION 2
CONGRESSIONAL DIST. 08
Passaic County
Wayne Township

Site Description

From 1948 until 1971, site operators extracted thorium and rare earths from monazite ore on the 6 1/2-acre W.R. Grace & Co./Wayne Interim Storage Site in Wayne Township. In 1971, W.R. Grace ceased processing monazite ore and amended its Nuclear Regulatory Commission (NRC) license to cover only the storage of radioactive materials. The company decontaminated the property in 1974 to the then-established criteria. In 1975, the NRC released the site for unrestricted use, provided that the land deed indicated the presence of radioactive material under the site's surface. Radioactively contaminated soils were removed from nearby properties and were placed in an interim storage pile through 1988. Radioactive process wastes, process equipment, and building rubble are buried beneath the interim storage pile. In 1981, the EPA conducted an aerial survey that showed elevated radiation levels at the plant site, an adjacent school bus maintenance facility, a township park, along the banks of Sheffield Brook, and a railroad spur. Much of the off-site contamination was spread by runoff and water discharges from the site. An active agricultural area is located within 200 feet of the site, and there are homes located to the east and along Sheffield Brook. Many commercial businesses lie within 3 miles of the site. Residents within 3 miles of the site rely on groundwater for drinking, household, and irrigation purposes. The municipal well system serves 51,000 people, and the nearest well is 3,200 feet from the site. Local surface water is used for recreation.

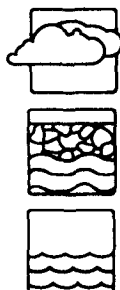
Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Monitoring at the site measured radon-220 and radon-222 concentrations in the air. The contaminants identified in the groundwater and surface water are radioactive particles in the thorium and uranium decay series. After cleanup, monitoring of the storage activities on the site has shown that these substances do not pose any current health threats to people.

Cleanup Approach

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

Response Action Status



Initial Actions: Cleanup activities began in 1985 under the U.S. Department of Energy's (DOE) "Formerly Utilized Sites Remedial Action Program" (FUSRAP). The DOE excavated and contained about 50,000 cubic yards of contaminated soil from all areas except the railroad spur area. Another 70,000 cubic yards of contaminated wastes exist below-grade at the site. The storage facility meets EPA guidelines, and the waste is stabilized. The DOE also studied radioactive contamination along Sheffield Brook, the front of the facility, and the right-of-way property. All off-site contamination has been identified, characterized, and placed in the interim storage pile, except materials from the railroad siding. The DOE is continuing to maintain and monitor the site and is complying with State permit requirements.



Entire Site: In late 1989, the DOE began an intensive study of remaining contamination at and around the W.R. Grace site. This investigation is exploring the nature and extent of remaining contamination, which will result in recommendations for cleanup of any residual contamination. The DOE has sampled the storage pile and plans to further investigate the railroad spur area and the material buried on site below the storage pile. Field work is scheduled to be completed in late 1991.

Site Facts: The DOE was given responsibility for cleanup by Congressional action in 1984. The DOE bought the site from W.R. Grace that year and renamed it the Wayne Interim Storage Site. The Department used the site as a temporary storage facility for low-level radioactive soils removed during cleanup of nearby properties.

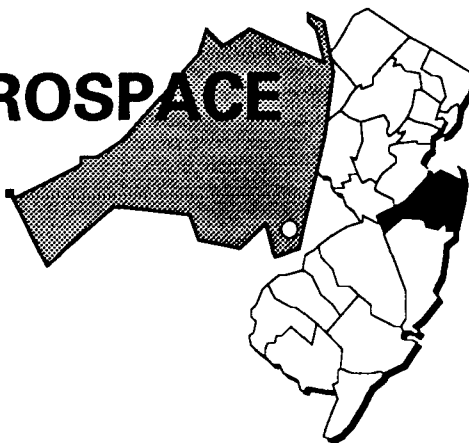
Environmental Progress



The initial cleanup of the W.R. Grace site has been completed by the DOE, and the site is being closely monitored by the DOE and the EPA to ensure that radiation levels do not become elevated. Further investigations leading to a selection of final cleanup technologies currently are underway.

WALDICK AEROSPACE DEVICES, INC. NEW JERSEY

EPA ID# NJD054981337



EPA REGION 2
CONGRESSIONAL DIST. 04
Monmouth County
Sea Girt section of Wall Township

Site Description

This site, approximately 1 1/2 acres in size, is an inactive industrial facility located at 2121 Highway 35 in the Sea Girt section of Wall Township. From 1979 until about 1984, Waldick Aerospace Devices, Inc. leased this property for the manufacture and plating of metal components for the aerospace industry. In 1982, State and County inspectors found that during the years of operation a series of degreasing, dip, rinse, and plating tanks, as well as a polishing machine, were discharging wastewater directly onto the ground toward the front of the main building. Runoff flowed across the front lawn. In addition, used machine oil drained out of perforated drums onto the ground at the rear of the building. Sampling revealed that the wastes contained heavy metals, acids, and volatile organic compounds (VOCs). Soil and groundwater, as well as two of the leased buildings, are contaminated. A third building, never used by the Waldick firm, has been used in recent years for several retail operations. It is isolated from the main building by a stockade fence. Highway 35 is an industrial/commercial corridor that separates largely undeveloped land to the west from developed land to the east. Western land use consists mainly of woodland, agriculture, and scattered residential areas, although a housing development was being planned just north of the site in 1988. Public and private wells within a 3-mile radius of the site serve about 41,500 people. The nearest residence is approximately 1/4 mile from the site. The few private wells in this area are used for irrigation. The closest drinking water well is on a residential property about 3/8 mile upgradient from the site.

Site Responsibility: This site is being addressed through Federal, State, and county actions.

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

Threats and Contaminants



The main and auxiliary buildings are contaminated with petroleum hydrocarbons, pesticides, dyestuffs, and polycyclic aromatic hydrocarbons (PAHs). Groundwater contains VOCs and heavy metals. Soil contains VOCs, cadmium, and chromium. Surface water and sediments are contaminated with VOCs and chromium. Accidental ingestion of or direct contact with contaminated soils may pose a health risk. Contaminated groundwater does not pose any significant threats, because it is not used as a drinking water source.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases directed at source control and cleanup of the off-site contamination.

Response Action Status



Immediate Actions: In June 1983, the State and the County excavated about 40 cubic feet of soil from the southeastern corner of the main building and about 40 cubic feet more from an area behind the building. The EPA discovered about ten 55- and 30-gallon drums and 20 containers of varying sizes containing hazardous materials, as well as a storage cabinet of laboratory chemicals, in January 1985. EPA staff sampled the contents and segregated or bulked them according to compatibility. The storage area was cordoned off, and the building was secured. Workers shipped all hazardous waste containers to a temporary storage facility.



Source Control: The EPA selected a remedy for controlling the source of contamination on the site in 1987 that featured: (1) in-situ air stripping to treat contaminated soils; (2) excavating all treated soils showing elevated levels of contamination and disposing of them off site; (3) decontaminating or demolishing the buildings, depending on how severely they are undermined by excavation; (4) installing additional groundwater monitoring wells; (5) establishing an environmental monitoring program; and (6) completely fencing the site to restrict access. The EPA began the engineering design for this remedy in 1988. Sampling conducted during the design phase has determined that the originally selected technology contaminated soils by air stripping is not appropriate. Therefore, the remedy has been modified to include the thermal treatment of contaminated soil prior to its disposal. The design is slated for completion in late 1991, after which cleanup actions will begin.



Off-Site Contamination: The EPA completed an investigation of the extent of groundwater, surface water, and stream sediment contamination and issued a decision outlining interim cleanup methods in March 1991. The interim remedy involves extracting the groundwater and treating it by chemical precipitation. The sludge resulting from the process will be disposed of off site. The groundwater will be further treated using air stripping. Once the groundwater is treated, it will be reinjected into the aquifer. Additional investigations will be conducted to determine a final cleanup remedy. Interim cleanup actions will begin once the engineering design of the selected remedy is completed. It is scheduled to begin later in 1991.

Site Facts: In March 1984, Waldick was tried in Superior Court for criminal violation of Federal and State environmental laws. Waldick and two of the three company officers have filed for bankruptcy.

Environmental Progress

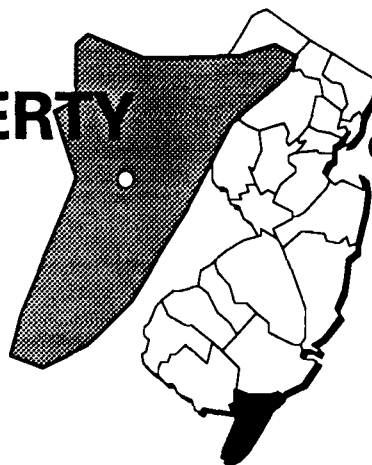


By removing the containers of hazardous materials and the laboratory chemicals, as well as securing the building, the EPA has significantly reduced the potential for exposure to contamination at the Waldick Aerospace Devices site. Cleanup activities will begin once the design of the source control and the interim groundwater remedies are completed.

WILLIAMS PROPERTY

NEW JERSEY

EPA ID# NJD980529945



EPA REGION 2
CONGRESSIONAL DIST. 02
Cape May County
Swainton

Site Description

The Williams Property site is a 6-acre abandoned hazardous waste dump on wooded land in Swainton. Approximately 200 drums of liquid hazardous wastes were disposed of at the site in 1979. Waste solvents currently are stored in drums and tanks on the site. Soils and groundwater have been contaminated with high concentrations of toxic and volatile organic compounds (VOCs). The area is sparsely populated, although a residence stands on the site. This home's well is contaminated and has been closed since 1985. A neighboring home lies over the contaminated plume of groundwater to the northwest, but residents there have reported no problems. Surface water bodies in the vicinity are used for recreation, and more than 60 people depend on groundwater for drinking supplies. Groundwater contaminant levels have been decreasing since the initial disposal of wastes. The site and its surroundings are used primarily for residential purposes; about eight families live in the area. Municipal and private wells servicing about 4,900 people lie within 3 miles of the site. Groundwater is used for crop irrigation.

Site Responsibility: This 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



Groundwater on the site is contaminated with VOCs and metals. On-site soil contains phthalates, a plastics by-product, and VOCs including xylene and methylene chloride. Although the Williams domestic well is not being used for drinking water, the contaminant plume is migrating toward other wells in the area. People who ingest or come into direct contact with the polluted water or hazardous waste may be at risk. The site is in a rural, agricultural region near coastal wetlands and wildlife management areas that could be subject to contamination from the site runoff.

Cleanup Approach

The site is being addressed 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, the State removed about 1,200 cubic yards of contaminated sludge and soil. Continued evidence of groundwater contamination forced the closing of the Williams well in 1985 and the establishment of 24-hour site security. Several contaminated drums and cylinders have been removed to off-site EPA-approved locations for disposal.



Entire Site: The EPA selected a remedy for cleanup of the entire site in 1987 that included: (1) extracting and treating contaminated groundwater and discharging the cleaned water to the underlying aquifer; (2) excavating 700 cubic yards of contaminated soil and incinerating it off site; (3) backfilling the excavation with clean soil, regrading it, and revegetating it; and (4) providing an alternate water supply to nearby residents with polluted wells. The State, which is taking the lead for site cleanup, also plans to restrict access to the site with fencing and to dispose of the stored solvents. The engineering design for the selected remedy began in fall 1990. It is slated for completion in 1992. Cleanup work also began in 1990, with excavation of contaminated soil and a test burn to determine the feasibility of incineration. Although the test burn was successful, use of that facility was not approved, and alternatives are being investigated.

Site Facts: In 1984, the parties potentially responsible for the contamination notified the EPA of their willingness to conduct a study of the site. The potentially responsible parties filed suit against the EPA and the New Jersey Department of Environmental Protection, seeking to enjoin the agencies from spending any monies for the study. In 1985, the scope of work submitted by the potentially responsible parties was found to be inadequate. The EPA informed the potentially responsible parties that they will not perform the study, and further negotiations will not occur.

Environmental Progress

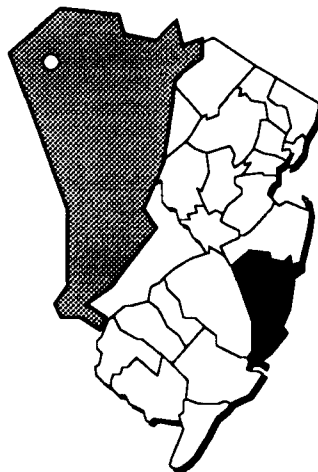


Much of the contamination has been removed from the Williams Property site, greatly reducing the potential for exposure to hazardous materials while final cleanup activities take place at the site.

WILSON FARM

NEW JERSEY

EPA ID# NJD980532824



EPA REGION 2
CONGRESSIONAL DIST. 13
Ocean County
Plumsted Township

Other Names:
Thiokol Corporation

Site Description

The 438-acre Wilson Farm site is one of seven similar "Plumsted" sites located within 20 square miles of Plumsted Township. Four of these sites are listed on the NPL. Through an agreement with the site owner, Thiokol Chemical Company allegedly disposed of bulk liquid and drummed wastes on 10 acres of this site. The wastes were dumped on the surface in the late 1960s and early 1970s; there is no evidence of buried materials. Inorganic chemicals were found in drinking wells near the site in 1987. The site is not fenced or posted, and there is evidence that the area is used for hunting and recreation. Approximately 1,900 people live within a 3-mile radius of the site, and 300 people live within a mile. These residents rely on private wells for drinking supplies. The closest drinking water well sampled was approximately 1,500 feet from the site.

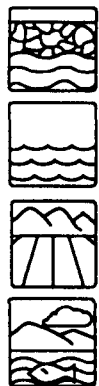
Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Volatile organic compounds (VOCs), pesticides, and heavy metals were detected in groundwater and stream sediments. Surface and subsurface soils are contaminated with VOCs and heavy metals. Contaminated surface water and groundwater may pose a health threat if used for recreational activities or for a drinking water source. Contaminants found at the site may pose a threat to Borden's Run Creek, Collier's Mill Lake, and a wildlife refuge.

Cleanup Approach

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

Response Action Status



Emergency Actions: In 1980, New Jersey Department of Environmental Protection (NJDEP) workers installed six groundwater monitoring wells, removed drums, and excavated and removed sludge, solid wastes, and approximately 620 cubic yards of contaminated soil.



Entire Site: In 1987, the NJDEP began an intensive study of the remaining water and soil pollution at the site. This investigation is exploring the nature and extent of contamination problems and will recommend the best strategies for final cleanup. It is scheduled for completion in 1992. Once completed, the EPA will evaluate the study findings and will select final cleanup remedies for site contamination areas.

Environmental Progress



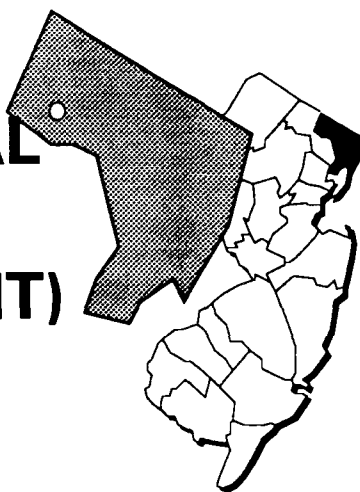
The removal of drums and the excavation and removal of sludge, solid wastes, and contaminated soil have greatly reduced the potential for exposure to contaminants at the Wilson Farm site while further studies and cleanup activities are taking place.

WITCO CHEMICAL CORP.

(OAKLAND PLANT)

NEW JERSEY

EPA ID# NJD045653854



EPA REGION 2
CONGRESSIONAL DIST. 07
Bergen County
Oakland

Site Description

The Witco Chemical Corp. (Oakland Plant) operates a technical research facility for the development of specialty chemicals at this 9-acre site on Bauer Drive in Oakland. From 1966 through 1984, the company neutralized laboratory wastewater in an underground tank and then discharged it into a network of six unlined subsurface seepage pits. This network lies in an aquifer used for domestic and industrial purposes. The New Jersey State Department of Environmental Protection (NJDEP) inspected the operation in 1982. Petroleum hydrocarbons and volatile organic compounds (VOCs) were detected in soil and groundwater samples. The operation is located in an industrial park. It is bordered by Hopper Lake, a recreational water body, and a housing development. Approximately 43,000 people live within a 3-mile radius of the site, and 5,000 live within 1 mile. The entire population draws its drinking water supplies from either municipal or private wells that tap the aquifer of concern. A freshwater wetland lies within a mile of the site, and Franklin Lake, used for recreation, is 3 miles downstream.

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

NPL LISTING HISTORY

Proposed Date: 06/24/88

Final Date: 10/04/89

Threats and Contaminants



Groundwater contains petroleum hydrocarbons, the VOCs toluene and ethyl benzene, and carbon disulfide and phthalates. Soil is contaminated with pesticides including dieldrin, DDE, and DDT and the heavy metals mercury, cadmium, and lead. The seepage pit samples revealed the presence of high levels of petroleum hydrocarbons and other organic and inorganic contaminants. The EPA will perform an assessment to determine what threats and potential threats are posed by the site.

Cleanup Approach

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

Response Action Status



Initial Actions: Under a 1982 directive from the NJDEP, Witco began cleanup operations. The company installed a 6,000-gallon fiberglass tank to receive laboratory waste. This completely eliminated any subsurface discharges by early 1984. A separate system for discharging uncontaminated cooling waters into a nearby lake has been established under a State environmental permit. In 1987, Witco started its own independent soil cleanup. Workers removed remaining sludges, contaminated soil, and various pieces of discharge equipment. They backfilled and closed the excavation by 1988. The soils removed were those contaminated to a level of 100 parts per million of petroleum hydrocarbons; remaining soils have not been tested.



Entire Site: To ensure that Witco's cleanup meets standards, the EPA ordered the company to conduct a study of any remaining contamination. Witco started the investigation in fall 1989. It is slated for completion in early 1992. The study will involve further groundwater and soil investigations to determine the nature and extent of any remaining contamination present on site.

Site Facts: Pursuant to a July 1982 State directive, Witco deactivated its seepage pit system and performed a hydrogeologic investigation. In August 1989, Witco entered into an Administrative Order with the EPA for the performance of an investigation of the site.

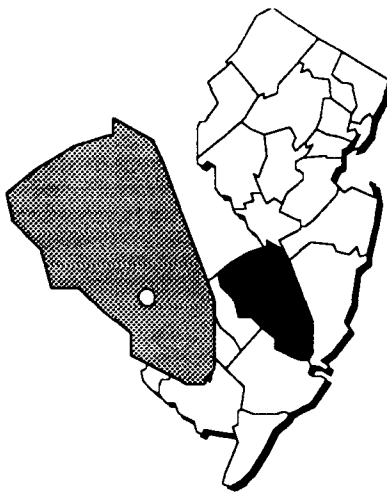
Environmental Progress



The cleanup activities already completed by the Witco Chemical Corp. have significantly reduced the levels of contamination at the site. Further investigations into the extent of any remaining soil and groundwater contamination currently are underway.

WOODLAND ROUTE 72 DUMP NEW JERSEY

EPA ID# NJD980505879



EPA REGION 2
CONGRESSIONAL DIST. 13
Burlington County
Woodland Township

Other Names:
Manahawkin Site

Site Description

The Woodland Route 72 Dump site is a 12-acre industrial dump located along Route 72, just 2 miles away from an almost identical site on Route 532. Both are on the National Priorities List; one residence lies between them. From the early 1950s to the mid-1960s, various wastes were brought to this uncontrolled disposal site in 55-gallon drums and in bulk transport. Records indicate that the wastes were dumped into open pits and trenches and then burned. Investigations, however, reveal that substantial amounts of these wastes were buried. In addition to numerous chemical contaminants in soil and water, there are some areas of the site where gamma radiation exposure is greater than the EPA-recommended action level. Active commercial cranberry bogs lie 1/2 mile northwest of the site. Approximately 900 people live within a 4-mile radius of the site, and only one private residence is located within a 3-mile radius. Land use in the area is limited to cranberry and blueberry cultivation and harvesting of cedar and pine for wood products. Residents rely on groundwater for drinking, household use, and irrigation; about 20 people use private wells within 3 miles of the site. The closest well is 1 1/2 miles from the dump. There is no evidence of well contamination. The site is located within the Pinelands National Reserve, which was created by the National Parks and Recreation Act of 1978. Pope Branch, an intermittent stream, is located approximately 500 feet to the north and 1,000 feet west of the site. Wetlands are located approximately 1/4 mile southwest of the site.

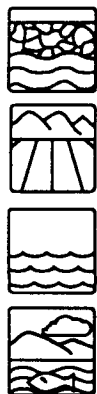
Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Groundwater is contaminated with volatile organic compounds (VOCs), semi-volatiles, heavy metals, and pesticides. The surface at two areas on the site has elevated levels of gamma radioactivity (from thorium-232, radium-226, and uranium-238). Off-site sediments contain lead. Surface and subsurface soils are contaminated with VOCs, semi-volatiles, polychlorinated biphenyls (PCBs), and the pesticide DDT; metals also are present. Surface and subsurface sludge wastes contain a range of organic compounds, including VOCs, acids, semi-volatiles, DDT, PCBs, and metals. Phenol and lead have been detected in off-site surface water. A chain-link fence, installed in 1986, may restrict access to the site somewhat, but there is evidence that children and adults use the property for recreation. The geology of the site makes it easy for the contaminants in the soil to seep down into the groundwater. Therefore, people who drink or come in direct

contact with groundwater from private wells may be at risk if wells become contaminated. In addition, coming into direct contact with or accidentally ingesting the contaminated sludge, soil, surface water, or sediments may pose a health hazard. Pollutants migrating from the site may be harmful to wildlife inhabiting the Pinelands National Reserve.

Cleanup Approach

The site is being addressed in a single long-term remedial phrase directed at cleanup of the entire site.

Response Action Status



Entire Site: The cleanup remedy selected for the site by the EPA in 1990 includes the excavation of 54,000 cubic yards of soil, with off-site disposal and groundwater extraction and treatment. The feasibility of several groundwater treatment alternatives, including air stripping, biological treatment, advanced oxidation and carbon adsorption, will be assessed. Cleanup activities will begin once the engineering design of the selected remedy, underway since 1990, is completed. Removal and disposal of contaminated soil by the potentially responsible parties occurred in 1991.

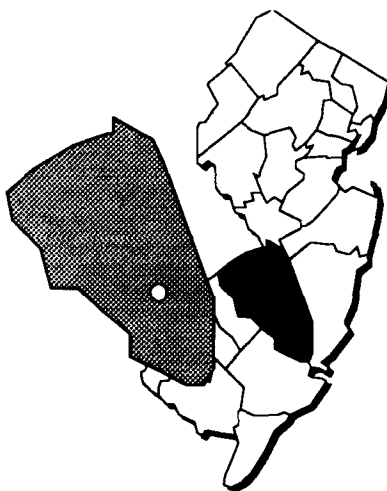
Environmental Progress



The removal and disposal of contaminated soil have reduced the threat of exposure to the public and the environment while groundwater cleanup activities are being designed for the Woodland Route 72 Dump site.

WOODLAND ROUTE 532 DUMP NEW JERSEY

EPA ID# NJD980505887



EPA REGION 2
CONGRESSIONAL DIST. 13
Burlington County
Woodland Township

Site Description

The Woodland Route 532 Dump site is an inactive chemical waste dump covering about 20 acres along Route 532. It was put into use after nearby residents forced abandonment of an almost identical site along Route 72, about 2 miles away, which also is on the National Priorities List. Several chemical companies disposed of wastes here from 1956 until the mid-1960s, dumping, burning, and burying drummed and bulk materials. The site contains several sludge mounds and numerous sandy depressions containing drums. The area around the site is sparsely populated. One private residence is located within a 3-mile radius of the dump, and 900 people live within 4 miles. The closest residences rely on private well water. The site is located within the Preservation Area District of the New Jersey Pinelands. Goodwater Run, an intermittent stream, borders the site to the east. An active cranberry bog is located 4,000 feet to the southwest. The local cranberry producers use the surface waters to flood the cranberry bogs.

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

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Groundwater and soil are contaminated with volatile organic compounds (VOCs), semi-volatiles, heavy metals, and pesticides. Goodwater Run contains elevated levels of the heavy metals zinc and lead. Hazardous waste disposal areas are covered with a sand layer. This may pose a physical danger to trespassers who come into contact with the wastes. People who come in direct contact with or drink contaminated groundwater or surface water may be at risk. Pollutants from the site may be harmful to wildlife inhabiting the Pinelands National Reserve.

Cleanup Approach

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

Response Action Status



Immediate Actions: In 1986, a security fence was constructed to restrict site access.



Entire Site: The State concluded a study of soil and groundwater pollution at the site in 1989. In 1990, the EPA selected the cleanup remedy, which involves excavating all contaminated surface materials and disposing of them at an approved off-site facility and installing a groundwater recovery system consisting of air stripping, metals removal, biological treatment, and advanced oxidation or carbon adsorption. By January 1991, waste materials were removed and disposed of by the potentially responsible parties at an EPA-approved facility. Design of the groundwater cleanup currently is underway.

Environmental Progress



By constructing a fence to limit site access and removing a substantial amount of waste materials, the EPA and the potentially responsible parties have reduced the potential for exposure to hazardous materials on the Woodland Route 532 Dump site while the final cleanup remedy for the groundwater is being designed.

**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.

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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

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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 commu-

nities, 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.

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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.

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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 inundated 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

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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,

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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

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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.

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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.

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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

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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

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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

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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 non-tidal 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 Jersey**

Information Repositories for NPL Sites in the State of New Jersey

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
A.O. POLYMER	Sparta Public Library, 22 Woodport Road, Sparta, NJ 07871
AMERICAN CYANAMID COMPANY	Somerset County Library, Main Library, North Bridge Street and Vogt Drive, Bridgewater, NJ 08807
ASBESTOS DUMP	Passaic Township Library, 91 Central Avenue, Stirling, NJ 07980
BEACHWOOD/BERKELEY WELLS	Berkeley Township Library, 42 Station Road, Bayville, NJ 08721
BOG CREEK FARM	Howell Township Public Library, Preventorium Road, Howell, NJ 07731
BRICK TOWNSHIP LANDFILL	Brick Township Public Library, 401 Chambers Bridge Road, Brick Town, NJ 08723
BRIDGEPORT RENTAL & OIL SERVICES	Logan Township Library, Center Square Road and School Lane, Swedesboro, NJ 08085
BROOK INDUSTRIAL PARK	Bound Brook Public Library, 402 East High Street, Bound Brook, NJ 08805
BURNT FLY BOG	Monmouth County Library, Marlboro Branch Library, 1 Library Court, Marlboro, NJ 07746
CALDWELL TRUCKING	Anthony Pio Costa Memorial Library, 261 Hollywood Avenue, Fairfield, NJ 07004
CHEMICAL CONTROL CORPORATION	Office of the Director, City of Elizabeth, Department of Health, Welfare and Housing, 50 Winfield Scott Plaza, Room G5, Elizabeth, NJ 07201
CHEMICAL INSECTICIDE CORPORATION	Edison Public Library, 340 Plainfield Avenue, Edison, NJ 08817
CHEMICAL LEAMAN TANK LINES, INC.	Township Clerk's Office, Logan Township Municipal Building, 73 Main Street, Bridgeport, NJ 08014
CHEMSOL, INC.	Kennedy Public Library, 500 Hoes Lane, Piscataway, NJ 08854
CIBA-GEIGY CORP.	Ocean County Public Library, Main Library, 101 Washington Street, Toms River, NJ 08753
CINNAMINSON GW CONTAMINATION	Cinnaminson Township Municipal Building, 1621 Riverton Road, Cinnaminson, NJ 08077
COMBE FILL NORTH LANDFILL	Morris County Free Library, 30 East Hanover Avenue, Whippany, NJ 07891
COMBE FILL SOUTH LANDFILL	Washington Township Library, 146 Schooleys Mountain Road, Long Valley, NJ 07853
COOPER ROAD SITE	Deleted from the NPL
COSDEN CHEMICAL COATINGS CORP.	Beverly City Hall Municipal Building, 446 Broad Street, Beverly, NJ 08010
CPS/MADISON INDUSTRIES	Old Bridge Public Library, Old Bridge Center, 516 Cottrell Road, Old Bridge, NJ 08857
CURCIO SCRAP METAL	Saddle Brook Free Public Library, 340 Mayhill Street, Saddle Brook, NJ 07662
D'IMPERIO PROPERTY	Office of the Mayor, Hamilton Township, 2 Cape May Avenue, Mays Landing, NJ 08330
DAYCO CORP./L.E. CARPENTER	Wharton Public Library, 1519 South Main Street, Wharton, NJ 07885

Information Repositories for NPL Sites in the State of New Jersey (Continued)

Site Name	Site Repository
DELILAH ROAD	Atlantic County Library, Egg Harbor Branch, Swift Drive, Bargaintown, NJ 08232
DENZER & SCHAFER X-RAY COMPANY	Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753
DE REWAL CHEMICAL COMPANY	Hunterdon County Library, Route 12, Flemington, NJ 08822
DIAMOND ALKALI CO.	Newark Public Library, 5 Washington Street, Newark, NJ 07101
DOVER MUNICIPAL WELL 4	Dover Free Library, 32 East Clinton Street, Dover, NJ 07801
ELLIS PROPERTY	Evesham Library, Tritown Plaza, Route 70, Marlton, NJ 08053
EVOR PHILLIPS LEASING	Old Bridge Public Library, Old Bridge Center, 516 Cottrell Road, Old Bridge, NJ 08857
EWAN PROPERTY	Shamong Township Clerk, 60 Willow Grove Road, Vincetown, NJ 08088
FAA TECHNICAL CENTER	Atlantic County Library, Mays Landing Branch, 2 South Farragut Avenue, Mays Landing, NJ 08330
FAIR LAWN WELL FIELD	Maurice M. Pine Free Public Library, 10-01 Fair Lawn Avenue, Fair Lawn, NJ 07410
FLORENCE LAND RECONTOURING, INC.	Burlington County Library, Main Library, West Woodlane Road, Mount Holly, NJ 08060
FORT DIX (LANDFILL SITE)	Fort Dix Environmental, Natural Resources Division, Building 5512, Texas Avenue, Fort Dix, NJ 08640
FRIED INDUSTRIES	East Brunswick Library, 2 Jean Walling Civic Center Drive, East Brunswick, NJ 08816
FRIEDMAN PROPERTY	Deleted from the NPL
GARDEN STATE CLEANERS	Buena Borough Municipal Building, 616 Central Avenue, Minotola, NJ 08341
GEMS LANDFILL	Gloucester Township Library, 1650 Blackwood/Clementon Road, Blackwood, NJ 08012
GLEN RIDGE RADIUM SITE	Glen Ridge Public Library, 240 Ridgewood Avenue, Glen Ridge, NJ 07028
GLOBAL SANITARY LANDFILL	Sayreville Public Library, 1050 Washington Road, Parlin, NJ 08859
GOOSE FARM	Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753
HELEN KRAMER LANDFILL	Gloucester County Library, Main Library, 200 Holly Dell Drive, Sewell, NJ 08080
HERCULES, INC.	Greenwich Township Municipal Building, Broad and Walnut Streets, Gibbstown, NJ 08027
HIGGINS DISPOSAL	Not Established
HIGGINS FARM	Franklin Township Public Library, 485 DeMott Lane, Somerset, NJ 08872
HOPKINS FARM	Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753
IMPERIAL OIL COMPANY INC./CHAMPION CHEM	Marlboro Township Hall, 1979 Township Drive, Marlboro, NJ 07746
INDUSTRIAL LATEX CORP.	John F. Kennedy Memorial Library, 92 Hathaway Street, Wallington, NJ 07057
JACKSON TOWNSHIP LANDFILL	Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753
JIS LANDFILL	South Brunswick Public Library, 110 Kingston Lane, Monmouth Junction, NJ 08852

Information Repositories for NPL Sites in the State of New Jersey (Continued)

Site Name	Site Repository
KAUFFMAN & MINTER, INC.	Springfield Township Municipal Building, Jobstown Road, Jacksonville, NJ 08041
KIN-BUC LANDFILL	Edison Township Library, 340 Plainfield Avenue, Edison, NJ 08817
KING OF PRUSSIA	Camden City Library, 418 Federal Street, Camden, NJ 08101
KRYSWATY FARM	Deleted from the NPL
LANDFILL & DEVELOPMENT COMPANY	Burlington County Library, Main Library, West Woodlane Road, Mount Holly, NJ 08060
LANG PROPERTY	Community Library, 348 Lakehurst Road, Brownsmill, NJ 08015
LIPARI LANDFILL	McCowan Library, 15 Pitman Avenue, Pitman, NJ 08071
LODI MUNICIPAL WELLS	Lodi Memorial Library, 1 Memorial Drive, Lodi, NJ 07644
LONE PINE LANDFILL	Monmouth County Public Library, 25 Broad Street, Freehold, NJ 07728
M. & T. DELISA LANDFILL	Deleted from the NPL
MANNHEIM AVENUE DUMP	Galloway Township Public Library, 30 West Jim Leeds Road, Pomona, NJ 08240
MAYWOOD CHEMICAL COMPANY	Maywood Public Library, 459 Maywood Avenue, Maywood, NJ 07607
METALTEC/AEROSYSTEMS	Sussex County Library, Dennis Memorial Branch Library, 101 Main Street, Newton, NJ 07860
MONITOR DEVICES/INTERCIRCUITS, INC.	Wall Township Library, Old Mill Plaza, State Highway 35, Sea Girt, NJ 08750
MONROE TOWNSHIP LANDFILL	Jamesburg Public Library, 229 Gatzmer Road, Jamesburgh, NJ 08831
MONTCLAIR/WEST ORANGE RADIUM	Montclair Public Library, 50 South Fullerton Avenue, Montclair, NJ 07042
MONTGOMERY TOWNSHIP HOUSING	Somerset County Library, Main Library, North Bridge Street and Vogt Drive, Bridgewater, NJ 08807
MYERS PROPERTY	Hunterdon County Library, Route 12, Flemington, NJ 08822
NASCOLITE CORPORATION	Millville Public Library, 210 Buck Street, Millville, NJ 08332
NAVAL AIR ENGINEERING CENTER	Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753
NAVAL WEAPONS STATION EARLE	Monmouth County Library, Colts Neck Branch Library, 15 Heyers Mill Pond, Colts Neck, NJ 07722
NL INDUSTRIES INC.	Penns Grove-Carney's Point Library, South Broad Street, Penns Grove, NJ 08069
PEPE FIELD	BOONTON Holmes Library, 621 Main Street, Boonton Town, NJ 07005
PICATINNY ARSENAL	Office of Environmental Affairs, SMCRA-EA, U.S. Army Armament Research, Development, and Engineering Center, Picatinny Arsenal, NJ 07806
PIJAK FARM	Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753
PIP LANDFILL	Jersey City Public Library, Five Corners Branch, 678 Newark Avenue, Jersey City, NJ 07306
POHATCONG VALLEY GW CONTAMN.	Washington Borough Municipal Building, 100 Belvidere Avenue, Washington, NJ 07882

Information Repositories for NPL Sites in the State of New Jersey (Continued)

Site Name	Site Repository
POMONA OAKS RESIDENTIAL WELLS	Galloway Township Public Library, 30 West Jim Leeds Road, Pomona, NJ 08240
PRICE LANDFILL	Atlantic City Public Library, 1 North Tennessee Avenue, Atlantic City, NJ 08401
RADIATION TECHNOLOGY, INC.	Rockaway Township Public Library, 61 Mount Hope Road, Rockaway Township, NJ 07866
REICH FARMS	Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753
RENORA, INC.	Edison Main Library, 340 Plainfield Drive, Edison, NJ 08817
RINGWOOD MINES/LANDFILL	Ringwood Library, 145 Sylards Road, Ringwood, NJ 07456
ROCKAWAY BOROUGH WELL FIELD	Rockaway Borough Municipal Complex, 1 East Main Street, Rockaway, NJ 07866
ROCKAWAY TOWNSHIP WELLS	Rockaway Township Public Library, 61 Mount Hope Road, Rockaway Township, NJ 07866
ROCKY HILL MUNICIPAL WELL	Somerset County Library, Main Library, North Bridge Street and Vogt Drive, Bridgewater, NJ 08807
ROEBLING STEEL CO.	Florence Township Public Library, 1350 Homberger Avenue, Roebbing, NJ 08554
SAYREVILLE LANDFILL	Sayreville Free Public Library, 1050 Washington Road, Parlin, NJ 08859
SCIENTIFIC CHEMICAL PROCESSING	William E. Dermody Free Public Library, 420 Hackensack Street, Carlstadt, NJ 07072
SHARKEY LANDFILL	Morris County Public Library, 30 East Hanover Avenue, Whippany, NJ 07981
SHIELD ALLOY CORP.	Newfield Borough Library, Catawba Avenue and Church Street, Newfield, NJ 08344
SOUTH BRUNSWICK LANDFILL	South Brunswick Public Library, 110 Kingston Lane, Monmouth Junction, NJ 08852
SOUTH JERSEY CLOTHING CO.	Buena Borough Municipal Building, 616 Central Avenue, Minotola, NJ 08341
SPENCE FARM	Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753
SWOPE OIL AND CHEMICAL CO.	Clerk's Office, Township of Pennsauken, 5605 North Crescent Boulevard, Pennsauken, NJ 08110
SYNCON RESINS	Kearny Public Library, 318 Kearny Avenue, Kearny, NJ 07302
TABERNAACLE DRUM DUMP	Tabernacle Township Building, 163 Carranza Road, Tabernacle Township, NJ 08088
UNIVERSAL OIL PRODUCTS, INC.	East Rutherford Memorial Library, 143 Boiling Spring Avenue, East Rutherford, NJ 07073
UPPER DEERFIELD TOWNSHIP SANITARY LDFL	Cumberland County Library, 800 East Commerce Street, Bridgeton, NJ 08302
U.S. RADIUM CORP.	Orange City Public Library, 348 Main Street, Orange, NJ 07050
VENTRON/VELSICOL	Carlstadt Public Library, 420 Hackensack Street, Carlstadt, NJ 07602
VINELAND CHEMICAL CO, INC.	Vineland Public Library, 1058 East Landis Avenue, Vineland, NJ 08360
VINELAND STATE SCHOOL	Vineland Public Library, 1058 East Landis Avenue, Vineland, NJ 08360
W.R. GRACE & CO.	Wayne Municipal Library, 474 Valley Road, Wayne, NJ 07470
WALDICK AEROSPACE DEVICES, INC	Wall Township Library, 2700 Allaire Road, Wall, NJ 07719

Information Repositories for NPL Sites in the State of New Jersey *(Continued)*

Site Name	Site Repository
WILLIAMS PROPERTY	Cape May County Public Library, Cape May Court House, Mechanic Street, Cape May, NJ 08210
WILSON FARM	Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753
WITCO CHEMICAL CORP.	Free Public Library of Oakland, Municipal Plaza, Oakland, NJ 07436
WOODLAND ROUTE 72 DUMP	Woodland Township Municipal Building, Main Street, Chatsworth, NJ 08019
WOODLAND ROUTE 532 DUMP	Woodland Township Municipal Building, Main Street, Chatsworth, NJ 08019