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SUPERFUND: Progress at National Priority List Sites

NEW JERSEY 1992 UPDATE

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INTRODUCTION

A BRIEF OVERVIEW OF SUPERFUND

During the second half of the Twentieth Century, the environmental consequences of more than 100 years of industrialization in the United States became increasingly clear. Authors such as Rachel Carson wrote passionately about the often-hidden environmental effects of our modern society's widespread use of chemicals and other hazardous materials. Their audience was small at first, but gradually their message spread. Growing concern turned to action, as people learned more about the environment and began to act on their knowledge

The 1970s saw environmental issues burst onto the national scene and take hold in the national consciousness. The first Earth Day was observed in 1970, the year that the U.S. Environmental Protection Agency (EPA) was founded. By the end of the 1970s, Love Canal in New York and the Valley of the Drums in Kentucky had entered the popular lexicon as synonyms for pollution and environmental degradation.

Superfund Is Established

The industrialization that gave Americans the world's highest standard of living also created problems that only a national program could address. By 1980, the U.S. Congress had passed numerous environmental laws, implemented by the EPA, but many serious hazardous waste problems were slipping through the cracks.

Responding to growing concern about public health and environmental threats from uncontrolled releases of hazardous materials, the U.S. Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Popularly known as Superfund, CERCLA had one seemingly simple job—to uncover and clean up hazardous materials spills and contaminated sites.

A Big Job

Few in Congress, the EPA, the environmental community, or the general public knew in 1980 just how big the nation's hazardous materials problem is. Almost everyone thought that Superfund would be a short-lived program requiring relatively few resources to clean up at most a few hundred sites. They were quite mistaken.

As the EPA set to work finding sites and gauging their potential to harm people and the environment, the number of sites grew. Each discovery seemed to lead to another, and today almost 36,000 hazardous waste sites have been investigated as potential hazardous waste sites. They are catalogued in the EPA's computerized database, CERCLIS (for the Comprehensive Environmental Re-

sponse, Compensation, and Liability Information System).

The damage to public health and the environment that each site in CERCLIS might cause is evaluated; many sites have been referred to State and local governments for cleanup. The EPA lists the nation's most serious hazardous waste sites on the National Priorities List, or NPL. (These Superfund sites are eligible for federally-funded cleanup, but whenever possible the EPA makes polluters pay for the contamination they helped create.) The NPL now numbers 1,275 sites, with 50 to 100 added each year. By the end of the century, the NPL may reach as many as 2,100 sites.

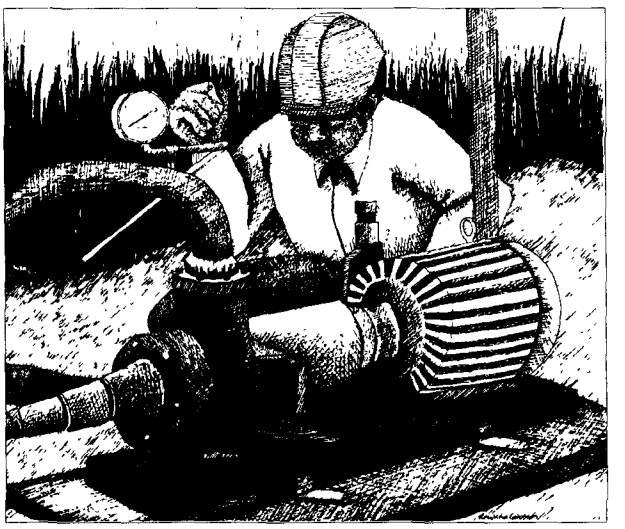
Superfund faces some of the most complex pollution problems ever encountered by an environmental program. Improperly stored or disposed chemicals and the soil they contaminate are one concern. More difficult to correct are the wetlands and bays, and the groundwater, lakes, and rivers often used for drinking water that are contaminated by chemicals spreading through the soil or mixing with storm water runoff. Toxic vapors contaminate the air at some sites, threatening the health of people living and working near by.

Superfund aims to control immediate public health and environmental threats by tackling the worst problems at the worst sites first. Wherever possible, Superfund officials use innovative treatment techniques—many developed or refined by the EPA—to correct hazardous materials problems once and for all. Many of the treatment techniques they use did not exist when the program was created.

The EPA Administrator had challenged Superfund to complete construction necessary for cleanup work at 130 NPL sites by the end of the 1992 federal fiscal year. By September 30, 1992, the end of fiscal year 1992, construction had been completed at a total of 149 NPL sites. Superfund is well on its way of meeting the Administrator's goal of completing construction at 200 NPL sites by the end of fiscal year 1993, and 650 sites by the end of fiscal year 2000.

Quick Cleanup at Non-NPL Sites

Long-standing hazardous waste sites are not Superfund's only concern. The EPA also responds to hazardous spills and other emergencies, hauling away chemicals for proper treatment or disposal. Superfund teams perform or supervise responses at rail and motor vehicle accidents, fires, and other emergencies involving hazardous substances. They also evacuate people living and working near by, if necessary, and provide clean drinking water to people whose own water is contaminated. Removal crews also post warning signs and take other precautions to keep people and animals away from hazardous substances.



Superfund employee prepares equipment for groundwater treatment.

Quick Cleanups, or Removals, are not limited to emergencies. When cleanup crews at contaminated sites find hazardous substances that immediately threaten people or the environment, they act right away to reduce the threat or to remove the chemicals outright. As the EPA implements the Superfund Accelerated Cleanup Model (SACM), more and more sites will undergo quick cleanups, and many of these will be cleaned up completely without ever being included on the NPL. (See "Streamlining Superfund: The Superfund Accelerated Cleanup Model.")

Some of Superfund's most significant gains in public health and environmental protection have been won by the removal program. As of March 31, 1992, the Emergency Response Program had logged more than 2,300 removal completions since Superfund was established.

Superfund employee removing drums from a Superfund site.

The Public's Role

Superfund is unique among federal programs in its commitment to citizen participation. Although the EPA is responsible for determining how dangerous a site is and how best to clean it up, the Agency relies on citizen input as it makes these decisions.

Community residents are often invaluable sources of information about a hazardous waste site, its current and previous owners, and the activities that took place there. Such information can be crucial to experts evaluating a site and its potential dangers.

Residents also comment on EPA cleanup plans by stating their concerns and preferences at public meetings and other forums and in formal, written comments to Agency proposals. The EPA takes these comments and concerns seriously, and has modified many proposals in response to local concerns. For, ultimately, it is the community and its citizens that will live with the results of the EPA's decisions and actions; it is only fair that citizens participate in the process.

A Commitment to Communication

The Superfund program is very serious about public outreach and communication. Community relations coordinators are assigned to each NPL site to help the public understand the potential hazards present, as well as the cleanup alternatives. Local information repositories, such as libraries or other public buildings, have been established near each NPL site to ensure that the public has an opportunity to review all relevant information and the proposed cleanup plans.

The individual State volumes contain summary fact sheets on NPL sites in each State and territory. Together, the fact sheets provide a concise report on site conditions and the progress made toward site cleanups as of March 1992. The EPA revises these volumes periodically to provide an up-to-date record of program activities. A glossary of key terms relating to hazardous waste management and Superfund site cleanup is provided at the back of this book.

INTRODUCTION

Superfund is, of course, a public program, and as such it belongs to everyone of us. This volume, along with other State volumes, comprises the EPA's report on Superfund progress to the program's owners for the year 1992.

STREAMLINING SUPERFUND: THE SUPERFUND ACCELERATED CLEANUP MODEL

Historically, critics and supporters alike have measured Superfund's progress by the number of hazardous waste sites deleted from the NPL. Although easy enough to tally, this approach is too narrow. It misses the major gains Superfund makes by reducing major risks at the nation's worst hazardous sites long before all clean-up work is done and the site deleted. It also ignores the Removal Program's contributions to meeting Superfund's twin mandates of maximizing public health and environmental protection.

Renewing Superfund's commitment to rapid protection from hazardous materials, the EPA is streamlining the program. The Superfund Accelerated Cleanup Model, or SACM, will take Early Actions, such as removing hazardous wastes or contaminated materials, while experts study the site. SACM also will combine similar site studies to reduce the time required to evaluate a site and its threats to people and the environment. This way, immediate public health and environmental threats will be addressed while long-term cleanups are being planned.

Emergencies such as train derailments and motor vehicle accidents will continue to be handled expeditiously. Teams of highly trained technicians will swing into action right away, coordinating the cleanup and removal of hazardous substances to ensure public safety as quickly as possible.

Breaking With Tradition

The traditional Superfund process begins with a lengthy phase of study and site assessment, but SACM will save time by combining separate, yet similar, activities. Each EPA Region will form a Decision Team of site managers, risk assessors, community relations coordinators, lawyers, and other experts to monitor the studies and quickly determine whether a site requires Early Action (taking less than five years), Long-term Action, or both.

While the site studies continue, the Decision Team will begin the short-term work required to correct immediate public health or environmental threats from the site. Besides removing hazardous materials, Early Actions include taking precautions to keep contaminants from moving off the site and restricting access to the site. Early Actions could eliminate most human risk from these sites, and Superfund will further focus its public participation and public information activities on site assessment and Early Action.

Long-Term Solutions

While Early Actions can correct many hazardous waste problems—and provide the bulk of public health and environmental protection—some contamination will take longer to correct. Cleanups of mining sites, wetlands, estuaries, and projects involving incineration of contaminants or restoration of groundwater can take far longer than the three to five years envisioned for Early Actions. Under SACM, these sites will be handled much as they are now.

Also under SACM, the EPA will continue its pursuit of potentially responsible parties who may have caused or contributed to site contamination. Expedited enforcement and procedures for negotiating potentially responsible party settlements will secure their participation. Superfund personnel will continue to oversee clean-up work performed by potentially responsible parties.

HOW SUPERFUND WORKS

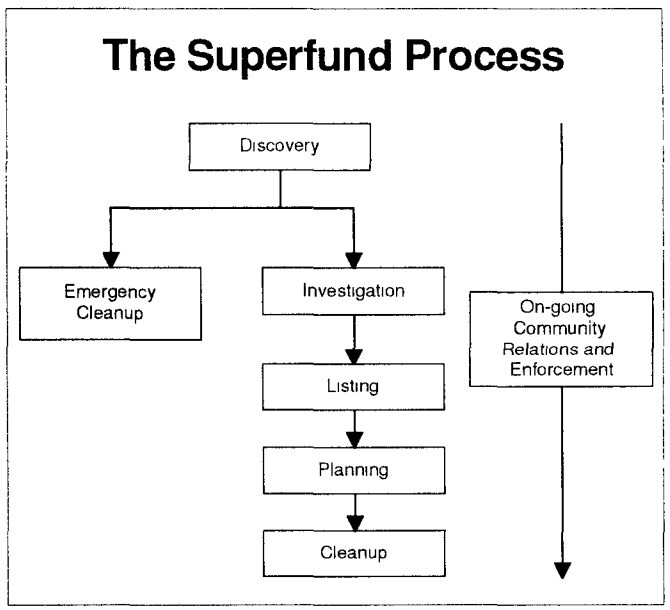
Each Superfund site presents a different set of complex problems. The same hazardous materials and chemicals often contaminate many sites, but the details of each site are different. Almost always, soil is contaminated with one or more chemicals. Their vapors may taint the air over and around the site. Contaminants may travel through the soil and reach underground aquifers which may be used for drinking water, or they may spread over the site to contaminate streams, ponds, and wetlands. The contaminating chemicals may interact with each other, presenting even more complicated cleanup problems.

Superfund's cleanup process is arduous and exacting. It requires the best efforts of hundreds of experts in science and engineering, public health, administration and management, law, and many other fields.

The average NPL site takes from seven to ten years to work its way through the system, from discovery to the start of long-term cleanup. Actual cleanup work can take years, decades if contaminated groundwater must be treated. Of course, imminent threats to public health or the environment are corrected right away.

The diagram to the right presents a simplified view of the cleanup process. The major steps in the Superfund process are:

- Site discovery and investigation to identify contaminants and determine whether emergency action is required;
- Emergency site work such as removing contaminants for proper treatment or disposal, and securing the site to keep people and animals away, if warranted by conditions at the site;
- Site evaluation to determine how people living and working nearby, and the environment, may be exposed to site contaminants;
- Detailed studies to determine whether conditions are serious enough to add the site to the National Priorities List of sites eligible for federally funded cleanup under Superfund;
- Selection, design, and implementation of a cleanup plan, after a thorough review of the most effective cleanup options, given site conditions, contaminants present, and their potential threat to public health or the environment.
- Follow-up to ensure that the cleanup work done at the site continues to be effective over the long term.



From the earliest stages, EPA investigators work hard to identify those responsible for the contamination. As their responsibility is established, the EPA negotiates with these "responsible parties" to pay for cleaning up the problem they helped create. This "enforcement first" policy saves Superfund Trust Fund monies for use in cleanups where the responsible parties cannot be identified, or where they are unable to fund cleanup work.

THE VOLUME

How to Use the State Book

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

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

How Can You Use This State Book?

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

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

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

THE VOLUME

NPL LISTING HISTORY

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

SITE RESPONSIBILITY

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

ENVIRONMENTAL PROGRESS

Summarizes the actions to reduce the threats to nearby residents and the surrounding environment and the progress towards cleaning up the site.

SITE NAME
STATE
EPA ID# ABC0000000

EPA REGION XX
COUNTY NAME
LOCATION

Other Names:

Site Description — A

Site Responsibility:

NPL Listing History
Proposed XX/XX/XX
Final XX/XX/XX

Threats and Contaminants — B

Cleanup Approach — C

Response Action Status — D

Site Facts: — E

Environmental Progress

Site Repository

SITE REPOSITORY

Lists the location of the primary site repository. The site repository may include community relations plans, public meeting announcements and minutes, fact sheets, press releases, and other site-related documents.

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

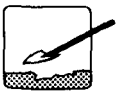
Contaminated *Surface Water and Sediments* on or near the site. (These include lakes, ponds, streams, and rivers.)

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.)

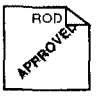
Threatened or contaminated *Environmentally Sensitive Areas* in the vicinity of the site. (Examples include wetlands and coastal areas or critical habitats.)

Icons in the Response Action Status Section

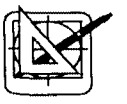


Initial, Immediate, or Emergency Actions have been taken or are underway to eliminate immediate threats at the site.

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.



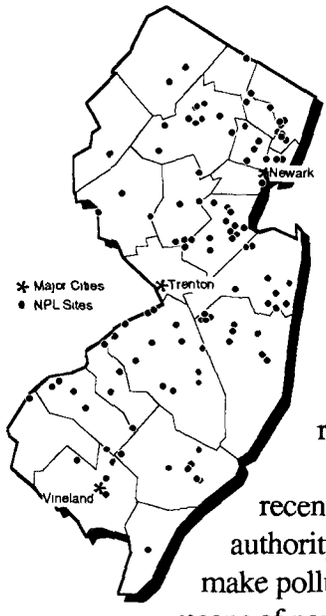
Remedy Design means that engineers are preparing specifications and drawings for the selected cleanup technologies.

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.

A SUMMARY OF THE STATE PROGRAM

Superfund Activities in New Jersey

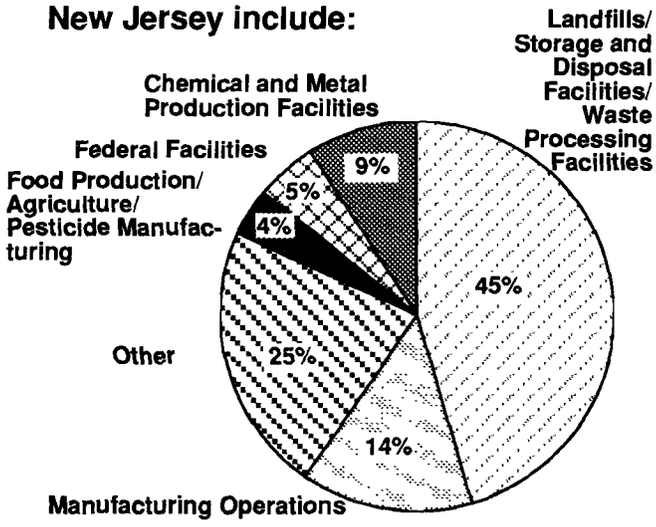


The State of New Jersey is located within EPA Region 2, which also includes New York, Puerto Rico, and the Virgin Islands. The State covers 7,787 square miles. According to the 1990 Census, New Jersey experienced a 5 percent increase in population between 1980 and 1990, and is ranked ninth in U.S. population with approximately 7,730,000 residents.

The New Jersey Spill Compensation and Control Act of 1976, most recently amended in 1990, establishes funding for public cleanups and provides authority for site cleanup activities. The statute grants the State the authority to make polluters liable for site cleanup regardless of fault, place liens on property as a means of payment, recover costs, and collect civil penalties and damages. In practice, the State attempts to reach a settlement with the polluter prior to issuing a penalty. New Jersey maintains three funds: the New Jersey Spill Compensation Fund, the Hazardous Discharge Site Cleanup Fund, and the Capital Fund. In addition to the required 10 percent contribution from the State under the Federal Superfund program, these Funds are available for emergency response, removals, studies and design, long-term cleanup actions, and operation and maintenance activities. The Spill Compensation Fund also is available for personal or property claims. At each stage of the cleanup process for all contaminated sites, the State holds public meetings to inform the community and encourage public participation. Currently, 108 sites in the State of New Jersey have been listed as final on the NPL; five sites have been deleted. No new sites have been proposed for listing in 1992.

The New Jersey Department of Environmental Protection and Energy implements the Superfund Program in the State of New Jersey

Activities responsible for hazardous waste contamination in the State of New Jersey include:



Facts about the 113 NPL sites in New Jersey:

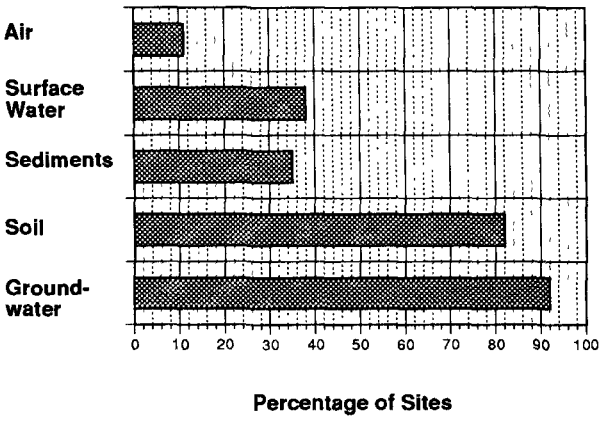
Immediate Actions (such as removing hazardous substances or restricting site access) were performed at 80 sites.

Thirty-seven sites endanger sensitive environments.

Ninety sites are located near residential areas.

Most Sites Have Multiple Contaminants and Contaminated Media:

Media Contaminated at Sites



Contaminants Found at Sites

	Percentage of Sites
VOCs	89%
Heavy Metals	73%
Pesticides/Herbicides	24%
PCBs	21%
Plastics	14%
Creosotes	13%
Cyanide	9%
Carbon Disulfide	9%
Radiation	7%
Other*	6%
Acids	5%
Petrochemicals/Explosives	5%
Dioxin	4%
Gases	3%

*Other contaminants include choloform, asbestos and vinyl acetate.

The Potentially Responsible Party Pays...

In the State of New Jersey, potentially responsible parties are paying for or conducting cleanup activities at 54 sites.

For Further Information on NPL Sites and Hazardous Waste Programs in the State of New Jersey Please Contact:

EPA Region 2 Public Affairs Branch	For information concerning community involvement	(212) 264-2515
National Response Center	To report a hazardous waste emergency	(800) 424-8802
The New Jersey Department of Environmental Protection and Energy: Site Remediation Program, Division of Publicly Funded Site Remediation	For information about the State's responsibility in the Superfund Program	(609) 984-2990
EPA Region 2 Emergency and Remedial Response Division	For information about the Regional Superfund Program	(212) 264-8672
EPA Superfund Hotline	For information about the Federal Superfund Program	(800) 424-9068

THE NPL REPORT

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, immediate action, 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 or planned.

⇨ 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 has been 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

Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
A.O. POLYMER	SUSSEX	Final	09/08/83	⇨	⇨	⇨				
AMERICAN CYANAMID COMPANY	SOMERSET	Final	09/08/83		⇨	⇨	⇨	⇨		
ASBESTOS DUMP	MORRIS	Final	09/08/83	⇨	⇨	⇨	⇨			
BEACHWOOD/BERKELEY WELLS	OCEAN	Deleted	01/06/83	⇨	⇨	⇨	⇨	⇨	⇨	✓
BOG CREEK FARM	MONMOUTH	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
BRICK TOWNSHIP LANDFILL	OCEAN	Final	09/08/83	⇨	⇨					
BRIDGEPORT RENTAL & OIL SERVICES	GLOUCESTER	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
BROOK INDUSTRIAL PARK	SOMERSET	Final	10/04/89	⇨	⇨					
BURNT FLY BOG	MONMOUTH/ MIDDLESEX	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
CALDWELL TRUCKING	ESSEX	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
CHEMICAL CONTROL	UNION	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
CHEMICAL INSECTICIDE CORPORATION	MIDDLESEX	Final	08/30/90	⇨	⇨	⇨	⇨	⇨		
CHEMICAL LEAMAN TANK LINES, INC.	GLOUCESTER	Final	09/21/84	⇨	⇨	⇨	⇨			
CHEMSOL, INC.	MIDDLESEX	Final	09/08/83	⇨	⇨	⇨	⇨			
CIBA-GEIGY CORP.	OCEAN	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
CINNAMINSON TOWNSHIP (Block 702) GW CONTAMINATION	BURLINGTON	Final	06/10/86		⇨	⇨				
COMBE FILL NORTH LANDFILL	MORRIS	Final	09/08/83		⇨	⇨	⇨	⇨		
COMBE FILL SOUTH LANDFILL	MORRIS	Final	09/08/83	⇨	⇨	⇨	⇨			
COOPER ROAD SITE	CAMDEN	Deleted	02/22/89		⇨	⇨	⇨	⇨	⇨	✓
COSDEN CHEMICAL COATINGS CORP.	BURLINGTON	Final	07/22/87	⇨	⇨					
CPS/MADISON INDUSTRIES	MIDDLESEX	Final	09/08/83		⇨	⇨	⇨	⇨		
CURCIO SCRAP METAL, INC.	BERGEN	Final	07/22/87		⇨	⇨	⇨			
D'IMPERIO PROPERTY	ATLANTIC	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
DAYCO CORP./L. E. CARPENTER	MORRIS	Final	07/22/87	⇨	⇨					
DELILAH ROAD	ATLANTIC	Final	09/21/84	⇨	⇨	⇨				
DENZER & SCHAFER X-RAY COMPANY	OCEAN	Final	09/08/83		⇨					

Progress Toward Cleanup at NPL Sites in the State of New Jersey (Continued)

Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
DE REWAL CHEMICAL COMPANY	HUNTERDON	Final	09/21/84		⇨	⇨	⇨	⇨		
DIAMOND ALKALI CO.	ESSEX	Final	09/21/84	⇨	⇨	⇨	⇨			
DOVER MUNICIPAL WELL 4	MORRIS	Final	09/08/83		⇨					
ELLIS PROPERTY	BURLINGTON	Final	09/08/83	⇨	⇨					
EVOR PHILLIPS LEASING	MIDDLESEX	Final	09/08/83	⇨	⇨					
EWAN PROPERTY	BURLINGTON	Final	09/21/84	⇨	⇨	⇨	⇨			
FAA TECHNICAL CENTER	ATLANTIC	Final	08/30/90	⇨	⇨	⇨	⇨	⇨		
FAIR LAWN WELL FIELD	BERGEN	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
FLORENCE LAND RECONTOURING	BURLINGTON	Final	09/21/84	⇨	⇨	⇨	⇨	⇨		
FORT DIX (LANDFILL SITE)	BURLINGTON	Final	07/22/87		⇨	⇨	⇨			
FRIED INDUSTRIES	MIDDLESEX	Final	06/10/86	⇨	⇨					
FRIEDMAN PROPERTY	MONMOUTH	Deleted	03/30/86		⇨	⇨	⇨	⇨	⇨	✓
GARDEN STATE CLEANERS CO.	ATLANTIC	Final	03/31/89		⇨	⇨	⇨			
GEMS LANDFILL	CAMDEN	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
GLEN RIDGE RADIUM	ESSEX	Final	02/14/85	⇨	⇨	⇨	⇨	⇨		
GLOBAL SANITARY LANDFILL	MIDDLESEX	Final	03/31/89		⇨	⇨				
GOOSE FARM	OCEAN	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
HELEN KRAMER LANDFILL	GLOUCESTER	Final	09/08/83		⇨	⇨	⇨	⇨		
HERCULES, INC.	GLOUCESTER	Final	09/08/83		⇨					
HIGGINS DISPOSAL	SOMERSET	Final	08/30/90	⇨	⇨					
HIGGINS FARM	SOMERSET	Final	03/30/89	⇨	⇨	⇨	⇨			
HOPKINS FARM	OCEAN	Final	09/21/84		⇨					
IMPERIAL OIL CO. INC./CHAMPION CHEM	MONMOUTH	Final	09/08/83		⇨	⇨	⇨	⇨		
INDUSTRIAL LATEX CORP.	BERGEN	Final	03/31/89	⇨	⇨					
JACKSON TOWNSHIP LANDFILL	OCEAN	Final	09/08/83	⇨	⇨					
JIS LANDFILL	MIDDLESEX	Final	09/08/83	⇨	⇨					
KAUFFMAN & MINTEER, INC.	BURLINGTON	Final	03/31/89	⇨	⇨					
KIN-BUC LANDFILL	MIDDLESEX	Final	09/08/83	⇨	⇨	⇨	⇨			

Progress Toward Cleanup at NPL Sites in the State of New Jersey (Continued)

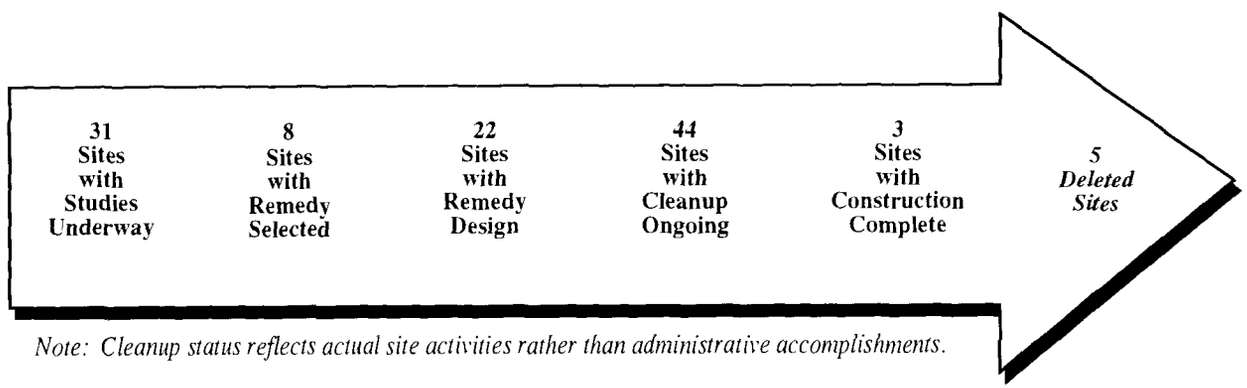
Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
KING OF PRUSSIA	CAMDEN	Final	09/01/83	⇨	⇨	⇨	⇨			
KRYSOWATY FARM	SOMERSET	Deleted	02/22/89	⇨	⇨	⇨	⇨	⇨	⇨	✓
LANDFILL AND DEVELOPMENT CO.	BURLINGTON	Final	09/21/84	⇨	⇨					
LANG PROPERTY	BURLINGTON	Final	09/08/83		⇨	⇨	⇨	⇨		
LIPARI LANDFILL	GLOUCESTER	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
LODI MUNICIPAL WELL	BERGEN	Final	08/30/90	⇨	⇨					
LONE PINE LANDFILL	MONMOUTH	Final	09/08/83		⇨	⇨	⇨	⇨		
M & T DELISA LANDFILL	MONMOUTH	Deleted	03/21/91		⇨	⇨	⇨	⇨	⇨	✓
MANNHEIM AVENUE DUMP	ATLANTIC	Final	09/08/83	⇨	⇨	⇨	⇨			
MAYWOOD CHEMICAL COMPANY	BERGEN	Final	09/08/83	⇨	⇨					
METALTEC/AEROSYSTEMS	SUSSEX	Final	09/08/83		⇨	⇨	⇨	⇨		
MONITOR DEVICES/INTERCIRCUITS, INC.	MONMOUTH	Final	06/10/86		⇨					
MONROE TOWNSHIP LANDFILL	MIDDLESEX	Final	09/08/83		⇨	⇨	⇨	⇨		
MONTCLAIR/WEST ORANGE RADIUM SITE	ESSEX	Final	02/14/85	⇨	⇨	⇨	⇨	⇨		
MONTGOMERY TOWNSHIP HOUSING DEVELOPMENT	SOMERSET	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
MYERS PROPERTY	HUNTERDON	Final	09/08/83	⇨	⇨	⇨				
NASCOLITE CORPORATION	CUMBERLAND	Final	09/21/84	⇨	⇨	⇨	⇨			
NAVAL AIR ENGINEERING CENTER	OCEAN	Final	07/22/87		⇨	⇨	⇨	⇨		
NAVAL WEAPONS STATION EARLE (SITE A)	MONMOUTH	Final	08/30/90		⇨					
NL INDUSTRIES	SALEM	Final	09/08/83	⇨	⇨	⇨				
PEPE FIELD	MORRIS	Final	09/08/83		⇨	⇨	⇨			
PICATINNY ARSENAL	MORRIS	Final	02/21/90		⇨	⇨	⇨	⇨		
PIJAK FARM	OCEAN	Final	09/08/83		⇨	⇨	⇨	⇨		
PJP LANDFILL	HUDSON	Final	09/08/83	⇨	⇨					
POHATCONG VALLEY GW CONTAM.	WARREN	Final	03/31/89	⇨	⇨					

Progress Toward Cleanup at NPL Sites in the State of New Jersey (Continued)

Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
POMONA OAKS RESIDENTIAL WELLS	ATLANTIC	Final	06/10/86	⇨	⇨	⇨			⇨	
PRICE LANDFILL	ATLANTIC	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
RADIATION TECHNOLOGY, INC.	MORRIS	Final	09/21/84		⇨					
REICH FARMS	OCEAN	Final	09/08/83	⇨	⇨	⇨	⇨			
RENORA, INC.	MIDDLESEX	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
RINGWOOD MINES /LANDFILL	PASSAIC	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
ROCKAWAY BOROUGH WELL FIELD	MORRIS	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
ROCKAWAY TOWNSHIP WELLS	MORRIS	Final	09/08/83	⇨	⇨					
ROCKY HILL MUNICIPAL WELL	SOMERSET	Final	09/08/83		⇨	⇨	⇨			
ROEBLING STEEL CO.	BURLINGTON	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
SAYREVILLE LANDFILL	MIDDLESEX	Final	09/08/83	⇨	⇨	⇨	⇨			
SCIENTIFIC CHEMICAL PROCESSING	BERGEN	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
SHARKEY LANDFILL	MORRIS	Final	09/08/83		⇨	⇨	⇨			
SHIELDALLOY CORP.	GLOUCESTER	Final	09/21/84	⇨	⇨					
SOUTH BRUNSWICK LANDFILL	MIDDLESEX	Final	09/08/83		⇨	⇨	⇨	⇨		
SOUTH JERSEY CLOTHING CO.	ATLANTIC	Final	10/04/89		⇨	⇨	⇨			
SPENCE FARM	OCEAN	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
SWOPE OIL AND CHEMICAL CO.	CAMDEN	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
SYNCON RESINS	HUDSON	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
TABERNACLE DRUM DUMP	BURLINGTON	Final	09/21/84	⇨	⇨	⇨	⇨			
U.S. RADIUM CORP.	ESSEX	Final	09/08/83	⇨	⇨					
UNIVERSAL OIL PRODUCTS (CHEMICAL DIVISION)	BERGEN	Final	09/08/83	⇨	⇨					
UPPER DEERFIELD TOWNSHIP LANDFILL	CUMBERLAND	Final	09/21/84	⇨	⇨	⇨				
VENTRON/VELSICOL	BERGEN	Final	09/21/84	⇨	⇨					
VINELAND CHEMICAL CO., INC.	CUMBERLAND	Final	09/21/84	⇨	⇨	⇨	⇨		⇨	
VINELAND STATE SCHOOL	CUMBERLAND	Final	09/08/83	⇨	⇨	⇨				
W.R. GRACE & COMPANY	PASSAIC	Final	09/21/84	⇨	⇨					

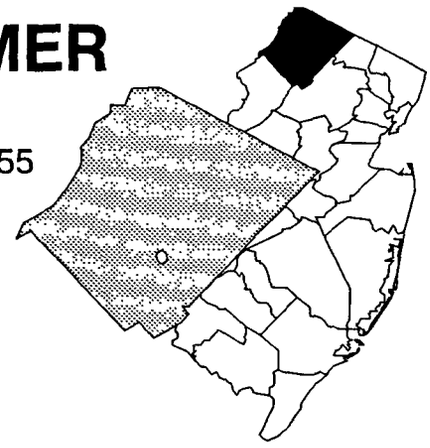
Progress Toward Cleanup at NPL Sites in the State of New Jersey (Continued)

Site Name	County	NPL	Date	Initial Response	Site Studies	Remedy Selected	Remedy Design	Cleanup Ongoing	Construction Complete	Deleted
WALDICK AEROSPACE DEVICES, INC.	MONMOUTH	Final	06/10/86	⇨	⇨	⇨	⇨			
WHITE CHEMICAL CORPORATION	ESSEX	Final	09/25/91	⇨	⇨	⇨	⇨	⇨		
WILLIAMS PROPERTY	CAPE MAY	Final	09/08/83	⇨	⇨	⇨	⇨	⇨		
WILSON FARM	OCEAN	Final	09/21/84	⇨	⇨					
WITCO CHEMICAL CORP.	BERGEN	Final	10/04/89	⇨	⇨	⇨			⇨	
WOODLAND ROUTE 72 DUMP	BURLINGTON	Final	09/21/84	⇨	⇨	⇨	⇨	⇨		
WOODLAND ROUTE 532 DUMP	BURLINGTON	Final	09/21/84	⇨	⇨	⇨	⇨	⇨		



Note: Cleanup status reflects actual site activities rather than administrative accomplishments.

A.O. POLYMER
NEW JERSEY
EPA ID# NJD030253355



EPA REGION 2
Sussex County
1 mile northeast of Sparta

Site Description

The 4-acre A.O. Polymer site, active since the early 1960s, produces resins, plastics, paper coatings, and specialty polymers. In the late 1970s, the New Jersey Department of Environmental Protection and Energy confirmed the contamination of soil, groundwater, and surface water in the area of the chemical plant, which allegedly resulted from plant operation and waste disposal practices. Operators left hundreds of leaking and deteriorated drums on the site, as well as an uncontrolled disposal lagoon which contained waste from plant operations. The site has been the focus of concern for local residents and regulatory authorities since the early 1970s. Citizens noticed odors in well water and the air in 1973; 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 thirteen times for air quality violations. The site is located near the Wallkill River, 1/4 mile from the commercial area of Sparta. A plume of contaminated groundwater has migrated to, and discharges into, both the Wallkill River and associated wetlands. Approximately 750 people live in the area of the site. The site threatens the Allentown aquifer, a source of potable groundwater that supplies drinking water to over 700 people.

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

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

Threats and Contaminants

Soil beneath the disposal lagoon area is contaminated with VOCs including ketones and phenols. Groundwater is contaminated with various VOCs which migrated from the contaminated soil. Wetlands and surface water have been contaminated by the spread of contaminated groundwaters. However, the low levels of VOC contamination in these two media are of little concern and demonstrate no risk to the surrounding population or environment. Possible health threats include drinking contaminated groundwater.

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 that explored the nature and extent of soil and groundwater contamination was completed in the spring of 1991. The EPA has selected the final cleanup remedy which includes soil vapor extraction to address removal of contaminants in soils, and construction of a pumping and Powdered Activated Carbon Treatment system to treat contaminated groundwater. Design of the remedy is expected to begin in 1992.

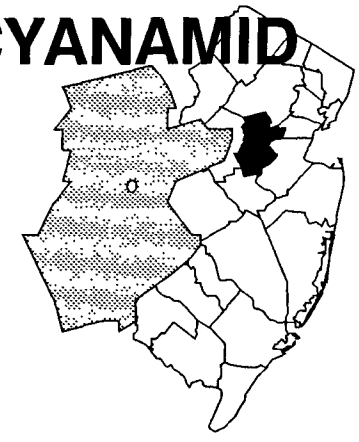
Environmental Progress

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 final cleanup activities are being planned.

Site Repository

Sparta Public Library, 22 Woodport Road, Sparta, NJ 07871

AMERICAN CYANAMID COMPANY
NEW JERSEY
EPA ID# NJD002173276



EPA REGION 2
Somerset County
Bound Brook

Other Names:
Bound Brook Plant

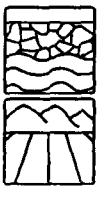
Site Description

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 and Energy (NJDEPE) and American Cyanamid Company have documented groundwater and soil 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: 12/30/82
Final Date: 09/08/83

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. On-site workers or trespassers may be exposed to contaminants through direct contact with contaminated soils, sludges, or groundwater. The contaminated groundwater is not a source of drinking water.

Cleanup Approach

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

Response Action Status

Interim Groundwater Monitoring and Treatment: American Cyanamid Company installed 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, which pumps approximately 600,000 gallons per day, has been effective in preventing contaminated seepage from moving off site through the groundwater. This groundwater control system is expected to continue operating through 1994, at which time alternative cleanup actions will be identified and selected if necessary.

Lagoons: Under State monitoring, American Cyanamid Company has conducted an intensive study of the lagoons and sludges. The company is currently evaluating various technologies for cleanup of the first group of impoundments. The technologies being considered include incineration, other thermal treatments, bioremediation using microorganisms, solidification, and in-place containment. The lagoons have been broken into four groups according to waste type and location on site. Each group will be addressed separately. The EPA, along with the State of New Jersey, is scheduled to select a remedy for the first group of impoundments in 1993.

Soils: Under State monitoring, American Cyanamid Company 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 have been addressed. A final cleanup remedy will be selected once the investigation is completed.

Site Facts: In 1981, American Cyanamid Company and the NJDEPE 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 NJDEPE signed a second Administrative Order on Consent with American Cyanamid Company covering cleanup activities at the entire facility.

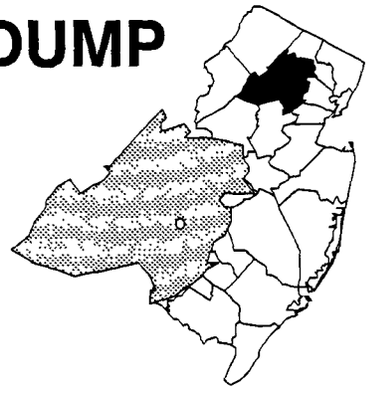
Environmental Progress

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 Company site will develop final cleanup strategies for addressing the lagoon, soil, and groundwater contamination.

Site Repository

Somerset County Library, Main Library, North Bridge Street and Vogt Drive, Bridgewater, NJ 08807

ASBESTOS DUMP
NEW JERSEY
EPA ID# NJD980654149



EPA REGION 2
Morris County
Millington

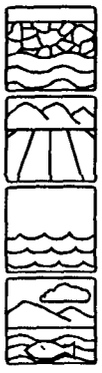
Site Description

The Asbestos Dump site consists of the 11-acre Millington area and three separate satellite properties, totaling approximately 59 acres. Beginning in 1927, a succession of owners operated an asbestos products manufacturing plant at the Millington area. It contains the largest volume of asbestos wastes; more than 90 percent of this area contains such wastes. Erosion and weathering have exposed areas of asbestos along the Passaic 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 New Vernon Road. This site was used as a refuse and asbestos disposal area for approximately 40 years and is bordered by Great Brook and a woodland habitat. The New Vernon Road and White Bridge Road portions of the site are residential properties about a mile south of the Great Swamp area. The New Vernon Road consists of approximately 30 acres. Broken asbestos tiles and siding, as well as loose asbestos fibers, were landfilled in this former corn and dairy farm during the late 1960s. The White Bridge Road area, covering 12 acres, 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. Approximately 650 people live within a mile of the Millington site. 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: 12/30/82
Final Date: 09/08/83

Threats and Contaminants

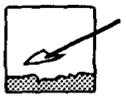


Groundwater and soils contain heavy metals, volatile organic compounds (VOCs), phthalates, phenols, and asbestos. Sediments contain low levels of VOCs, phthalates, and heavy metals including lead and mercury. Surface water contains phthalates and heavy metals including cadmium, chromium, and silver. While different levels and types of contaminants have been detected at the different subsites, asbestos has been detected at all four subsites. There is a potential health risk to the owners, nearby residents, and tourists due to the airborne release of asbestos fibers.

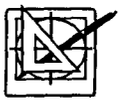
Cleanup Approach

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, actions were conducted to immobilize asbestos contamination at the New Vernon Road and White Bridge Road subsites. These actions included erecting signs and fences, sampling air and soil, capping two driveways, covering visible asbestos containing materials with geotextile fabric, removing a dilapidated shed, and removing asbestos containing material from the ground surface.



Millington Cleanup: The remedies selected by the EPA in 1988 for cleanup of 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 performing technical studies that will address the permanent destruction or immobilization of asbestos fibers. 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 work is scheduled to be completed in 1992.

New Vernon and White Bridge Roads: In 1991, the EPA selected in-situ solidification/stabilization treatment technology as the remedy to clean up the New Vernon and White Bridge Road subsites. A treatability study was initiated in late 1991 and is scheduled to be completed in 1992. The technical designs and specifications of the remedy began in early 1992, with actual cleanup scheduled to begin in late 1992.

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. Upon completion of the investigation, the EPA will recommend a cleanup strategy.

Site Facts: The EPA and the National Gypsum Company signed an Administrative Order on Consent in 1985, under which the company agreed to perform site studies. In 1989, the EPA issued a Unilateral Order to the National Gypsum Company to perform cleanup activities at the Millington area.

Environmental Progress

The restabilization of the Passaic River bank has reduced the potential for additional contamination of surface water at the Asbestos Dump site. The temporary actions performed at the New Vernon and White Bridge Road sites have also reduced the potential for exposure to contaminants while further studies are being completed and final cleanup activities are being planned.

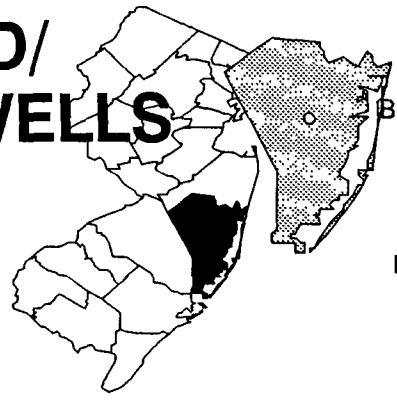
Site Repository

Passaic Township Library, 91 Central Avenue, Stirling, NJ 07980

BEACHWOOD/ BERKELEY WELLS

NEW JERSEY

EPA ID# NJD980654123



EPA REGION 2

Ocean County
Between the Garden State Parkway and Route 9

Other Names:
Beachwood Plaza Shopping Center

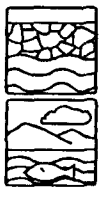
Site Description

The Beachwood/Berkeley Wells site lies in the New Jersey Pinelands area, which consists of reserved, protected, and preserved lands in Berkeley Township and Beachwood Borough. In 1982, a citizen's call prompted well water analyses that discovered lead in 20 percent of the Beachwood wells and 4 percent 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 New Jersey Department of Environmental Protection and Energy (NJDEPE) 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 connect 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 was addressed through Federal, State, and local actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83
Deletion Date: 01/06/92

Threats and Contaminants



Groundwater contained elevated levels of lead. Drinking water contaminated with lead from pipeline corrosion was a possible health threat. The site lies in the New Jersey Pinelands area, a noted wildlife habitat and groundwater recharge area.

Cleanup Approach

This site was addressed through an emergency action; further investigations showed that no other cleanup actions were required.

Response Action Status

Emergency Action: In 1982, the Ocean County Health Department closed 128 private wells with elevated lead levels and provided bottled water for affected residents in Beachwood Borough and Berkeley Township. In late 1983, construction of the water supply system expansion was completed.

Entire Site: The EPA attributed lead contamination at this site to corrosive groundwater acting naturally on components in the plumbing systems 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 on how to minimize the effects of lead in the drinking water. The site was deleted from the NPL in early 1992.

Site Facts: In 1982, an Administrative Order was issued by NJDEPE that required Beachwood Borough to extend the public water supply system to all Borough homes east of the Garden State Parkway and required all these homes within the Borough to be connected to the public water supply system.

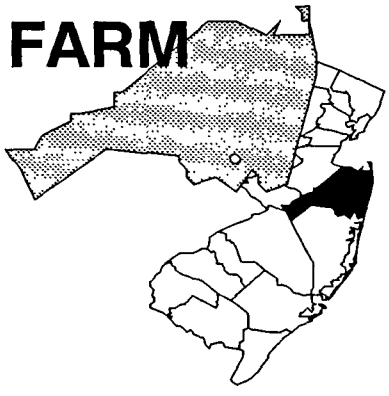
Environmental Progress

The emergency actions 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 recommended that no further actions be taken. The safety of nearby residents is protected through connection to safe drinking water supplies. The site was officially deleted from the NPL in early 1992.

Site Repository

Berkeley Township Library, 42 Station Road, Bayville, NJ 08721

BOG CREEK FARM
NEW JERSEY
EPA ID# NJD063157150



EPA REGION 2
Monmouth County
Howell Township

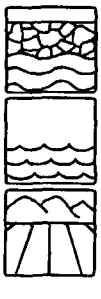
Site Description

A 4-acre disposal area lies on the 12-acre Bog Creek Farm and consists of a 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 is also 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: 12/30/82
Final Date: 09/08/83

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 VOCs, pesticides, and heavy metals. Sludges on site contain VOCs and heavy metals. Direct contact with contaminated surface water, sediments, or soil, or accidental ingestion of contaminated groundwater or soil may pose a threat to the health of the nearby population.

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.

Source Control: Beginning in 1984, the EPA installed test pits, trenches, and monitoring wells on site as part of the investigation to determine the nature and extent of contamination. In 1985, the EPA selected a remedy for controlling the source of the contamination including: removing wastewater and sediments from the pond and bog; regrading and covering the pond and bog; treating the wastewater in an on-site plant and discharging cleaned water to the nearby stream; excavating the contaminated waste deposits and soil; incinerating excavated materials, including the contaminated sediments from the north branch of Squankum Brook, and disposing of the incinerated residues on site or at an EPA-approved facility off site; conducting further analysis of the soil left behind to see if further cleanup is necessary; evaluating innovative technologies to treat remaining soil, if necessary; covering the excavated area with a compacted soil cap; building a security fence around the work areas; and 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. All incineration activities and most source control actions were completed in late 1990. The remaining source control actions were completed in 1991.

Groundwater and Sediment Cleanup: In 1989, the EPA selected a remedy for cleaning up groundwater and brook sediments on and around the site including: extracting, treating, and reinjecting groundwater via the on-site water treatment plant to restore the Upper Kirkwood Aquifer to identified cleanup goals; and excavating and incinerating contaminated sediments from the north branch of Squankum Brook and disposing of the incineration residues on site. To speed the cleanup process, all sediments were excavated and incinerated under the source control phase of the cleanup in 1990. The pump and treat activity is the final component in the site cleanup. This phase is expected to begin in 1992.

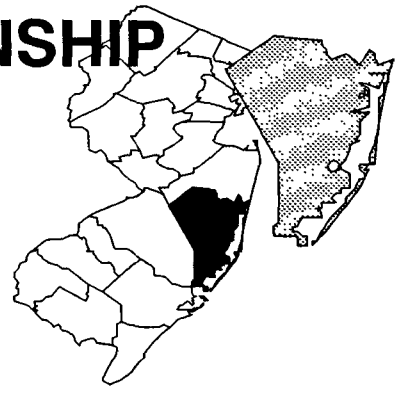
Environmental Progress

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

Site Repository

Howell Township Public Library, Preventorium Road, Howell, NJ 07731

BRICK TOWNSHIP LANDFILL
NEW JERSEY
EPA ID# NJD980505176



EPA REGION 2
Ocean County
Brick Township

Other Names:
French's Landfill
McCormick's Dump

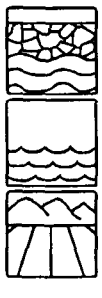
Site Description

The 42-acre Brick Township Landfill operated for more than 30 years, accepting sewage, septage, solids, bulk liquids, and other wastes. Chemical wastes were reportedly disposed of at the landfill in 1971, although this has never been documented. 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 indicates no contamination of either private or municipal wells that are used as drinking water sources.

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

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

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. Area residences are connected to a municipal water well. However, some private wells not used for drinking water are being used for industrial purposes and for lawn and garden maintenance. Ingestion of or contact with contaminated groundwater may pose a health threat.

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 removing about 150 aboveground drums and filling and venting 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 1993, at which time the EPA will select the remedies for the cleanup of the site. A field investigation in 1992 did not detect any additional buried drums at 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 and clean up the site.

Environmental Progress

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

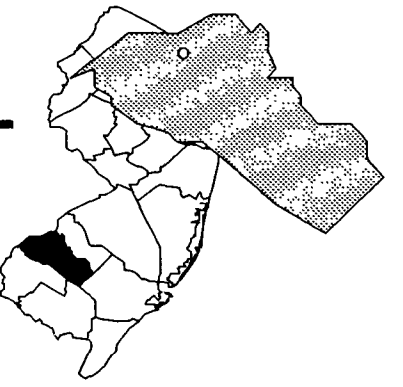
Site Repository

Brick Township Public Library, 401 Chambers Bridge Road, Brick Town, NJ 08723

BRIDGEPORT RENTAL & OIL SERVICES

NEW JERSEY

EPA ID# NJD053292652



EPA REGION 2

Gloucester County

Other Names:
Bridgeport Water Line

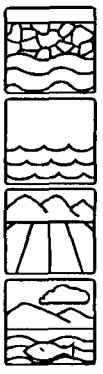
Site Description

The 30-acre Bridgeport Rental & Oil Services 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: 10/23/81
Final Date: 09/08/83

Threats and Contaminants

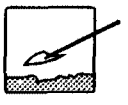


PCBs and VOCs, including benzene and methylene chloride, have entered groundwater from materials disposed of at the site. Sediments and sludges contain PCBs and other organic contaminants and metals including lead, cadmium, chromium, and barium. PCB-laden oil residues have been found in surface water.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

Response Action Status



Emergency Actions: The EPA sent emergency workers to the lagoon on the several occasions when it threatened to overflow its dike. In 1981, the failing dike was reinforced, raising the height by about 5 feet. In 1982, the EPA pumped down the lagoon 2 feet and treated the liquids removed; affected homes were provided with filtration units for their well water. In 1983, the lagoon level was lowered again by 2 feet. In early 1984, an initial cleanup measure was taken to stop leaks from the southeastern corners of the lagoon; in late 1984, workers returned for more cleanup activities when a failed boom spilled 50 gallons of PCB-contaminated oil. 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: removing oily waste, contaminated sludges, and polluted water from the lagoon and treating them by on-site incineration; excavating and disposing of drums on the site; continuing to pump to prevent the further spread of contaminated groundwater and to contain any pollutants that may escape during lagoon excavation; removing all tanks and contained waste; and 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 successful trial burn of the incineration unit was completed in early 1991. The incineration unit began full-scale operation in late 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.

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).

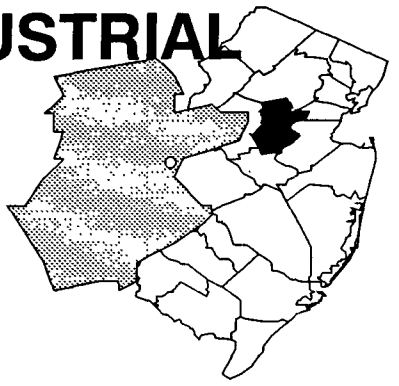
Environmental Progress

The numerous emergency cleanup actions taken at the Bridgeport Rental & Oil facility have 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 has determined that the site is safe while further investigations leading to a final selection of a remedy for the groundwater and related contamination are taking place.

Site Repository

Logan Township Library, Center Square Road and School Lane, Swedesboro, NJ 08085

BROOK INDUSTRIAL PARK
NEW JERSEY
EPA ID# NJD078251675



EPA REGION 2
Somerset County
Bound Brook

Other Names:
Jame Fine Chemicals
Blue Spruce Chemical

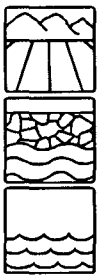
Site Description

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 Chemical 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 featured the direct discharge of wastewater to the Raritan; open storage of waste oils, sludge, 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 Chemical is suspected of discharging pesticide wastes to the drainage ditch and the Raritan River 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 became the focus of an EPA emergency response. 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 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 Chemical, contains 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. Sludge and discharges from sewers at Jame Fine Chemicals contain VOCs. Outdoor soils at Blue Spruce Chemical are contaminated with pesticides, VOCs, and dioxin. Outdoor soils at Jame Fine Chemicals contain VOCs, heavy metals, and inorganics. At National Metal Finishings Corp., a subsurface pit revealed contamination with heavy metals, VOCs, and inorganics. Surface water on the site and runoff to the Raritan River are contaminated with pesticides and inorganic chemicals. 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 used emergency funds to seal and lock the Blue Spruce Chemical facility 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. In 1992, the site was re-secured and the lock on the door was replaced.

Entire Site: In 1989, the EPA began an intensive study of pollution problems at this complex site. The investigation is exploring the nature and extent of soil and groundwater pollution and will recommend the best strategies for final cleanup. It is scheduled for completion in 1993. 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 and Energy (NJDEPE) filed an Administrative Order on Consent citing Jame Fine Chemicals for illegal discharge of cooling water to the Raritan River. In December 1980, the NJDEPE issued an Administrative Order to Blue Spruce Chemical ordering immediate cleanup of the facility. In August 1985, the NJDEPE cited National Metal Finishing Corp. and Brook Industrial Park for unlicensed discharges of metal plating waste into groundwater starting in 1977.

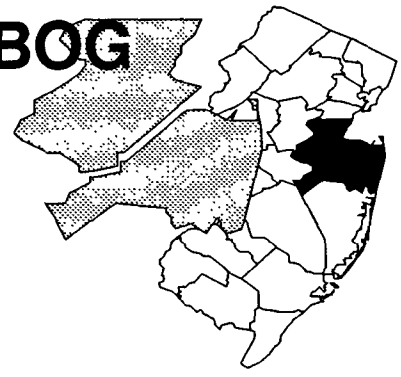
Environmental Progress

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

Site Repository

Bound Brook Public Library, 402 East High Street, Bound Brook, NJ 08805

BURNT FLY BOG
NEW JERSEY
EPA ID# NJD980504997



EPA REGION 2
Monmouth County and
Middlesex County
Marlboro Township

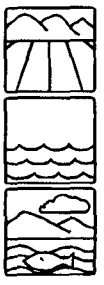
Site Description

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 also near the New Jersey Pine Barrens. An auto salvage yard, a few scattered residences, and a horse farm are located nearby. 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 referred to as the Uplands Area. 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 by several owners, and the facilities degenerated into several abandoned waste oil lagoons, a contaminated asphalt waste pile, a tar patch area, buried and exposed drummed wastes, and contaminated soil and Northerly Wetlands area, both resulting from lagoon overflow. About 10 acres were directly contaminated. In addition to the oil reprocessing activities, the site was subjected to sanitary landfilling and sand and gravel pit operations. Uncontrolled discharges from all these upland waste sources to adjoining wetlands have resulted in groundwater and oil contamination over a 60-acre expanse referred to as the Westerly Wetlands. 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; 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: 10/23/81
Final Date: 09/08/83

Threats and Contaminants

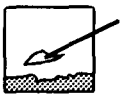


Soils and sediments contain polychlorinated biphenyls (PCBs) and lead. Surface water contains lead from runoff from the adjacent wetlands. Individuals may come in contact with site contaminants by accidentally ingesting polluted soils or dusts; eating fish, wild berries, or wild game from the bog; or 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 for final cleanup of the entire site.

Response Action Status



Emergency Actions: In 1982, the 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: 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; excavating and removing hazardous materials in lagoons 2, 3, and 4, the northerly wetlands, and the contaminated soils area; restoring the original site contours and replanting the area; designing a comprehensive five-year groundwater monitoring program and testing eight residential wells; and studying the Westerly Wetlands further to determine the extent of contamination there. All the contaminated soil and sludge has 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 late 1992.

Westerly Wetlands: The interim remedy selected for this area includes: excavating 5,600 cubic yards of contaminated materials that have migrated past the Westerly Wetlands to the downstream area; disposing of these substances in the same manner in which Upland Area wastes were handled; containing the contaminated soils in the Westerly Wetlands by means of a sedimentation basin and appropriate diversion controls; building a security fence and access road around the Westerly Wetlands; and conducting a study on 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; it is scheduled for completion in late 1992. The final remedy for contaminated soils will be determined based on the study to be conducted as part of the long-term cleanup phase for the entire site.

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

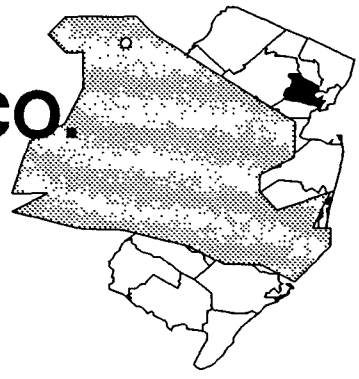
Environmental Progress

Construction of a dike and security fence around the lagoons and drums by the EPA emergency crews, and the removal and disposal of the contaminated soils and sludge in the Uplands area have 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 cleanup remedies are being planned.

Site Repository

Monmouth County Library, Marlboro Branch Library, 1 Library Court, Marlboro, NJ 07746

CALDWELL TRUCKING CO.
NEW JERSEY
EPA ID# NJD048798953



EPA REGION 2
Essex County
Fairfield Township

Other Names:
Fairfield Boro Site

Site Description

The 11-acre Caldwell Trucking Co. site consists of two lots that were used for the disposal of residential, commercial, and industrial septic waste. Wastes were deposited in unlined lagoons from the early 1950s until 1973. 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, the company installed underground storage tanks to store the wastes transported to the site. All the unlined lagoons were backfilled, with the exception of one that was covered with plywood. By 1984, the tanks were no longer used, and the company operated solely as a transport facility until 1988, when it ceased operations. There are about 500 single family homes located in a populated area within 1 mile of the site. Since 1981, over 100 private wells and two municipal wells in the area have been taken out of service due to contamination. The affected residents have been transferred to a municipal water supply. The contaminated groundwater plume originating from the site flows north toward the Passaic River, which is used for recreational activities.

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

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

Threats and Contaminants

The groundwater on- and off-site is contaminated with volatile organic compounds (VOCs) including trichloroethylene (TCE). Metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and VOCs were detected in on-site subsurface soils. Metals were also detected in on-site surface soils. VOCs were detected in off-site surface water in an unnamed tributary to Deepavaal Brook, the brook itself, and the Passaic River. Drinking contaminated groundwater is a potential health threat. Other health threats include direct contact with or accidental ingestion of contaminated surface water or soils.

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 off-site contamination.

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 restrict site access. The exposed lagoon and the four underground storage tanks were covered and surrounded with snow fencing. Portions of an access road were covered with geotextile fabric and stone to minimize exposure to trespassing dirt bike riders. Warning signs were posted on the fences and at the entrance to the site.

Entire Site: The first cleanup phase is separated into three phases including residential water line hookups, restoration of municipal well No. 7, and cleanup of the site. In late 1986, cleanup technologies to address site contamination were selected including: excavating and treating, through the addition of heat, approximately 28,000 cubic yards of contaminated soils and waste materials; disposing of treated soils in a secure landfill to be constructed at the site in accordance with Resource Conservation and Recovery Act (RCRA) requirements; restoring a lost potable water resource by providing treatment, through air stripping, of municipal public water supply well No. 7; providing an alternate water supply for residents potentially affected by groundwater contamination from the site; and preparing a supplemental investigation (of off-site contamination) 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 55 homes and nine commercial establishments in the plume area to municipal water. In 1990, the Fairfield Town Council decided to continue purchasing water from the Passaic Valley Water Commission, and forgo the use of municipal well No. 7 as a source of potable water. The EPA is finalizing the technical specifications and design for the excavation, treatment, and disposal of contaminated soils and waste material at the site. These cleanup activities are scheduled to begin in late 1992.

Off-Site Contamination: After the off-site study was completed in 1989, the remedy to cleanup the off-site contaminants was selected. The remedy called for the installation of groundwater recovery wells at various locations throughout the area to intercept contaminated groundwater. An air stripper will be constructed on site to treat the extracted groundwater. The treated effluent will be discharged to either Deepavaal Brook or the Passaic River. Design of this cleanup action is currently underway. Pumping and treating of the groundwater may last up to 30 years.

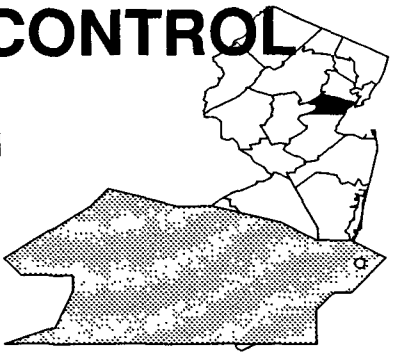
Environmental Progress

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

Site Repository

Anthony Pio Costa Memorial Library, 261 Hollywood Avenue, Fairfield, NJ 07004

CHEMICAL CONTROL
NEW JERSEY
EPA ID# NJD000607481



EPA REGION 2
Union County
Elizabeth

Site Description

The Chemical Control (CC) site consists of a 2 acre parcel of land adjacent to 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, CC 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, CC 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 14,250 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: 10/23/81
Final Date: 09/08/83

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 subsurface soil is contaminated with VOCs. Eating contaminated fish, shellfish, crabs, and other marine organisms and direct contact with sediments in the Elizabeth River may be 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 cleaning up the entire site.

Response Action Status

Immediate Actions: The EPA performed immediate actions at the site to ensure public and environmental safety. These actions included: packing gas cylinders in safe containers and installing additional pressure gauges on them; removing and decontaminating 11 box trailers and one vacuum truck; clearing plugged storm sewers; sampling and removing 187 gas cylinders that were left at the site and one taken from the Elizabeth River; designing a device used for sampling and compressing gases into new cylinders; 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 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 that were chosen in 1987 to address VOC-contaminated soil on site include: combining the contaminated soil with a solidification agent that will harden so that the contaminants cannot migrate from the site; 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; sealing the sanitary sewer line under the site where it connects to the South Front Street storm sewer; repairing the berm that separates the site from the Elizabeth River; and 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 that the soil solidification 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. Construction of the remedy is scheduled to be started in 1993.

Site Facts: In January 1979, the State 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. The Consent Decree was entered by the courts in November 1991.

Environmental Progress

The EPA has performed numerous immediate actions and eliminated the source of contamination at the Chemical Control site, which have reduced the potential for exposure to hazardous materials. The EPA is presently overseeing the design phase for the selected remedies, and has determined that the site is safe while it awaits final cleanup activities.

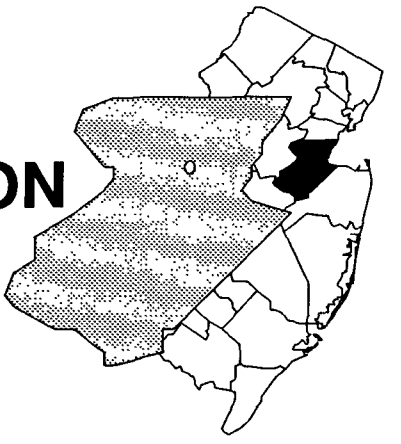
Site Repository

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

NEW JERSEY

EPA ID# NJD980484653



EPA REGION 2
Middlesex County
Edison Township

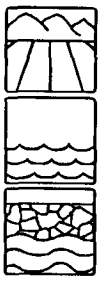
Site Description

The Chemical Insecticide Corporation (CIC) site is located in Edison Township and occupies approximately 6 acres. CIC owned the property located at 30 Whitman Avenue from 1954 to 1970 and used it for processing various pesticides. The property was formerly occupied by a number of industrial companies. In the mid-1960s, the Edison Department of Health became concerned about odors, wastewater 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 on-site lagoons. CIC declared bankruptcy in 1970. Subsequently, 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 and Energy sampled soil from the site and found dioxin, triggering more detailed investigations by the EPA. There are approximately 77,000 people living within 3 miles of the site. An unnamed stream and Mill Brook run near the site and have been used for recreation. Groundwater is a potential alternate water supply in the event of shortages in the municipal water supply system. There are also a number of privately owned wells in the area.

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

NPL LISTING HISTORY
Proposed Date: 10/26/89
Final Date: 08/30/90

Threats and Contaminants



The soil at the site is contaminated with arsenic, organic pesticides (e.g., DDT and lindane), and other hazardous substances. Although site access is controlled by fences, contaminants can migrate from the site by means such as surface water runoff, groundwater migration, and airborne dust migration. Contaminated surface water runoff from the site has been found to contain arsenic and the herbicide dinoseb. This runoff enters an unnamed tributary of Mill Brook. The groundwater at the site is contaminated by arsenic, organic pesticides, and other hazardous substances. Although most drinking water in the area is from distant sources, the continued migration of groundwater contaminants 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 cleanup of contaminated 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. Warning signs were posted at the site and along the unnamed tributary and Mill Brook. An action was also taken in response to the overflow of a drainage ditch to a parking lot adjacent to the site. Contaminated surface water was removed from the parking lot and the drainage ditch was unclogged and reinforced to prevent future overflows. Risks associated with contaminated surface water runoff were reduced, but not eliminated by this action.

Contaminated Surface Water Runoff: Actions selected for cleanup include: grading the site; installing an impermeable cap over the site; and installing a system for the controlled release of uncontaminated runoff from the cap. The technical design for these activities was completed in 1991, and construction began in 1992.

Source Materials and Groundwater: The EPA is conducting an investigation of the sources of hazardous waste materials and groundwater contamination. Once the investigation is completed, expected in 1992, alternate options for cleanup will be identified.

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 reduced the immediate threat to the surrounding community and the environment while the cleanup of contaminated surface water, source materials, and groundwater is being addressed.

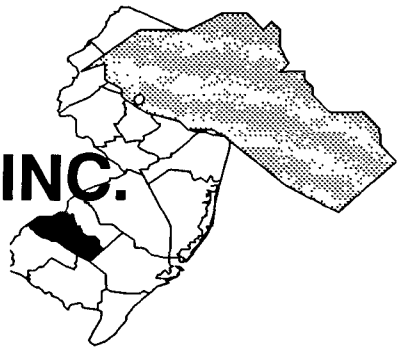
Site Repository

Edison Public Library, 340 Plainfield Avenue, Edison, NJ 08817

CHEMICAL LEAMAN TANK LINES, INC.

NEW JERSEY

EPA ID# NJD047321443



EPA REGION 2
Gloucester County
Logan Township

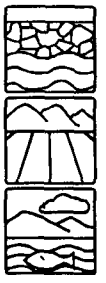
Site Description

Chemical Leaman Tank Lines, Inc. has operated a tank-washing facility since 1961 on a 34-acre site in Bridgeport, New Jersey. The wastewater generated was placed in a series of seven unlined lagoons and ultimately was discharged to Cedar Swamp and Moss Branch Creek which border the site. In 1975, sludge in the settling lagoons was excavated and disposed of off site. The lagoons were then backfilled with clean sand. The aeration lagoons were backfilled with sand and construction debris, 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 neighboring private wells. Logan Township has a population of approximately 3,000 residents. Agriculture accounts for about one-third of the land use; more than half the site 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. In 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: 09/08/83
Final Date: 09/21/84

Threats and Contaminants

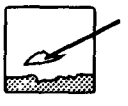


The groundwater on site is contaminated with volatile organic compounds (VOCs) including trichloroethene, benzene, and vinyl chloride and heavy metals including arsenic, chromium, and zinc. Many of the same contaminants have been found in private wells off site. Contaminants found in subsurface soils include heavy metals, VOCs, and phthalates. Those who use water from VOC-contaminated wells for bathing, clothes washing, or other uses may come in contact with touch or inhale contaminants. Area homes have either been connected to the municipal water supplies or received bottled water. The contaminated on-site well is used for tank trailer washing operations. Workers could be exposed to VOCs through direct contact with or inhalation of 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 Moss Branch 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 the 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 conducting the possible cleanup actions. The investigation was completed in mid-1990. Cleanup remedies selected include groundwater extraction; treatment of groundwater through chemical precipitation, air stripping, and granulated activated carbon; and discharge of treated groundwater into the Delaware River. The design of the selected remedy began in 1991 and is expected to be completed in 1993.

Soil Contamination: Sampling of on-site soils to determine the extent of soil contamination was completed in spring 1990. The EPA has completed an investigation of the soil contamination; however, recommendations for cleanup will not be issued until more data become available during the design phase of the groundwater cleanup.

Wetlands: An investigation into the nature and extent of contamination in the wetlands began in 1990 and is scheduled for completion in late 1993. At that time, recommendations on final cleanup methods will be made.

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 develop the alternative cleanup activities. In June 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. Chemical Leaman Tank Lines, Inc. also entered into a Consent Order with the EPA to construct a waterline extension to the homes in the vicinity of the site not receiving municipal water.

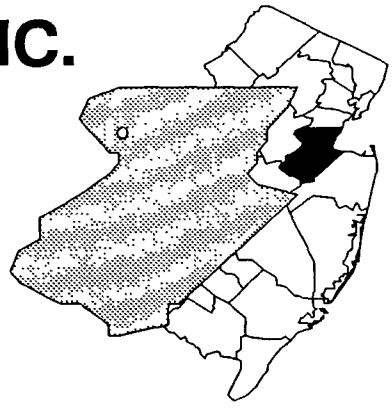
Environmental Progress

The affected homes to the north of the Chemical Leaman Tank Lines, Inc. 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 1992, thereby reducing the potential for exposure to contaminated groundwater while final groundwater cleanup remedies are being designed and further investigations leading to the selection of final remedies for the soil and wetlands contamination are taking place.

Site Repository

Township Clerk's Office, Logan Township Municipal Building, 73 Main Street, Bridgeport, NJ 08014

CHEMSOL, INC.
NEW JERSEY
EPA ID# NJD980528889



EPA REGION 2
Middlesex County
Piscataway

Site Description

Chemsol, Inc. is a 40-acre site in Piscataway, New Jersey. This inactive site was used as a solvent recovery and waste reprocessing facility 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. Between 1980 and 1990, approximately 40 groundwater monitoring wells were installed by Tang Realty on site or downgradient from the site. Sampling from these monitoring wells and from soil indicated that groundwater was contaminated with organic compounds and soil was contaminated with polychlorinated biphenyls (PCBs) and organic compounds. 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 PCB-contaminated site soils. During the soil excavations for removal of PCB-contaminated soils, several thousand small (less than 1 gallon) containers of unknown substances were discovered. These unknown substances were stored in a trailer on site. 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 after sampling results indicated the presence of organic contaminants in residential wells.

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

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

Threats and Contaminants

Volatile organic compounds (VOCs) such as trichloroethylene (TCE), chloroform, methylene chloride, and vinyl chloride; heavy metals such as arsenic; semi-volatile organic compounds; and pesticides have contaminated on-site groundwater. Soils may be contaminated by PCBs and organic compounds. Many of the hazardous substances detected in the groundwater at the site are present at levels which far exceed Federal and State standards and guidelines for groundwater. In addition, the data collected to date demonstrate that groundwater contaminants have migrated off the site. Direct contact with or accidental ingestion of contaminated groundwater or soil may pose a health threat.

Cleanup Approach

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

Response Action Status

Initial Actions: 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. During 1990 and 1991, the unknown substances discovered during soil excavations and stored in a trailer on site were analyzed for compatibility; compatible wastes were grouped together for off-site disposal. By late 1991, approximately 10,000 pounds of crushed lab pack bottles, 13,500 pounds of hazardous waste solids, 615 gallons of hazardous waste liquids, and 150 pounds of sulfurtrioxide were disposed of off site.

Groundwater: The EPA completed an investigation into site contamination. The aim of this investigation was to evaluate interim cleanup actions to restrict off-site migration of highly contaminated groundwater to a depth of approximately 130 feet. The selected interim remedy issued in late 1991 involves extraction of groundwater underlying the site (to approximately 130 feet), treatment of the contaminated groundwater, and discharge of the treated groundwater to a stream flowing along the eastern property boundary of the site. Design of the interim remedy is expected to be completed in 1993, with implementation of the interim remedy expected during 1994.

Entire Site: The EPA is conducting a study that focuses on 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 1994.

Site Facts: The New Jersey Department of Environmental Protection and Energy issued an Administrative Consent Order to Tang Realty in 1983 and 1984 for the performance of a site investigation. In March 1992, the EPA issued a Unilateral Administrative Order to four potentially responsible parties for the design and construction of the interim remedy. The potentially responsible parties have complied with the Order and are proceeding with the work.

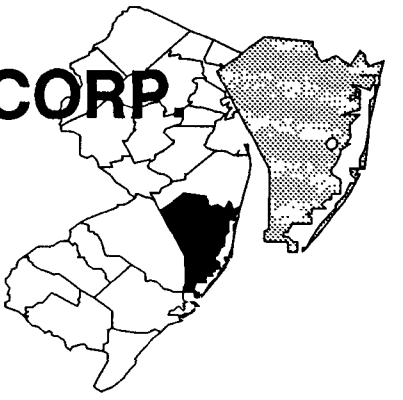
Environmental Progress

The removal of the unknown substances from the on-site trailer and contaminated soils has reduced the potential for exposure to hazardous materials at the Chemsol, Inc. site while an interim remedy is being designed and further investigations leading to the selection of the final cleanup remedy are taking place.

Site Repository

Kennedy Public Library, 500 Hoes Lane, Piscataway, NJ 08854

CIBA-GEIGY CORP.
NEW JERSEY
EPA ID# NJD001502517



EPA REGION 2
Ocean County
Route 37 in Dover Township

Other Names:
Toms River Chemical

Site Description

The Ciba-Geigy Corp. site, located in Toms River, New Jersey, is presently owned and operated by the Ciba-Geigy Corporation. The site covers approximately 1,400 acres, 320 of which are developed, with the remainder consisting of cleared areas, pine barrens, and wetlands. The manufacturing facility 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 1990, a variety of synthetic organic pigments, dyes, resins, and epoxy additives were manufactured at the site. Manufacturing of pigments and dyestuffs ceased in 1988. The company disposed of sludges and chemical wastes on site in the following locations: the drum disposal area containing 91,000 drums; a lime sludge and calcium sulfate disposal area which contains mainly inorganic wastes; a 12-acre filtercake disposal area, which received sludge from wastewater treatment; five backfilled lagoons comprising 8 1/2 acres; a 25-acre borrow/compactor debris disposal area; and two additional equalization basins, 5 acres of which contain sludges from a former treatment plant. 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. Contamination from the source areas is leaching into the groundwater and discharging to the Toms River and adjacent wetlands, which together comprise the eastern boundary of the site. The groundwater in the area is tapped by municipal, industrial, and private wells. To the north, south, and west, the site is bordered by light commercial, residential, and recreational areas. The Township of Dover has an estimated population of 64,455 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 Federal and potentially responsible parties' actions.

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

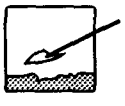
Threats and Contaminants

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 if accidentally ingested or touched. Contaminants from the site are migrating to the Toms River and wetlands, which form the eastern boundary of the site. Winding River Park, an outdoor recreational area situated in the flood plain of the Toms River, may also be adversely affected by site contaminants.

Cleanup Approach

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

Response Action Status



Initial Actions: In 1980, the potentially responsible parties removed 15,000 drums from the on-site sanitary landfill and initiated groundwater monitoring at the site. As an interim measure, the potentially responsible parties are withdrawing contaminated groundwater, treating it on site, and storing it until a system is constructed to discharge it. Groundwater is being handled under a permit issued by the State allowing the discharge of treated water if contamination has been reduced to safety levels.

Groundwater: The EPA decided on the following cleanup measures to protect public health and the environment: sealing contaminated residential irrigation wells; designing and constructing an on- and off-site groundwater extraction and treatment system with subsequent discharge to the Toms River; and implementing a river and groundwater monitoring program. All contaminated residential irrigation wells were sealed by mid-1991. The river and groundwater monitoring programs are underway. The designs for the treatment and extraction system are underway and are expected to be completed in 1992.

Entire Site: An investigation began in 1989 to evaluate the extent and nature of the contamination on the entire site. The investigations include characterizations of up to ten potential disposal areas, the wastewater treatment plant area, the 91,000 drum disposal area, off-site wetlands, the 100-acre production area, and other treatment and disposal facilities. The investigation is expected to be completed in 1993, at which time alternative cleanup options will be identified.

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. Field work is ongoing in the source areas.

Site Facts: In 1980, the New Jersey Department of Environmental Protection and Energy issued an Administrative Order forcing the potentially responsible parties to remove the drums and initiate groundwater monitoring at the site. 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 remedy for groundwater cleanup has been selected, and contaminated irrigation wells have been sealed. Bench- and pilot-scale treatability studies have been completed to determine appropriate groundwater cleanup technologies and the design of the groundwater treatment and extraction systems are underway. The EPA has determined that the Ciba-Geigy Corp. site no longer poses 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.

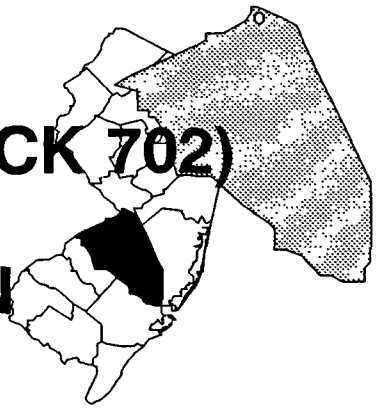
Site Repository

Ocean County Public Library, Main Library, 101 Washington Street, Toms River, NJ 08753

CINNAMINSON TOWNSHIP (BLOCK 702) GROUNDWATER CONTAMINATION

NEW JERSEY

EPA ID# NJD980785638



EPA REGION 2
Burlington County
Cinnaminson Township

Other Names:
Cinnaminson Township Landfill

Site Description

The Cinnaminson Township (Block 702) Groundwater Contamination site covers approximately 400 acres in Cinnaminson and Delran Townships in Burlington County, New Jersey. The site includes properties bounded by Union Landing Road, U.S. Route 130, River Road, and Taylors Lane. The Delaware River is located approximately 5,000 feet to the northwest, and U.S. Route 130 passes about 2,000 feet southwest of the site. The site consists of a landfill, residential properties, and light to heavy industrial properties. A number of the industrial facilities have petroleum underground storage tanks. Unlined slurry pits and cooling ponds are located on one industrial property The landfill portion of the site originally began as a sand and gravel mining pit. During the late 1950s, municipal solid wastes were deposited in the completed unlined mining pits, while the mining operations continued in other parts of the property. Mining operations were terminated in the late 1960s. After the mines were closed, large amounts of refuse and solid waste were deposited in the pits. Municipal and institutional wastes, bulky wastes, vegetable and food processing wastes, and industrial wastes, including hazardous substances, were deposited in two areas of the landfill. In the 1970s, the landfill was cited several times by the New Jersey Department of Environmental Protection and Energy for violations of landfill regulations. In 1979, analysis revealed that the groundwater underneath and adjacent to the landfill was contaminated. The landfill ceased operations in 1980. A clay cap was installed over the landfill to restrict rain and surface water from infiltrating into the wastes, thus reducing the amount of leachate entering the groundwater. The underlying 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 site. Approximately 55,000 people live within a 3-mile radius of the site.

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

NPL LISTING HISTORY
Proposed Date: 10/15/84
Final Date: 06/10/86

Threats and Contaminants

Arsenic and volatile organic compounds (VOCs) including chloroform, benzene, and vinyl chloride have been detected in the groundwater. Ingestion of the contaminated groundwater may pose a heath threat.

Cleanup Approach

The site is being addressed in two long-term remedial phases focusing on cleanup of the groundwater and an evaluation of the clay cap.

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 around the site to locate the areas of greatest contamination. The hydrogeology at the site is complicated by the presence of discontinuous clay layers, called lenses. These clay lenses tend to create a shallow aquifer above the deep aquifer. Samples of surface water, sediment, and air were taken during the investigation and found to be within acceptable levels. The selected remedy includes pumping groundwater from both the deep and shallow aquifers, treating it to remove contamination, and reinjecting the treated groundwater into the deep aquifer. The design of these technologies is expected to begin in 1992.

Clay Cap: An evaluation of the effectiveness of the clay cap, installed over the landfill when it ceased operations in 1980, is planned to begin in 1995 and expected 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 Township (Block 702) Groundwater Contamination site while cleanup actions are being planned and additional evaluations take place.

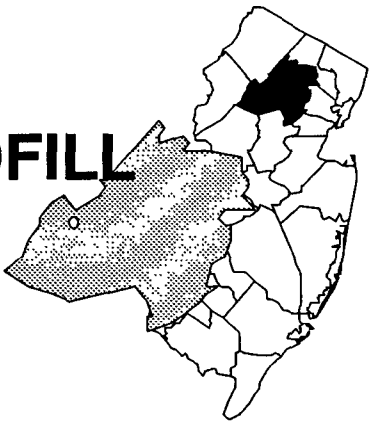
Site Repository

Cinnaminson Township Municipal Building, 1621 Riverton Road, Cinnaminson, NJ 08077

COMBE FILL NORTH LANDFILL

NEW JERSEY

EPA ID# NJD980530596



EPA REGION 2
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 and 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 flowed across the surface of the landfill and drained into the creeks bordering 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: 12/30/82
Final Date: 09/08/83

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 drained into nearby creeks may have contaminated the surface water and fish. Those who drink contaminated groundwater may be at risk. In addition, individuals who come in 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: grading and compacting the waste disposal area; covering the landfill with a clay or a synthetic material to prevent surface water and rainwater from coming into contact with the buried waste; installing a system of ditches and metal pipes to collect drainage from the site; installing a ventilation system for the methane gas; and fencing the site. The State has completed the majority of the cleanup activities. Once all of the remaining details of cleanup activities are completed, expected in 1992, the State plans to monitor the groundwater and air to ensure the effectiveness of the cleanup.

Environmental Progress

The EPA conducted preliminary investigations of the Combe Fill North Landfill and determined that no emergency response actions are needed. Long-term cleanup activities are underway at the site and are expected to be completed in 1992.

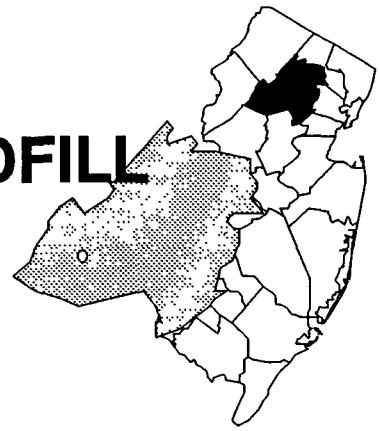
Site Repository

Morris County Free Library, 30 East Hanover Avenue, Whippany, NJ 07891

COMBE FILL SOUTH LANDFILL

NEW JERSEY

EPA ID# NJD094966611



EPA REGION 2

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 Federal and State actions.

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

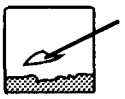
Threats and Contaminants

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, which contains VOCs, pesticides, and metals, drains into Trout Brook. Contaminants may accumulate in the trout and could pose a health hazard to those who eat them. Although residents have been provided with an alternate water supply, individuals who continue to drink the contaminated well water may suffer adverse health effects. In addition, those who come in contact with or accidentally ingest contaminated soil may be at risk.

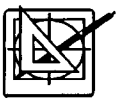
Cleanup Approach

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: covering the landfill with clay or a synthetic material to prevent surface water and rainwater from coming into contact with the buried wastes; installing a system to collect the landfill gases; pumping the shallow groundwater and leachate and treating it before discharging it into Trout Brook; installing controls to accommodate stormwater runoff and seasonal increases in rain; and performing an additional study to determine if the deep aquifer needs treatment. The State of New Jersey completed the design of the technical specifications to clean up the site in 1992. In addition, the design of an alternate water supply system has been initiated and installation will begin in 1993 for residents who are or may be threatened by the contaminated groundwater plume. Final cleanup actions are expected to begin in late 1992. When all cleanup activities are completed, the State will monitor the site to ensure the cleanup has been effective.

Environmental Progress

The site has been fenced and residents have been provided with bottled water, reducing the potential for exposure to contaminants at the Combe Hill South Landfill site while the design of final cleanup actions is completed.

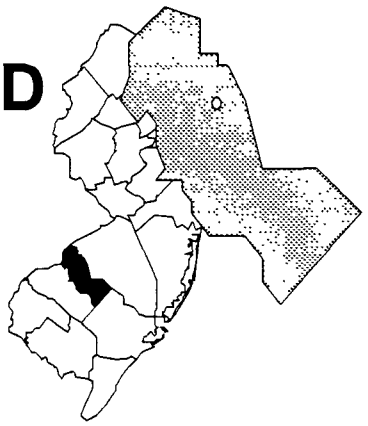
Site Repository

Washington Township Library, 146 Schooleys Mountain Road, Long Valley, NJ 07853

COOPER ROAD SITE

NEW JERSEY

EPA ID# NJD980761381



EPA REGION 2
Camden County
Voorhees Township

Site Description

The Cooper Road site covers an area of less than 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 at the site. Some of the vials were broken, but most were still intact. The State requested that the property owners remove the vials, but the owners did not comply. The property was sold in 1983, and under State supervision, the new owners removed the vials, 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 NPL 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: 09/08/83
Final Date: 09/21/84
Deleted Date: 02/22/89

Threats and Contaminants

Soil was contaminated with VOCs and heavy metals, including lead and arsenic.

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 the contaminated soils. The vials and soil were disposed of in a federally approved hazardous waste facility.

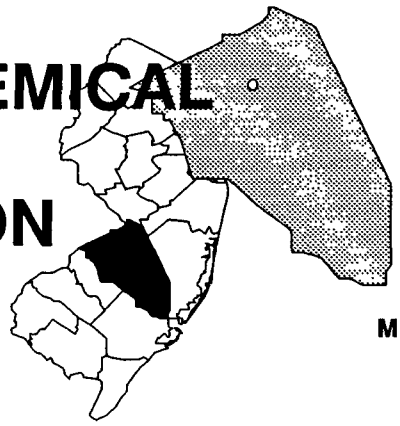
Environmental Progress

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

Site Repository

Information is no longer available.

COSDEN CHEMICAL COATINGS CORPORATION
NEW JERSEY
EPA ID# NJD000565531



EPA REGION 2
Burlington County
Beverly

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

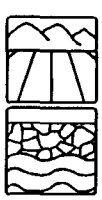
Site Description

The 6 1/2-acre Cosden Chemical Coatings Corporation 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, and stored them 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 owner abandoned the site in 1985. The site first came to the attention of the New Jersey Department of Environmental Protection and Energy (NJDEPE) following a grass fire at the facility. An inspection by the NJDEPE 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: 01/25/87
Final Date: 07/22/87

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). Individuals may be at risk through direct contact with contaminated soil or accidental ingestion of contaminated groundwater or soil. Although private wells were the source of drinking water in the past, all 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 have been 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. Nine wells have been installed to monitor groundwater and to analyze the contaminants. Once these investigations are completed, scheduled for 1992, alternatives for cleaning up the site will be recommended.

Site Facts: The State ordered Cosden Chemical Coatings Corporation 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. The site was abandoned in 1985.

Environmental Progress

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

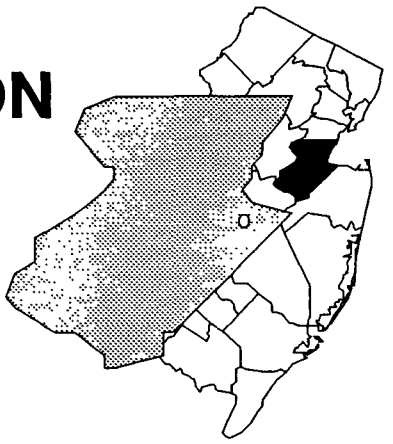
Site Repository

Beverly City Hall Municipal Building, 446 Broad Street, Beverly, NJ 08010

CPS/MADISON INDUSTRIES

NEW JERSEY

EPA ID# NJD002141190



EPA REGION 2

Middlesex County
Old Bridge Township

Other Names:
CPS Chemical
Old Bridge Chemical

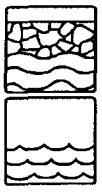
Site Description

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 water treatment agents, lubricants, oil field chemicals, and anti-corrosive agents. The company generates 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 have been closed due to contamination. Both facilities are still in operation and continue to handle hazardous materials on 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: 12/30/82
Final Date: 09/08/83

Threats and Contaminants



Groundwater is contaminated with various volatile organic compounds (VOCs) and heavy metals including zinc and to a lesser extent cadmium, copper, and lead. The sediments and surface water of Prickett's Pond are contaminated with zinc 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 come in contact with or ingest the water or sediments. Although the contaminated water wells have been taken out of service, those who accidentally come in contact with or drink contaminated groundwater may be at risk. In addition, the Perth Amboy wellfield is downgradient of the site.

Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on interim groundwater actions and cleanup of the entire site.

Response Action Status

Interim Groundwater Actions: In early 1991, a groundwater pump and treat system was installed as a temporary remedy to prevent contamination of the nearby Perth Amboy wellfield while further studies are being completed. Soon after the installation of the recovery system, benzene and dorobenzene appeared in Perth Amboy Supply Well #6 (SW#6). In response to the contamination at SW#6, the EPA installed additional monitoring wells immediately upgradient of the well and sampled the new and existing monitoring wells. The results of that sampling indicated that the contamination was deeper and closer to SW#6 than previously believed. The EPA and the State are currently looking into options for protecting the well.

Entire Site: CPS and Madison Industries, under State supervision, have been studying 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: CPS and Madison Industries are performing hydrological contamination investigations under a 1988 court order. Discussions are underway between the EPA and the State to initiate studies to locate any remaining sources of contamination at the site. In addition, Perth Amboy, in response to the initial contamination at SW#6, has taken the two companies to court in an effort to use the existing court order to force them to implement a wellhead protection program.

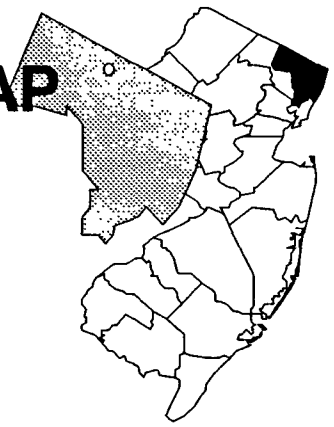
Environmental Progress

A temporary groundwater treatment system has been installed to contain the spread of groundwater contamination and protect the Perth Amboy wellfields which provide the public with their drinking water supply. The EPA and the State continue to monitor the drinking water to ensure that the residents and the environment are protected while further investigations leading to the selection of final cleanup remedies are taking place.

Site Repository

Old Bridge Public Library, Old Bridge Center, 516 Cottrell Road, Old Bridge, NJ 08857

CURCIO SCRAP METAL, INC.
NEW JERSEY
EPA ID# NJD011717584



EPA REGION 2
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) recycle 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 to a pond approximately 300 feet from the site and determined that CISC was responsible for the spill. The company spilled about 200 to 300 gallons of hydraulic fluid on the 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 located 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: 01/22/87
Final Date: 07/22/87

Threats and Contaminants

The groundwater and soil are contaminated with PCBs, heavy metals, and volatile organic chemicals (VOCs). Surface water in a drainage ditch and in a nearby pond may be contaminated with the same contaminants. Those who drink or come in 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 if the water is touched or accidentally ingested.

Cleanup Approach

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

Response Action Status

Soil: In mid-1991, excavation and off-site incineration of approximately 1,800 cubic yards of contaminated soil was selected to clean up the soil. The parties potentially responsible for site contamination are currently conducting the design of the remedy, scheduled to be completed in 1993, and will perform the cleanup at the site under EPA monitoring.

Groundwater and Surface Water: In 1992, the potentially responsible parties are scheduled to start the second phase of 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 the spring of 1993.

Site Facts: In 1988, the EPA, Consolidated Edison Company of New York, 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 Administrative Order in 1989 requiring the potentially responsible parties to refrain from taking any actions that might interfere with the EPA's investigation or cleanup of the site. The respondents are also required to implement provisions for eliminating any future releases of hazardous substances at the site. The EPA issued a Unilateral Administrative Order in 1991 requiring all potentially responsible parties to design and construct the cleanup remedy.

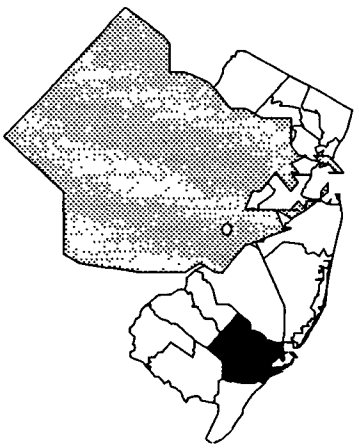
Environmental Progress

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, Inc. site while further studies are being completed and cleanup activities are being designed.

Site Repository

Saddle Brook Free Public Library, 340 Mayhill Street, Saddle Brook, NJ 07662

D'IMPERIO PROPERTY
NEW JERSEY
EPA ID# NJD980529416



EPA REGION 2
Atlantic County
Hamilton Township

Other Names:
Motel Dennis

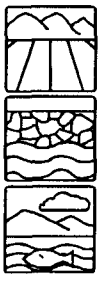
Site Description

The D'Imperio Property site comprises approximately 26 acres, of which 1 1/2 acres were used as an unauthorized dump in the mid-1970's. The disposal area consists mainly of partially buried and ruptured metal drums. Numerous drums containing metals and various volatile organic compounds (VOCs) including solvents were dumped there. The groundwater is contaminated and the contaminant plume has been detected in two aquifers. The site is located in a semi-rural area, with most of the developed areas more than 1/2 mile from the property. 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. The site is within the New Jersey Pineland Reserve. Babcock Swamp wetlands, which are drained by Babcock Creek, are approximately 2,000 feet to the southwest.

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

NPL LISTING HISTORY
Proposed Date: 10/23/81
Final Date: 09/08/83

Threats and Contaminants



Surface and sub-surface soils are contaminated with VOCs, base neutral/acid extractables, and metals. The groundwater is contaminated with VOCs. Those who drink the contaminated groundwater from private wells may be at risk. In addition, individuals may be at risk from direct contact with or accidental ingestion of contaminated soils. The New Jersey Pineland Reserve and the Babcock Swamp wetlands also are potentially threatened.

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 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: excavating and transporting 3,900 cubic yards of contaminated waste, soil, and drums to a federally approved facility; constructing a cover made of clay or synthetic material to prevent rainwater from spreading buried wastes; and pumping and treating the groundwater to remove the contaminants and then discharging the clean water back into the aquifers. In 1987, the EPA removed 82 buried drums and 3,900 cubic yards of contaminated soil and disposed of them in a federally approved facility. The EPA currently is designing the technical specifications for the groundwater pump and treat system. Once the design phase is completed, scheduled for 1992, the groundwater cleanup will begin. Upon completion of the groundwater pump and treat action, the EPA will design the cap for the waste area.

Environmental Progress

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

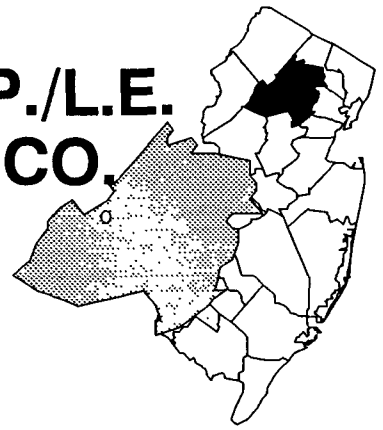
Site Repository

Office of the Mayor, Hamilton Township, 2 Cape May Avenue, Mays Landing, NJ 08330

DAYCO CORP./L.E. CARPENTER CO.

NEW JERSEY

EPA ID# NJD002168748



EPA REGION 2
Morris County
Wharton Borough

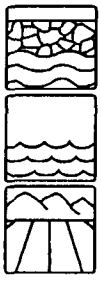
Site Description

The 14 1/2-acre Dayco Corp./L.E. Carpenter Co. 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 located in the flood plain of the Rockaway River and is above an aquifer that provides water for both Wharton and Dover. 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: 04/10/85
Final Date: 07/22/87

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 may adversely affect public health if accidentally swallowed or touched. Site-related contaminants have reached the Rockaway River and have been found in river sediment samples.

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 Co. 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. More than 5,000 gallons of organic liquids have been pumped from above the water table and removed from the site.

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, scheduled for late 1992, alternative cleanup actions will be evaluated by the New Jersey Department of Environmental Protection and Energy and the EPA.

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

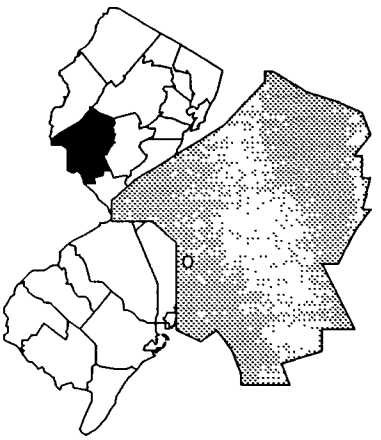
Environmental Progress

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

Site Repository

Wharton Public Library, 1519 South Main Street, Wharton, NJ 07885

DE REWAL CHEMICAL COMPANY
NEW JERSEY
EPA ID# NJD980761373



EPA REGION 2
Hunterdon County
Kingwood Township

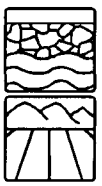
Site Description

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 population of the Kingwood Township is approximately 3,000.

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

NPL LISTING HISTORY
Proposed Date: 09/08/83
Final Date: 09/21/84

Threats and Contaminants



Testing of the bedrock aquifer showed the presence of VOCs such as trichloroethane and tetrachloroethane, as well as the heavy metal cadmium, but not at levels exceeding safety standards. The shallow water-bearing zone also contains metals and VOCs. 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: excavation of contaminated soil; on-site thermal treatment of VOC-contaminated soil; on-site solidification and stabilization of the thermally treated soil and the remaining metal-contaminated soil; extraction of shallow contaminated groundwater with on-site storage, and off-site disposal at an approved industrial wastewater treatment facility; provision of a treatment system for the on-site residential well; monitoring to ensure the remedy has been effective; and 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 remaining cleanup activities is scheduled for completion late in 1993.

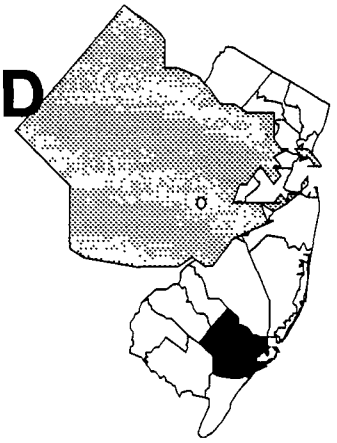
Environmental Progress

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

Site Repository

Hunterdon County Library, Route 12, Flemington, NJ 08822

DELILAH ROAD
NEW JERSEY
EPA ID# NJD980529002



EPA REGION 2
Atlantic County
Egg Harbor Township

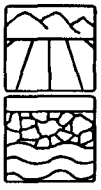
Site Description

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 and Energy 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: 09/08/83
Final Date: 09/21/84

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 may pose a health hazard to individuals if accidentally swallowed or touched. Access to the site is unrestricted.

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: Bottled water was provided to the nearby residences until the State completed the installation of a municipal water supply system. Hookups have been provided to the residences and businesses around the perimeter of the landfill that previously relied on private wells for their water supply.

Entire Site: The State completed an investigation of the site 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 surface water control system; installing a landfill gas collection and treatment system; implementing an air and groundwater monitoring program; and fencing and issuing deed restrictions to limit access to the site. Cleanup activities will begin once the design of the remedy is completed.

Environmental Progress

By providing an alternative water supply to residents affected by site contamination, the potential for exposure to contamination at the Delilah Road site has been reduced, while design of the remedies and cleanup actions are being planned.

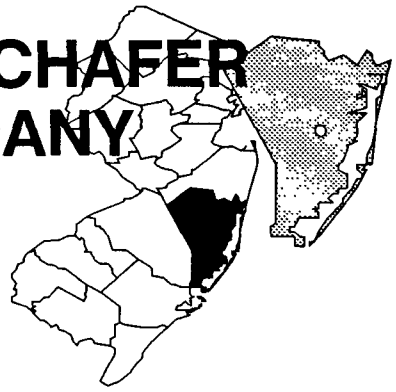
Site Repository

Atlantic County Library, Egg Harbor Branch, Swift Drive, Bargaintown, NJ 08232

DENZER & SCHAFER X-RAY COMPANY

NEW JERSEY

EPA ID# NJD046644407



EPA REGION 2
Ocean County
Bayville

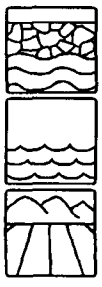
Site Description

The 5-acre Denzer & Schafer 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), semi-volatiles, and metals. 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: 12/30/82
Final Date: 09/08/83

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 1993, 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.

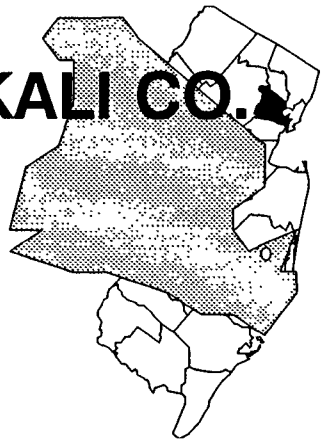
Site Repository

Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753

DIAMOND ALKALI CO.

NEW JERSEY

EPA ID# NJD980528996



EPA REGION 2

Essex County
Newark

Other Names:
Diamond Shamrock Site
80 Lister Avenue Property

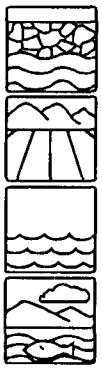
Site Description

The Diamond Alkali Co. owned and operated a pesticides manufacturing facility in Newark, New Jersey. The site, which covers over 3 acres and is adjacent to the Passaic River, is composed of a number of properties 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 Chemicals Company), acquired the property in 1951 and produced various chemicals and pesticides until 1969, when the company ceased operations. Subsequent owners used the property until 1983, when 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 Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/08/83
Final Date: 09/21/84

Threats and Contaminants



Dioxin has been detected in on-site monitoring wells. Other contaminants detected in groundwater include herbicides and volatile organic compounds (VOCs) such as benzene, acetone, and toluene. Dioxin and pesticides have been found in the on-site soils. Sediments in the Passaic River and nearby waterways contain dioxin. Workers involved in the cleanup and area residents, including children, may be at risk if they come in contact 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 three stages: immediate actions and two long-term remedial phases focusing on interim and long-term remedies for the entire site.

Response Action Status

Immediate Actions: The dioxin discovery led to one of the properties being secured with a fence. All exposed soils were covered with geofabric to prevent potential migration of contamination. At the other properties, 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 and Energy (NJDEPE) in 1983 and taken over by the Diamond Shamrock Chemicals Company under State Administrative Consent Orders.

Interim Remedy: In 1987, the EPA selected an interim remedy that entails construction of a slurry wall around the two properties, installation of a cap, and extraction and treatment of groundwater to reduce the migration of contaminants. Under a Consent Decree with the EPA and the State of New Jersey, a party potentially responsible for the contamination is currently designing these cleanup remedies.

Long-term Remedy: Under a 1989 Consent decree, the interim remedy will be periodically reevaluated. This remedy will be modified if additional actions are deemed necessary to ensure the effectiveness and permanence of the cleanup.

Site Facts: In 1984, the State and Diamond Shamrock Chemicals Company entered into two Administrative Orders on Consent, one for the completion of the investigation and immediate response work at 80 Lister Avenue, and the second for investigations and immediate response work at other properties. A Consent Decree was filed in 1989 between Chemical Land Holdings 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 have 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.

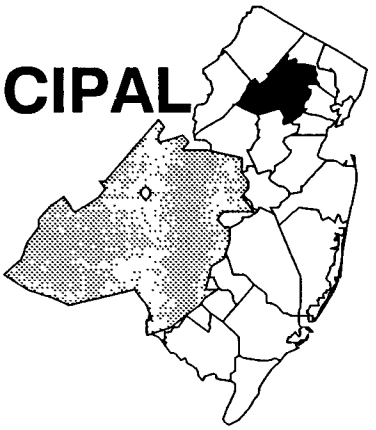
Site Repository

Newark Public Library, 5 Washington Street, Newark, NJ 07101

DOVER MUNICIPAL WELL 4

NEW JERSEY

EPA ID# NJD980654131



EPA REGION 2
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 and Energy (NJDEPE) is investigating the site. Approximately 32,000 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: 12/30/82
Final Date: 09/08/83

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 NJDEPE identified two parties potentially responsible for the contamination. An Administrative Consent Order was signed between NJDEPE and the two parties; however, the NJDEPE 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.

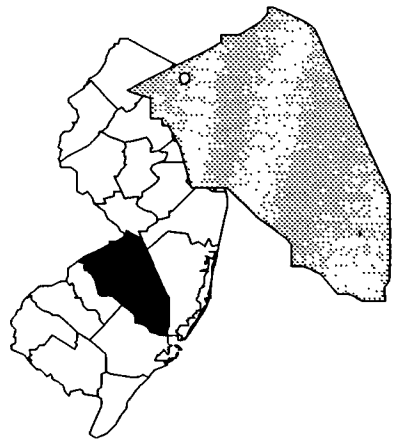
Environmental Progress

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, provided they do not drink or use water from this well. Further investigations leading to the discovery of the source of the contamination and the selection of final cleanup remedies currently are underway.

Site Repository

Dover Free Library, 32 East Clinton Street, Dover, NJ 07801

ELLIS PROPERTY
NEW JERSEY
EPA ID# NJD980529085



EPA REGION 2
Burlington County
Evesham Township

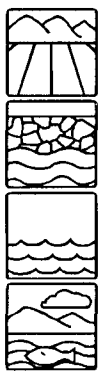
Site Description

The Ellis Property site is a 36-acre tract of land located in Evesham and Medford Townships. The property is surrounded by farmland and wooded lots. The site, originally a dairy farm, was used for drum storage and reconditioning operations. The site included a large two-story building housing several washing tanks and troughs, as well as 50 to 75 drums, many of which were full. There also were three sheds, which contained drums of various sizes and full chemical containers. An area adjacent to the sheds contained about 100 55-gallon plastic drums, most of which still contained liquids. Approximately 300 containers were discovered at the site. Some of the drums had corroded or otherwise deteriorated so that the contents had leaked onto the ground. Sharps Run, an intermittent stream, is less than a mile to the north. Drainage from the site flows east through a natural swale and trenches into a wetland area. Drainage from the wetlands eventually leads to Sharps Run. The shallow 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: 12/30/82
Final Date: 09/08/83

Threats and Contaminants



The surface soils are contaminated with volatile organic compounds (VOCs), heavy metals, and polychlorinated biphenyls (PCBs). The shallow groundwater is contaminated with VOCs, including trichloroethylene (TCE) and tetrachloroethylene (PCE), and heavy metals including arsenic, chromium, and lead. Sampling of wells that are near the site and used as a potable water supply showed no contamination. These wells will continue to be monitored. Surface water and sediments at the site show elevated levels of heavy metals and TCE. Individuals may be at risk by coming in contact with or accidentally ingesting contaminated soil, surface water, or groundwater.

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 and Energy removed some drums and contaminated soil from the site. In 1987, the buildings on site were demolished because they were structurally unsafe. 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 containerized materials were removed.

Entire Site: An investigation of the site begun by the State in 1987 was completed in early 1992. After the study was completed, the State issued a proposed remedy for the Ellis Property site which entails excavation and off-site disposal of contaminated soils and extraction and treatment of contaminated groundwater. After a public comment period, the EPA will select a final remedy, expected in late 1992.

Environmental Progress

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

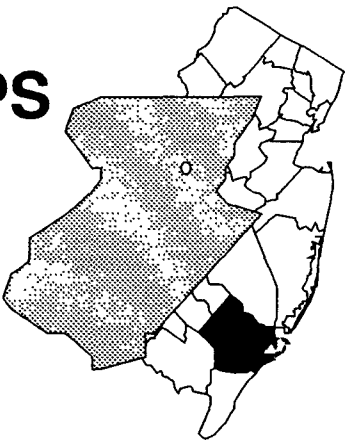
Site Repository

Evesham Library, Tritown Plaza, Route 70, Marlton, NJ 08053

EVOR PHILLIPS LEASING

NEW JERSEY

EPA ID# NJD980654222



EPA REGION 2

Middlesex County
Old Bridge Township

Other Names:
Phillips Leasing
N. America Metals
EPL Industries

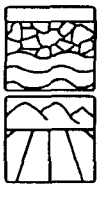
Site Description

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 Federal, State, and potentially responsible parties' actions.

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

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 the soil and groundwater could cause health problems. Accidentally ingesting contaminated soil or drinking the contaminated groundwater could pose a health threat. Municipal well data confirm the presence of site-related contaminants in the groundwater. All well water samples exceed 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 causing contamination of drinking water wells.

Cleanup Approach

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

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.

On-Site Groundwater and Buried Drums: The State completed assessing the sources of contamination, the on-site buried drums, and determined the nature and extent of the contamination of the on-site groundwater in 1992. The EPA is currently reviewing the cleanup alternatives and will select the best remedy for the site. The final cleanup remedy is expected to be determined by late 1992.

Regional Groundwater and On-Site Soils: An investigation is expected to begin in 1993 to explore the nature and extent of regional groundwater and on-site soil contamination. The study will define the contaminants of concern and will recommend effective alternatives for final cleanup. Once completed, the EPA will evaluate the study findings and select a final remedy for regional groundwater and on-site soil cleanup.

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

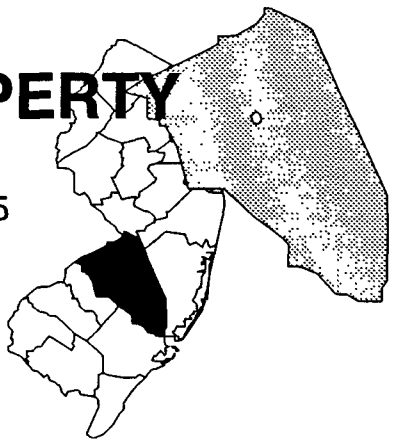
Environmental Progress

The EPA has determined that while site studies are taking place the Evor Phillips Leasing 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 site do not migrate to surrounding areas.

Site Repository

Old Bridge Public Library, Old Bridge Center, 516 Cottrell Road, Old Bridge, NJ 08857

EWAN PROPERTY
NEW JERSEY
EPA ID# NJD980761365



EPA REGION 2
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 primary 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 indicates 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 New Jersey Pinelands 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: 09/08/83
Final Date: 09/21/84

Threats and Contaminants

A plume of contaminated groundwater 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: In 1988, the EPA selected the cleanup methods to be used to remove contaminated materials and buried drums from the site. These methods include: construction of an area for waste identification, grouping, and storage; excavation of wastes; collection and grouping of waste materials with off-site incineration of all appropriate wastes; temporary on-site storage and assessment of non-incinerable wastes to determine proper treatment/disposal methods; and monitoring of 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, scheduled for late 1993, 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.

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.

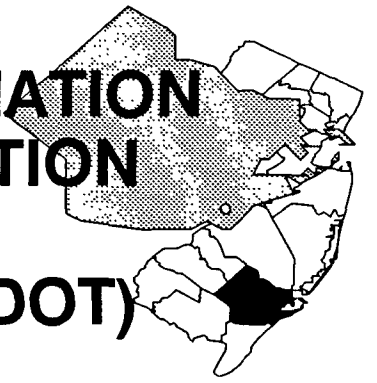
Environmental Progress

Installation of a security fence has reduced the potential for contact with contaminants while the chosen remedies are being designed. 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.

Site Repository

Shamong Township Clerk, 60 Willow Grove Road, Vincetown, NJ 08088

FEDERAL AVIATION ADMINISTRATION TECHNICAL CENTER (USDOT)



NEW JERSEY

EPA ID# NJ9690510020

EPA REGION 2
Atlantic County
8 miles northwest of Atlantic City

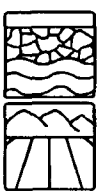
Site Description

The Federal Aviation Administration (FAA) Technical Center (USDOT) covers an area of approximately 5,000 acres on a site 8 miles 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. The FAA has identified over 20 areas of concern at the Technical Center, including five training areas, underground storage tanks, landfills, and a jet fuel misting area. 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 water drawn directly from the reservoir. 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 37,000 permanent residents and 113,00 visitors during peak seasons obtain drinking water from the Atlantic City wells and reservoirs.

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

NPL LISTING HISTORY
Proposed Date: 07/14/89
Final Date: 08/30/90

Threats and Contaminants



Volatile organic compounds (VOCs), including tetrachloroethene, dichloroethene, and benzene are present in groundwater above New Jersey safety standards. Polychlorinated biphenyls (PCBs) and VOCs were detected in soils in drum storage areas and at the location of two underground waste oil tanks. Although the Atlantic City municipal wells are not contaminated, a potential health threat exists if pollutants migrate to the wells. Those who accidentally ingest contaminated soil may suffer adverse health effects.

Cleanup Approach

The site is being addressed in five stages: initial actions and four long-term remedial phases focusing on cleanup of the jet fuel farm, the salvage yard, the fire training area, and other areas.

Response Action Status

Initial Actions: In 1989 and 1990, PCB-contaminated soil and a contaminated cement pad were removed from the Transformer Storage Area. During these two actions, approximately 62 tons of soil and concrete debris were excavated and disposed of in an approved landfill.

Jet Fuel Farm: It is estimated that there are 360,000 gallons of floating petroleum product and 33,000 cubic yards of contaminated soil in this area. In 1989, the EPA selected a remedy to clean up the jet fuel in the soil and groundwater including free product extraction, in-situ bioremediation, and soil venting. The design of the technical specifications of the remedy is planned for completion in 1992.

Salvage Yard: Storage of scrap materials and drummed hazardous wastes has contaminated the soil and groundwater in this area. 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. Construction of a groundwater pumping and treatment system began in late 1991 and the system has been in operation since early 1992.

Fire Training Area: Test burning and extinguishing of fuel fires have contaminated soil and groundwater in this area. The investigation into the nature and extent of contamination at the fire training area was completed in 1991. The EPA expects to select a remedy for the fire training area in late 1992.

Other Areas: Investigations to determine the nature and extent of contamination are near completion at several other areas at the FAA Technical Center site. Based on the results of investigations at other areas, additional cleanup phases, as well as specific cleanup alternatives, will be recommended.

Site Facts: An Interagency Agreement between the EPA and the FAA is expected to be signed in 1992.

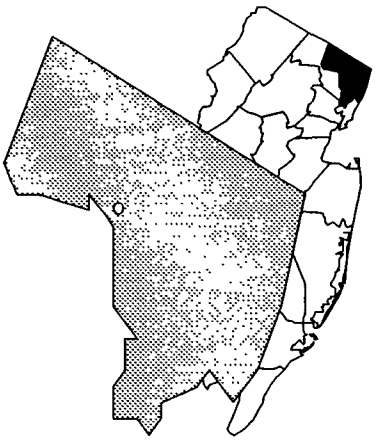
Environmental Progress

Initial actions have removed PCB-contaminated soils and limited the potential for exposure to hazardous wastes. Remedy designs for groundwater and additional soil contamination cleanup are nearing completion while investigations are being concluded at the remaining areas of concern at the Federal Aviation Administration Technical Center (USDOT) site.

Site Repository

Atlantic County Library, Mays Landing Branch, 2 South Farragut Avenue,
Mays Landing, NJ, 08330

FAIR LAWN WELL FIELD
NEW JERSEY
EPA ID# NJD980654107



EPA REGION 2
Bergen County
Fair Lawn

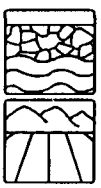
Site Description

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 Fair Lawn 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 Fair Lawn 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: 12/30/82
Final Date: 09/08/83

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, accidentally ingesting or touching contaminated groundwater or soil poses health threats.

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, Inc. conducted a limited investigation of its facility. The New Jersey Department of Environmental Protection and Energy and the EPA are negotiating with Sandvik, Inc. to conduct additional investigations at its facility.

Fisher Scientific Facility: Fisher Scientific Company conducted a limited investigation of its facility, under monitoring by the State. The company has installed a trench to collect contaminated groundwater for on-site treatment and discharge to a publicly owned water treatment works; however, groundwater is not currently being collected or treated due to permitting issues.

Site Facts: In 1984, an Administrative Order was signed by Sandvik, Inc. 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.

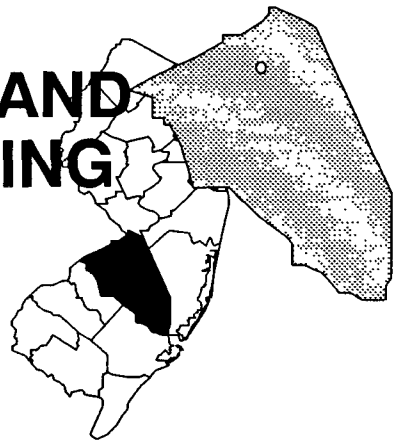
Environmental Progress

The immediate actions described above have 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.

Site Repository

Maurice M. Pine Free Public Library, 10-01 Fair Lawn Avenue, Fair Lawn, NJ 07410

FLORENCE LAND RECONTOURING LANDFILL
NEW JERSEY
EPA ID# NJD980529143



EPA REGION 2
Burlington County
In the Townships of Florence, Mansfield, and Springfield

Other Names:
Gravel Pit

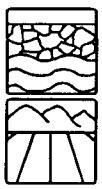
Site Description

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. The State licensed the landfill to accept sanitary and non-chemical industrial wastes. In 1975, the New Jersey Department of Environmental Protection and Energy (NJDEPE) 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 nine years have shown that drinking 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 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: 09/08/83
Final Date: 09/21/84

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). 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. Cleanup workers and those who trespass on the landfill may be at 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, or 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: 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; leachate treatment and disposal at a municipal wastewater treatment facility; removal and disposal of lagoon liquids and sediments and other surface debris; construction of a partial fence with warning signs; and 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. The installation of the security fence has been completed; remaining cleanup activities are underway and are scheduled for completion in late 1993.

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 NJDEPE was required when the terms of the Consent Order were not followed. In July 1981, Florence Land Recontouring, Inc. submitted a final closure plan, and operations terminated in November 1981.

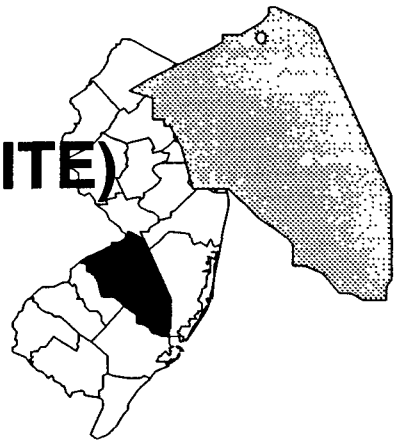
Environmental Progress

By installing a fence around the site and installing carbon and absorption filters, the threat to the surrounding community from site contamination has been reduced while cleanup activities are being completed.

Site Repository

Burlington County Library, Main Library, West Woodlane Road, Mount Holly, NJ 08060

FORT DIX (LANDFILL SITE)
NEW JERSEY
EPA ID# NJ2210020275



EPA REGION 2
Burlington County
Pemberton

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

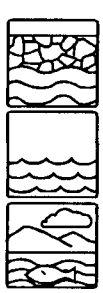
Site Description

The U. S. Army Training Center and Fort Dix encompasses approximately 33,000 acres. 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. In addition to the landfill, the Army identified 21 past disposal and spill areas on the reservation which were possibly contaminated. Fourteen of these areas have been determined to merit further investigation. 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: 10/15/84
Final Date: 07/22/87

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 touching 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 eating 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 cleanup of the disposal and spill areas.

Response Action Status

Landfill: In 1991, the Army and the EPA selected a remedy for the landfill area which entails capping the southernmost 50 acres and monitoring for 30 years. The design of the cap is underway and construction is scheduled to begin in late 1992.

Disposal and Spill Areas: In addition to the landfill, the Army has identified 21 past disposal and spill areas potentially contaminated with hazardous wastes. A preliminary study recommended that the EPA conduct a study of 14 additional areas of the site to determine the nature and extent of contamination. The subsequent investigation and recommendations for final cleanup alternatives are expected to be completed in 1994.

Site Facts: Fort Dix is participating in the Installation Restoration Program (IRP), 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 for closure of the landfill. The DOD agreed to investigate the contamination at the site, define the contaminants, and recommend alternatives for final cleanup. In 1991, the Army also signed an Interagency Agreement with the EPA which entails both study and closure of the landfill and the investigation and cleanup of the disposal and spill areas.

Environmental Progress

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

Site Repository

Fort Dix Environmental, Natural Resources Division, Building 5512, Texas Avenue, Fort Dix, NJ 08640

FRIED INDUSTRIES
NEW JERSEY
EPA ID# NJD041828906

EPA REGION 2
Middlesex County
East Brunswick Township

Site Description

Fried Industries manufactured floor finishing products, detergent solutions, and other cleaning products on this site in East Brunswick Township. Also, site facilities had been leased at times to a manufacturer of automotive antifreeze. The site property occupies 26 acres and contains a pond, a marsh area, several separate wetland areas, and a building complex. 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 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.

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

NPL LISTING HISTORY
Proposed Date: 10/15/84
Final Date: 06/10/86

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. People may be at risk from direct contact with contaminated soil, or accidental ingestion of contaminated groundwater or soil. Also, there is concern that Bog Brook, Mill Pond, Lawrence Brook, 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. The EPA approved an immediate action in 1989 to install a security fence and remove more than 1,200 drums and containers as well as laboratory bottles from the site. The EPA completed this action in early 1992.

Entire Site: The EPA completed an investigation to determine the nature and extent of the contamination including: a soil gas survey to delineate contaminant plume and to locate areas of elevated contamination; a geophysical survey to further define any contaminant plume, as well as the locations of buried drums and fill areas; a sampling of surface and buried drums, repacking of leaking drums, and placement of all drums in a secured area on site; a survey and sampling of selected off-site residential wells to delineate any subsurface migration of site-related contaminants; a delineation of Fried Industries property boundaries and on-site wetlands; and an air monitoring program to determine potential contaminant migration off the Fried Industries site. The EPA determined that additional studies are needed to further characterize the site. The studies are underway. Upon completion of site studies, scheduled for 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. Under a 1985 Consent Decree, the owner suspended further manufacturing and production operations on site. The site owner was asked to leave the site premises and did so in 1989.

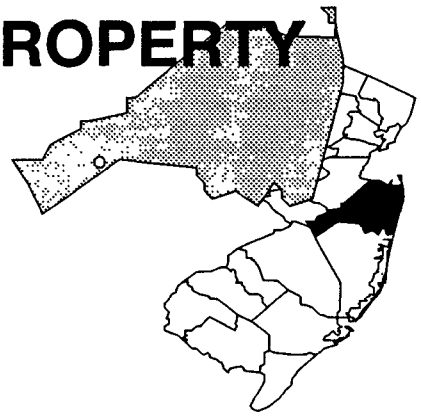
Environmental Progress

The removal of hazardous liquids, the provision of an uncontaminated public water supply, and securing the site have 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.

Site Repository

East Brunswick Library, 2 Jean Walling Civic Center Drive, East Brunswick, NJ 08816

FRIEDMAN PROPERTY
NEW JERSEY
EPA ID# NJD980532832



EPA REGION 2
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: 12/30/82
Final Date: 09/08/83
Deleted Date: 03/30/86

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 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 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 and Energy (NJDEPE) performed the monitoring. The sampling results provided to the EPA showed that groundwater continues to be safe. The EPA recommended that the State request local authorities to place deed restrictions on future uses of the property. This request is under discussion by the State.

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 NJDEPE 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 in 1986.

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.

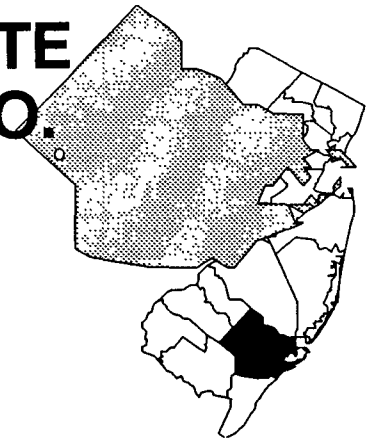
Site Repository

Information is no longer available.

GARDEN STATE CLEANERS CO.

NEW JERSEY

EPA ID# NJD053280160



EPA REGION 2

Atlantic County
Minotola

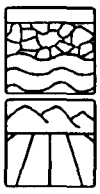
Site Description

Garden State Cleaners Co. (GSC) 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 GSC in 1984, the New Jersey Department of Environmental Protection and Energy (NJDEPE) 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 located adjacent to and downgradient of GSC and South Jersey Clothing Company 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 6,000 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: 03/31/89

Threats and Contaminants



The groundwater and soil are contaminated with VOCs, including primarily PCE and TCE. Use of contaminated groundwater for domestic purposes and agricultural irrigation may pose a health threat as a result of drinking or touching 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: In 1991, the EPA chose a remedy for the site which entails in-situ treatment of contaminated soil using a vapor extraction process, extraction of VOC-contaminated groundwater, and treatment of the contaminated groundwater using air stripping and carbon adsorption technologies, reinjection of the treated water into the aquifer, and long-term monitoring. The design of these actions is underway and cleanup is expected to begin in late 1994.

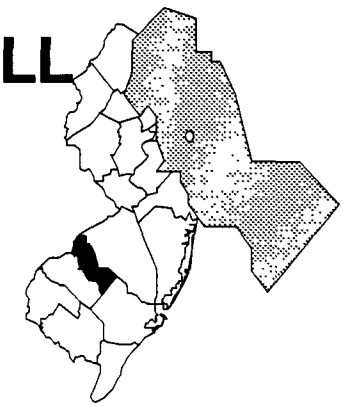
Environmental Progress

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 Co. site while design of the final cleanup remedies is taking place.

Site Repository

Buena Borough Municipal Building, 616 Central Avenue, Minotola, NJ 08341

GEMS LANDFILL
NEW JERSEY
EPA ID# NJD980529192



EPA REGION 2
Camden County
Gloucester Township

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

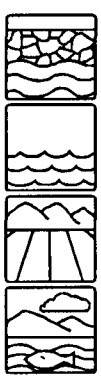
Site Description

The approximately 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 wetland areas near the site.

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

NPL LISTING HISTORY
Proposed Date: 07/23/82
Final Date: 09/08/83

Threats and Contaminants



Groundwater, surface water, and sediments are contaminated with volatile organic compounds (VOCs) and heavy metals including arsenic, barium, and lead. VOCs and heavy metals also have been detected in off-site surface soils. Leachate from the site contains VOCs, heavy metals, and trace amounts of pesticides including DDE, DDD, and DDT. This leachate is migrating into, and constitutes a significant percent of, the flow of the nearby Holly Run. Individuals may be at risk by inhaling site contaminants, or touching or ingesting contaminated groundwater, surface water, or soil.

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: constructing a landfill cap and regrading existing landfill side slopes; installing an active gas collection and treatment system, a groundwater/leachate treatment system, and surface water controls; implementing a monitoring program; and 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; completion of the first phase of the cleanup, installation of the gas collection and treatment system, is scheduled for mid-1992. The engineering designs for the groundwater/leachate treatment system are underway and construction is expected to begin in 1993.

Site Facts: In 1981, a suit was instituted by the State to compel compliance with operation and closure regulations. Complex litigation involved the Township, the New Jersey Department of Environmental Protection and Energy (NJDEPE), 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, NJDEPE 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 this directive and an Administrative Order issued simultaneously by the EPA, the potentially responsible parties have undertaken the first phase of cleanup activities.

Environmental Progress

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

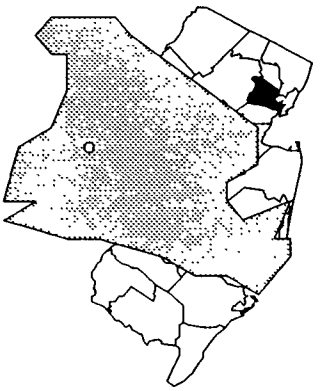
Site Repository

Gloucester Township Library, 1650 Blackwood/Clementon Road, Blackwood, NJ 08012

GLEN RIDGE RADIUM SITE

NEW JERSEY

EPA ID# NJD980785646



EPA REGION 2

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. The cleanup plan addresses 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 288,500 live within 3 miles.

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

NPL LISTING HISTORY
Proposed Date: 10/15/84
Final Date: 02/14/85

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.

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: 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; installing and maintaining indoor engineering controls at less contaminated properties; monitoring the site to ensure the effectiveness of the remedy; and 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. The engineering designs have been completed for the majority of extensively contaminated properties. Cleanup has been completed on several homes at the Montclair/West Orange site.

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 1993.

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. Cleanup work is scheduled to begin in late 1992.

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

Environmental Progress

By providing air treatment systems to reduce excessive levels of radon and lead shielding to protect affected residents from exposure to high levels of gamma radiation, the EPA has reduced the potential for exposure to radioactive substances at the Glen Ridge Radium Site while further studies and cleanup activities are taking place.

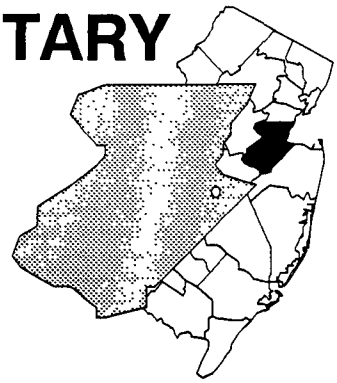
Site Repository

Glen Ridge Public Library, 240 Ridgewood Avenue, Glen Ridge, NJ 07028

GLOBAL SANITARY LANDFILL

NEW JERSEY

EPA ID# NJD063160667



EPA REGION 2
Middlesex County
Old Bridge Township

Site Description

The 60-acre Global Sanitary Landfill site was licensed by the New Jersey Department of Environmental Protection and Energy (NJDEPE) 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. Allegations that drums containing paint thinner and various solvents were buried in the landfill from 1968 to 1977 were confirmed in 1988. 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: 03/31/89

Threats and Contaminants

An aquifer underneath the site is contaminated; however, the extent 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 wetlands and wildlife inhabiting the wetlands area. People may be at risk from accidental ingestion of contaminated groundwater.

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 1991, NJDEPE completed a study of the various methods for closing the landfill. Based on this study, the EPA selected a multi-layer, hazardous waste cap and leachate collection system as the remedy. Design of this remedy is scheduled to begin in late 1992.

Groundwater, Surface Water, and Surrounding Wetlands: In 1990, the State began investigations into the extent of the contamination in the Cheesquake Creek Tidal Marsh and the related aquifer. Once the investigations are completed, scheduled for 1994, final cleanup technologies will be selected.

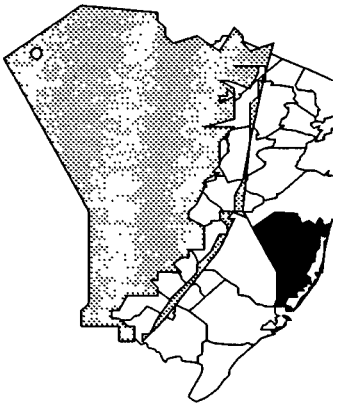
Environmental Progress

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

Site Repository

Sayreville Public Library, 1050 Washington Road, Parlin, NJ 08859v

GOOSE FARM
NEW JERSEY
EPA ID# NJD980530109



EPA REGION 2
Ocean County
Plumsted Township

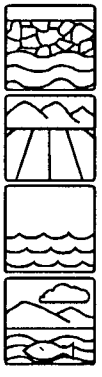
Site Description

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 and Energy (NJDEPE) found that a contaminant plume that originated in the waste pit area had migrated north in the groundwater toward a nearby stream. Soil also was found to contain volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and polychlorinated biphenyls (PCBs). This site is within 2 miles of three other NPL sites: Hopkins Farm, 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: 10/23/81
Final Date: 09/08/83

Threats and Contaminants



Groundwater is contaminated with VOCs and SVOCs. Soils heavily contaminated with VOCs, PCBs, phenols, arsenic, and zinc were excavated from the waste pit; however, residual contamination remains. Surface soils are now clean. The unnamed stream that flows into Lahaway Creek is contaminated with methylene chloride, benzene, and toluene. Leachate from the waste 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 eaten. The surface water is used for recreational purposes and may be harmful if accidentally swallowed. Wildlife in the area may be affected by the pollutants. People who touch or ingest the contaminated groundwater 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 heavily 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. The selected remedy includes: recovery and treatment of contaminated groundwater, soil flushing with the treated groundwater, evaluation of the need to cap the site, and additional testing of soils for PCB contamination. 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 1992, 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 with the EPA, NJDEPE, and the U.S. Department of Justice.

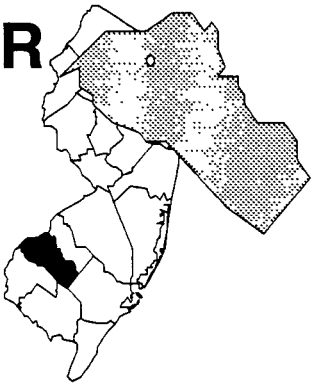
Environmental Progress

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.

Site Repository

Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753

HELEN KRAMER LANDFILL
NEW JERSEY
EPA ID# NJD980505366



EPA REGION 2
Gloucester County
Mantua Township

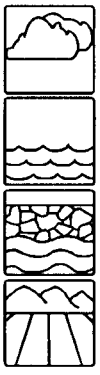
Site Description

The Helen Kramer Landfill site encompasses a 66-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 landfill ceased operations in 1981 through a court-ordered closure. 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: 07/23/82
Final Date: 09/08/83

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 chance 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: constructing a trench to collect the leachate seeps from the landfill; collecting and treating the groundwater and leachate from the trench; covering the landfill with a multi-layer cap to prevent rain water from spreading the buried contaminants and to limit escaping gas vapors; constructing a slurry wall encompassing the landfill to prevent groundwater from moving into the contaminated area; installing a gas collection and treatment system; constructing a fence around the site; draining, excavating, and filling the leachate ponds and lagoons; controlling surface water movement on the site; and monitoring the site to ensure the cleanup measures are effective. Cleanup work began in early 1992. The cleanup of the lagoons, construction of both the leachate treatment facility and the gas treatment facility, installation of a fence around the site, and the implementation of surface water controls have been completed. The construction of the landfill cap, the slurry wall and the leachate collection trench is scheduled for completion in late 1992.

Environmental Progress

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

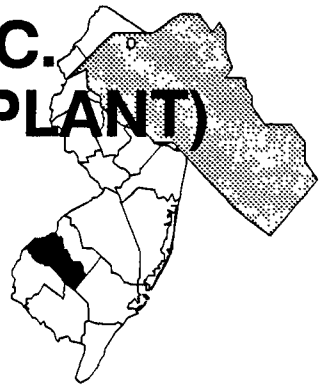
Site Repository

Gloucester County Library, Main Library, 200 Holly Dell Drive, Sewell, NJ 08080

HERCULES, INC. (GIBBSTOWN PLANT)

NEW JERSEY

EPA ID# NJD002349058



EPA REGION 2

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 on site was used by Hercules from 1952 to 1974, and by DuPont prior to 1952. 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 beneath 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: 12/30/82
Final Date: 09/08/83

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 touch 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 and three additional monitoring wells will be constructed as part of this investigation. Once the investigation is completed, scheduled for 1993, 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 process plant area. Once the investigation is completed, scheduled for 1994, measures will be recommended for cleanup of the process plant area.

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

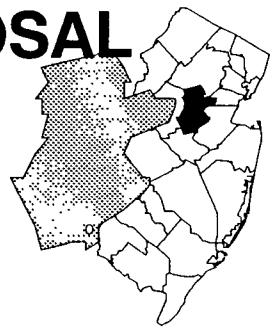
Environmental Progress

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

Site Repository

Greenwich Township Municipal Building, Broad and Walnut Streets, Gibbstown, NJ 08027

HIGGINS DISPOSAL
NEW JERSEY
EPA ID# NJD053102232



EPA REGION 2
Somerset County
North of Kingston

Other Names:
Laurel Avenue

Site Description

The 38-acre Higgins Disposal site is located in a rural area on Laurel Avenue in Franklin Township, New Jersey. From the 1950s to 1986, the site owner operated a waste disposal business at the site utilizing an unpermitted landfill, waste transfer station, and compactor. This same owner currently maintains his residence on the site as well as an equestrian facility and a truck repair shop. In 1982, the New Jersey Department of Environmental Protection and Energy (NJDEPE) ordered the owner to cease acceptance and disposal of solid waste and to remove the waste already at the site. In 1985, the Franklin Township Health Department and the NJDEPE discovered volatile organic compounds (VOCs) in groundwater samples from nine homeowner wells on Laurel Avenue. The site, possibly located hydraulically upgradient of the homes, was cited as one of several potential sources of groundwater contamination. As a result of the contaminants found in the homeowner wells, the Laurel Avenue residences were designated an Interim Well Restriction Area by the NJDEPE. The NJDEPE sent a directive to the site owner in 1987 to restrict site access, to apply for an official groundwater permit from New Jersey that would require discharges to groundwater to meet safety standards, and to start an interim groundwater monitoring program. Through this groundwater monitoring program, on-site groundwater contamination was discovered. Within a 3 mile radius of the site, approximately 10,643 people rely on groundwater for their drinking water source. Two farms within a 3-mile radius of the site grow food for human consumption. Neither of these farms use groundwater for irrigation. The farms use water from ponds and a stream located more than 3 miles from the site. A freshwater wetland is located 300 feet from the site. Two on-site ponds discharge into Dirty Brook, which is a tributary of the Delaware/Raritan Canal and the Millstone River. Located approximately 1500 feet west of the site, both ponds flow north, eventually discharging into the Raritan Bay. Within 3 miles downstream from the site, the Delaware/Raritan Canal is used for fishing, boating, and swimming. 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. In addition, soil and sediment sampling by the EPA in 1990 and 1991 revealed the presence of polychlorinated biphenyls (PCBs) in one area of the site. Because the Delaware/Raritan Canal is used for recreation, individuals who touch or accidentally ingest the water may be at risk. In addition, fish from the canal may be harmful to public health if eaten. The soil on the site is permeable, which makes it easy for contaminants to migrate. Coming in 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 long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Initial Action: As a result of the detection of VOCs, use of wells that contain pollutants have been restricted. Due to the elevated levels of PCBs in one area of the site, the EPA plans to remove the contaminated soil in 1992.

Entire Site: The EPA will investigate the site to determine the nature and extent of contamination at the site. Work plans for this site study are under review by the EPA. Field work is expected to begin in 1992. The results of these studies will be the basis for recommending measures to clean up the site. These recommendations are expected in 1993.

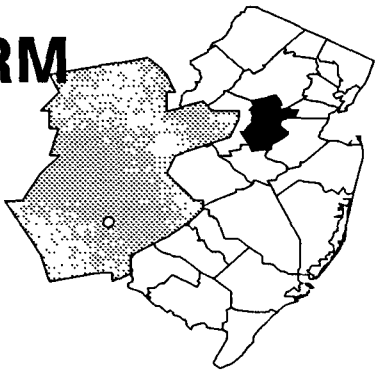
Environmental Progress

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

Site Repository

Not established.

HIGGINS FARM
NEW JERSEY
EPA ID# NJD981490261



EPA REGION 2
Somerset County
Franklin Township

Other Names:
Route 518

Site Description

The 74-acre Higgins Farm site consists of a former drum burial dump, located in the northern part of the site, and a second area nearby where drums were uncovered during recent field work. The dump once contained 50 drums. The New Jersey Department of Environmental Protection and Energy (NJDEPE) discovered the dump site in 1985 while conducting an investigation after the Franklin Township Health Department reported chlorobenzene in a nearby private well. The NJDEPE informed the farm's owner of State requirements relating to the excavation of buried drums, which were subsequently removed in 1986. Before being halted by the NJDEPE 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 NJDEPE 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: 03/31/89

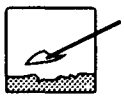
Threats and Contaminants

Groundwater in private wells is contaminated with VOCs, while on-site soils are contaminated with VOCs, pesticides, and dioxins. Possible health threats include being exposed to contaminants through 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, 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 brook lies downslope of the site, it is possible that site-related contaminants could migrate into the water. Local residents use the Millstone River and the Delaware/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 NJDEPE installed carbon filter units on the wells of the affected residents' homes in 1989. At that time, the EPA discontinued bottled water delivery. At the NJDEPE's request, the EPA currently maintains 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: a shed was constructed to house material that may be contaminated, including overpacked drums and roll-off containers; the excavation pit was drained, lined, and backfilled; the pumped liquids were treated and stored in a holding tank; and 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: conducting a survey to determine the rock formations that exist under the site and to locate any drums that may be buried on site; conducting a soil gas survey to outline areas of potential contamination; installing monitoring wells to collect samples for chemical analysis; and installing soil borings, a technique to analyze soil contamination. The field work was completed in 1991. The EPA is currently evaluating the results of the investigation. Once completed, the EPA will select a final remedy for the site cleanup.

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, connection to the existing water supply system, and operation and maintenance of existing carbon adsorption units. The design of the waterline is nearly completed and the construction is 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.

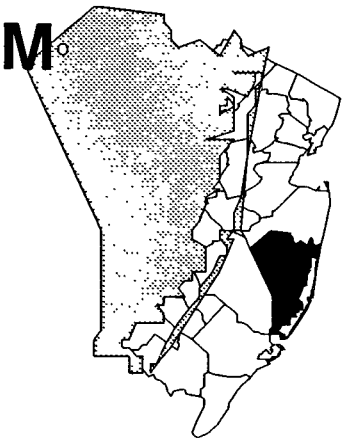
Environmental Progress

By providing a temporary water supply until a permanent alternative water source is connected to residences, the EPA and the State have 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 remedies are being completed.

Site Repository

Franklin Township Public Library, 485 DeMott Lane, Somerset, NJ 08872

HOPKINS FARM
NEW JERSEY
EPA ID# NJD980532840



EPA REGION 2
Ocean County
Plumsted Township

Other Names:
Thiokol Chemical Corporation

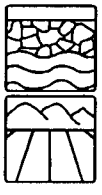
Site Description

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: 09/08/83
Final Date: 09/21/84

Threats and Contaminants



VOCs have been detected in site soils and groundwater underlying the area. The soil also is contaminated with VOCs and the heavy metal antimony. The contaminated groundwater and soil could adversely affect the health of individuals if accidentally touched or swallowed; however, no contamination of drinking water wells has been detected.

Cleanup Approach

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

Response Action Status

Entire Site: In 1987, the New Jersey Department of Environmental Protection and Energy (NJDEPE) started an investigation to determine the nature and extent of the contamination at the site. The investigation is scheduled to be completed in 1992. In addition, the party that is potentially responsible for the site contamination will perform an interim cleanup action during 1992, which will address surface wastes at the site. Once the studies and interim cleanup action are completed, the EPA will determine if additional cleanup remedies are necessary.

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 the selection of final cleanup activities are taking place.

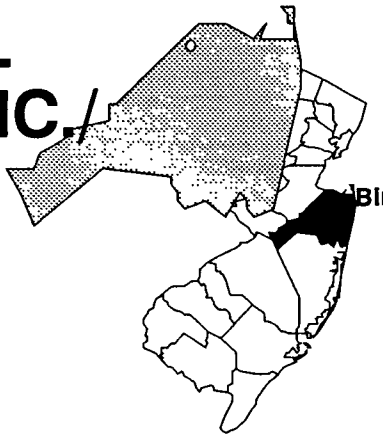
Site Repository

Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753

IMPERIAL OIL COMPANY, INC./ CHAMPION CHEMICALS

NEW JERSEY

EPA ID# NJD980654099



EPA REGION 2

Monmouth County
Morganville

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

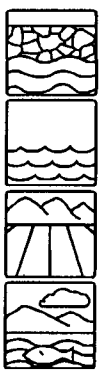
Site Description

The 14-acre Imperial Oil Co., Inc./Champion Chemicals site consists of seven production, storage, and maintenance buildings and 56 aboveground storage tanks. Imperial Oil Co., Inc. 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: 12/30/82
Final Date: 09/08/83

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 with, 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 may be contaminated. Wetlands areas also may be threatened.

Cleanup Approach

This site is being addressed in three stages: an immediate action and two long-term remedial phases focusing on cleanup of off-site contamination and on-site contamination.

Response Action Status

Initial Actions: In 1991, the EPA excavated and disposed of an on-site waste filter clay pile. The waste filter clay pile was contaminated with VOCs, PCBs, metals, and petroleum hydrocarbons. Currently, the EPA is designing a system to remove an oily layer or "floating products" from the surface of the groundwater beneath the site.

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 wetland cleanup and restoration is currently underway. In 1991, the fence was installed around the off-site contaminated areas.

On-Site Contamination: The New Jersey Department of Environmental Protection and Energy 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. The EPA is currently reviewing the results of the groundwater portion of the investigation. The evaluation is expected to be completed in 1992, at which time the EPA will select a final cleanup remedy to address on-site groundwater contamination.

Environmental Progress

The excavation and disposal of an on-site waste filter clay pile have reduced the threat of exposure to contaminants from the Imperial Oil Company, Inc./Champion Chemicals site while further studies are completed and cleanup activities are being planned.

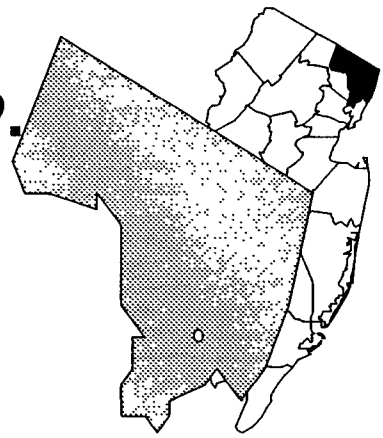
Site Repository

Marlboro Township Hall, 1979 Township Drive, Marlboro, NJ 07746

INDUSTRIAL LATEX CORP.

NEW JERSEY

EPA ID# NJD981178411



EPA REGION 2
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 actions.

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 03/31/89

Threats and Contaminants

Soil is contaminated with PCBs, and volatile organic compounds (VOCs) including toluene, xylene, ethyl benzene, and benzene. Possible health risks include accidentally ingesting 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: 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. The EPA 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 includes sampling and conducting treatability studies to determine the most appropriate methods to clean up the site. This study is scheduled to be completed in 1992.

Environmental Progress

The removal of drums, tanks, and liquids, the decontamination and treatment of various waste, and the repairing of the fence have reduced the potential for exposure to contaminants around the Industrial Latex Corp. site while further investigations leading to the selection of final cleanup remedies are being conducted.

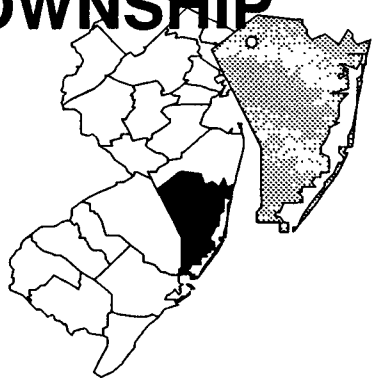
Site Repository

John F. Kennedy Memorial Library, 92 Hathaway Street, Wallington, NJ 07057

JACKSON TOWNSHIP LANDFILL

NEW JERSEY

EPA ID# NJD980505283



EPA REGION 2

Ocean County
Jackson Township

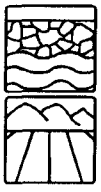
Site Description

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 septic 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: 12/30/82
Final Date: 09/08/83

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 in the groundwater and soil. All the nearby residences rely on a municipal well for their water supply. 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, individuals may come into direct contact with or ingest contaminated dust or soil at or near the landfill, which may pose a potential health threat.

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: In 1980, the State provided an alternate water supply for residences relying on 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 permanent cleanup of site contamination.

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

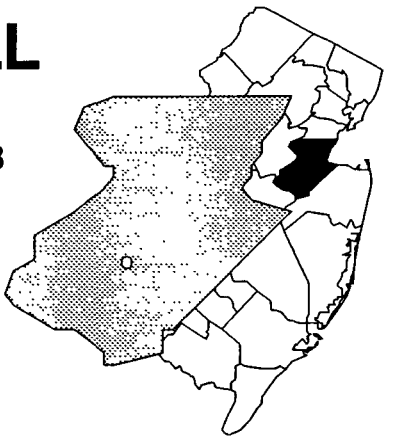
Environmental Progress

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 that will identify appropriate cleanup remedies.

Site Repository

Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753

JIS LANDFILL
NEW JERSEY
EPA ID# NJD097400998



EPA REGION 2
Middlesex County
South Brunswick

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

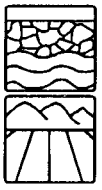
Site Description

The 11-acre Jones Industrial Services (JIS) Landfill site began operations within a former borrow pit in 1955. Excavated material from the borrow pit provided soil needed for the construction of the New Jersey Turnpike. In 1974, a total of 7,677 tons of solid waste and over 86,000 gallons of liquids, consisting largely of waste oil, were disposed of at the landfill. 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 and Energy (NJDEPE). 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, the NJDEPE ordered JIS and other potentially responsible parties to fund the site investigation. Private wells from nine properties were found to be contaminated. The EPA is providing bottled water to the residents of the affected properties. Approximately 32,000 people are located within 3 miles of the site and depend on groundwater for domestic uses.

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

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

Threats and Contaminants



The groundwater is contaminated with heavy metals such as chromium, nickel, and cadmium, and volatile organic compounds (VOCs) including vinyl chloride, methylene chloride, acetone, trichloroethane, and benzene. VOCs and other organic compounds were detected in the soil. Two interconnected aquifers, the Farrington Sand and the Old Bridge, underlie the site. People may be at risk from the accidental ingestion of contaminated groundwater.

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 contamination. Private water supplies were sampled and found to be contaminated with VOCs at eight residences and one business. The EPA provided bottled water to the business and residents of the affected homes. The Monroe Utilities Authority installed water mains to supply potable water, and the EPA provided hookups at five properties having contaminated wells. A water main extension providing potable water to the remaining four homes should be completed by mid-1992.

Entire Site: The State began an investigation of the site in 1986 to determine the full 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 final cleanup remedies will follow.

Site Facts: Twelve potentially responsible parties signed an Administrative Order agreeing to pay for the full cost of the State's investigation. Eleven additional potentially responsible parties have been identified and have agreed to contribute to the cost of the EPA site studies.

Environmental Progress

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

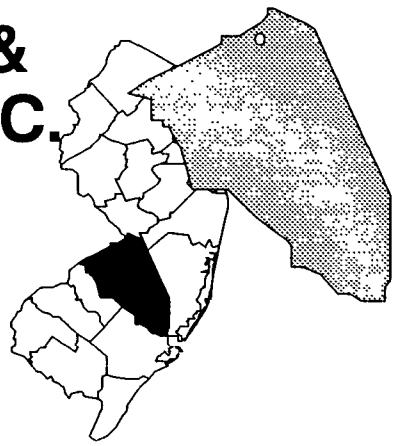
Site Repository

South Brunswick Public Library, 110 Kingston Lane, Monmouth Junction, NJ 08852

KAUFFMAN & MINTEER, INC.

NEW JERSEY

EPA ID# NJD002493054



EPA REGION 2

Burlington County
Jobstown

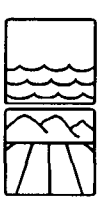
Site Description

Company-owned tanker trucks transport bulk liquids, including synthetic organics, plastics, resins, vegetable oils, petroleum oils, and alcohols, from the 5-acre Kauffman & Minteer, 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. In 1990, the company negotiated an agreement with the EPA to sample and dispose of all wastewater in the lagoon and fence the area. However, the company did not comply with the agreement, which prompted the EPA to fence and drain the lagoon in 1991. 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 600 people. 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: 03/31/89

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, as yet, to have contaminated the groundwater that nearby residents use for drinking, washing, and irrigating crops. People may be at risk from direct contact with contaminated lagoon material.

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 1991, the EPA 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 early 1993, at which time a cleanup remedy will be selected.

Site Facts: In 1983, the New Jersey Department of Environmental Protection and Energy (NJDEPE) cited the company for operating the lagoon without the proper permits. The EPA negotiated an Administrative Order on Consent that required the company to fence the site, maintain adequate freeboard in the lagoon, install a berm around the lagoon, and conduct sampling activities. The company's delinquency in performing these activities prompted the EPA to perform these protective measures in mid-1991.

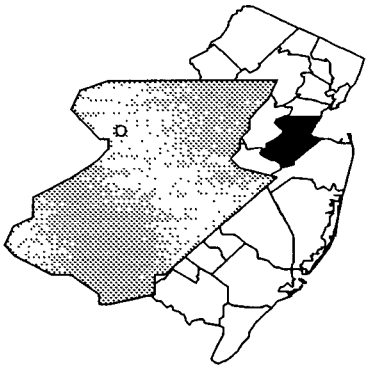
Environmental Progress

The EPA fenced the site, constructed a berm around the lagoon, and drained the wastewater lagoon. These actions have reduced threats to the public health and the environment while further studies are being completed and cleanup activities are being planned at the Kauffman & Minteer, Inc. site.

Site Repository

Springfield Township Municipal Building, Jobstown Road, Jacksonville, NJ 08041

KIN-BUC LANDFILL
NEW JERSEY
EPA ID# NJD049860836



EPA REGION 2
Middlesex County
Edison Township

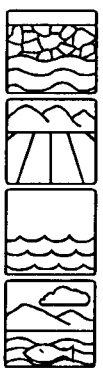
Site Description

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, until the State revoked its permit in 1976 because of several environmental violations. 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 come 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: 10/23/81
Final Date: 09/08/83

Threats and Contaminants



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. Eating 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 immediate 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 1991, 3,123,755 gallons of aqueous phase leachate were shipped off site for treatment and disposal. As of 1991, 30,400 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 in 1988 to address these areas include: installation of a slurry wall on all sides of the site; collection and off-site incineration of oily phase leachate; collection and on-site treatment of aqueous phase leachate and contaminated groundwater with direct surface water discharge; maintenance and upgrading, if necessary, of the existing cap on Kin-Buc I; 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 the Pool C area; long-term periodic monitoring; and 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, scheduled in early 1993.

Mound B and Adjacent Waterways, Wetlands, and Groundwater: The potentially responsible parties, under EPA monitoring, have completed the investigation into the nature and extent of contamination of the wetlands, surface water, and groundwater at and adjacent to the site. The investigation identified VOC contamination in the groundwater, as well as elevated levels of PCBs and metals in sediments and local wildlife. The potentially responsible parties are currently developing and evaluating alternative cleanup options for these areas of the site. Once completed, expected in late 1992, the EPA will evaluate the study findings and select a final cleanup remedy.

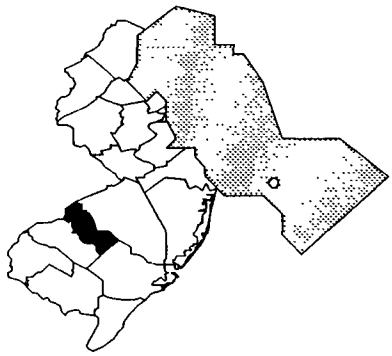
Environmental Progress

The numerous immediate cleanup actions to remove leachate and contaminated solids have reduced the potential for exposure to hazardous substances at the Kin-Buc Landfill site while design of the selected cleanup technologies for the mounds and Pool C is being conducted and cleanup activities are being planned for the remaining areas of the site.

Site Repository

Edison Township Library, 340 Plainfield Avenue, Edison, NJ 08817

KING OF PRUSSIA
NEW JERSEY
EPA ID# NJD980505341



EPA REGION 2
Camden County
New Jersey Pine Barrens

Other Names:
King of Prussia Technical Corporation Disposal

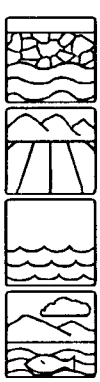
Site Description

The 10-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: 12/30/82
Final Date: 09/01/83

Threats and Contaminants



Groundwater is contaminated with heavy metals including beryllium, chromium, copper, and nickel. Groundwater also contains phthalates, a plastic derivative, and various volatile organic compounds (VOCs). Lagoon sludges are contaminated with various heavy metals. 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 of 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 was completed in late-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 and Energy 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. The design of the selected remedy, which includes additional sampling of contaminated areas, began in 1991.

Site Facts: From 1981 to 1992, the EPA sent out 63 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 potentially responsible for contaminating the site. In 1991, the EPA issued an order to five potentially responsible parties to design and conduct cleanup activities at the site.

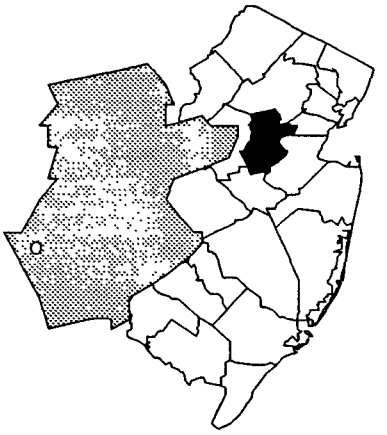
Environmental Progress

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

Site Repository

Camden City Library, 418 Federal Street, Camden, NJ 08101

KRYSOWATY FARM
NEW JERSEY
EPA ID# NJD980529838



EPA REGION 2
Somerset County
Hillsborough Township

Other Names:
Three Bridges Drum Dump

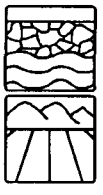
Site Description

The 1-acre Krysowaty 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 and Energy (NJDEPE) 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: 09/08/83
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 Krysowaty Farm, the site no longer poses a threat 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: excavating soil and wastes and disposing of them in an approved facility; providing a permanent alternate water supply to the residents affected by contaminated well water; and monitoring the site for five years to ensure the actions taken had 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 at 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 monitored the groundwater for five years to ensure the cleanup activities have been effective. This monitoring program was successfully completed in 1992.

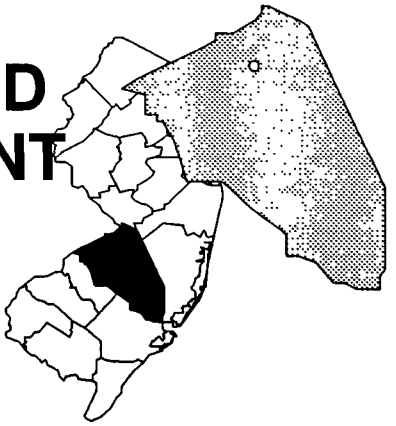
Environmental Progress

All cleanup activities have been completed at the Krysowaty Farm site. The provision of a permanent alternate water supply has eliminated the threat to public health posed by contaminated groundwater. The EPA has determined that surface contamination has been cleaned to Federal standards and that no further cleanup actions are required at the site. The site is now safe for nearby residents and the environment, and has been deleted from the NPL.

Site Repository

Information is no longer available.

LANDFILL AND DEVELOPMENT COMPANY
NEW JERSEY
EPA ID# NJD048044325



EPA REGION 2
Burlington County
Mt. Holly, Easthampton, and Lumberton Townships

Other Names:
SCA Services
Mt. Holly Landfill

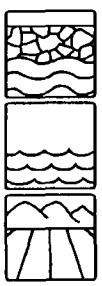
Site Description

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: 09/08/83
Final Date: 09/21/84

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 that pollutants may migrate to them. Rancocas Creek and Smithville Canal are used for recreational activities. Seeps from the landfill have polluted these waters. People may be at risk from direct contact with contaminated sediments or accidental ingestion of contaminated groundwater or sediments.

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 company, under supervision of the New Jersey Department of Environmental Protection and Energy (NJDEPE), connected residences to public water supplies and installed a liner at the landfill to prevent further migration of contaminants.

Entire Site: The company is conducting an investigation under the supervision of the NJDEPE to determine the extent of groundwater, soil, and surface water contamination at the landfill. Once the investigation is completed, scheduled for early 1994, final cleanup measures will be recommended for the site.

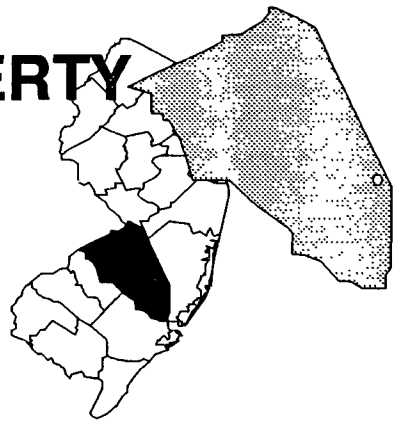
Environmental Progress

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

Site Repository

Burlington County Library, Main Library, West Woodlane Road, Mount Holly, NJ 08060

LANG PROPERTY
NEW JERSEY
EPA ID# NJD980505382



EPA REGION 2
Burlington County
Pemberton Township

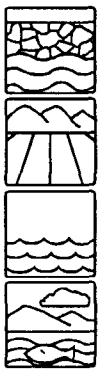
Site Description

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: 12/30/82
Final Date: 09/08/83

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 touch or drink contaminated groundwater from wells may be at risk. People who enter the site and touch 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 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: excavating contaminated soil and material and disposing of it in a federally approved facility; extracting and treating the contaminated groundwater and then reinjecting the treated water into the aquifer; filling and grading the excavated area; installing a security fence; and 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. Construction and implementation of the groundwater pump and treat system is expected to begin in 1992, upon completion of some further study of the leachability of contaminants into the groundwater.

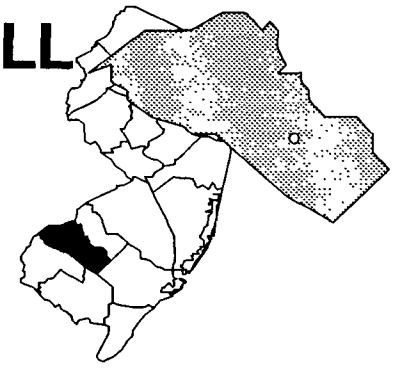
Environmental Progress

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

Site Repository

Community Library, 348 Lakehurst Road, Brownsmill, NJ 08015

LIPARI LANDFILL
NEW JERSEY
EPA ID# NJD980505416



EPA REGION 2
Gloucester County
Mantua Township

Other Names:
Lipari Landfill Nick

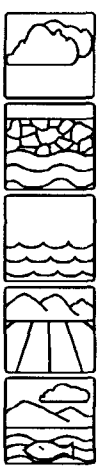
Site Description

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 and Energy, 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: 10/23/81
Final Date: 09/08/83

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 touch or drink the contaminated groundwater may suffer adverse health effects. Although Alcyon Lake has been closed because of contamination, people who trespass, swim, or consume fish taken from the lake 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. A landfill containment system consisting of a cut-off wall around the area was constructed to divert surface water runoff and the landfill was covered 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: installing extraction and injection wells in the landfill containment system to flush the system and pump the contaminated groundwater and leachate; treating the pumped water on site and then discharging it to a trunkline; installing monitoring wells downhill from the site; and continuing groundwater treatment to meet applicable safety standards. The EPA installed the landfill injection and extraction wells and completed construction of the treatment plant in early 1992. Shakedown operations of the wells and treatment plant are underway. Once the plant is fully operational, the groundwater will be flushed to remove contaminants for a period of approximately 7 years.

Off-Site Contamination: In 1988, the EPA selected a remedy to clean up the off-site contamination including: collecting the groundwater and leachate in the aquifers outside the containment system, treating them, and discharging the treated water into the county sewer lines; excavating and dewatering the contaminated soils in Chestnut Branch Marsh, dredging and dewatering the contaminated sediments in Alcyon Lake, Chestnut Branch, and Rabbit Run, and removing the pollutants by heating the soil and sediment; instituting temporary measures, if necessary, to reduce vapors from the leachate seepage areas in Chestnut Branch Marsh; and monitoring the off-site areas to ensure that the on-site cleanup is effective. The EPA currently is designing the technical specifications to clean up the marsh, aquifers, streams, and lake. The cleanup activities are expected to begin in 1993, once the design phase is completed.

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

Environmental Progress

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

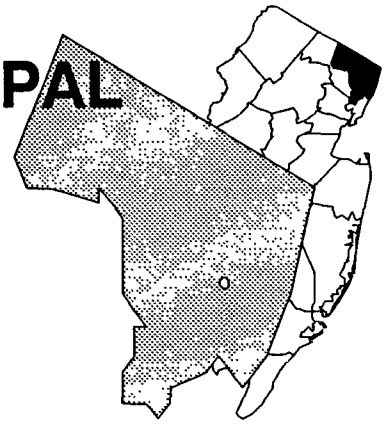
Site Repository

McCowan Library, 15 Pitman Avenue, Pitman, NJ 08071

LODI MUNICIPAL WELL

NEW JERSEY

EPA ID# NJD980769301



EPA REGION 2
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 and Energy (NJDEPE). 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 percent 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 though 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: 10/15/84
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 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 NJDEPE and the Lodi Water Department. Additionally, alternate water supplies were provided to affected residents.

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 is being done to determine if radionuclide contamination is the result of natural or man-made sources. The sampling began in mid-1991. The investigation is scheduled for completion in 1992. After review, various alternatives will be evaluated for site cleanup.

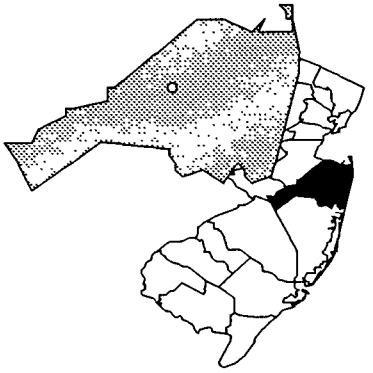
Environmental Progress

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

Site Repository

Lodi Memorial Library, 1 Memorial Drive, Lodi, NJ 07644

LONE PINE LANDFILL
NEW JERSEY
EPA ID# NJD980505424



EPA REGION 2
Monmouth County
Freehold

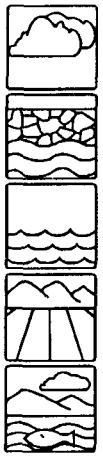
Site Description

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 and Energy. 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: 10/23/81
Final Date: 09/08/83

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 touch 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 eat any game caught in the area.

Cleanup Approach

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

Response Action Status

On-site Landfill/Groundwater 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 on-site collected groundwater and then discharging the treated water into a sewer line for further treatment at the Ocean County Utilities Authority; and monitoring the site to ensure the cleanup has been effective. The potentially responsible parties began cleanup activities in mid-1991 and are scheduled to complete the work in 1994.

Groundwater and Off-Site Contamination: One of 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, on-site treatment of the contaminated groundwater, discharge of the treated groundwater into a sewer line for further treatment at the Ocean County Utilities Authority, and the installation of a 2,800-foot interceptor drain to prevent contamination of the Manasquan River. The potentially responsible parties have been collecting field data in preparation for the start of the remedy design. Additional data may need to be collected. The design phase is expected to begin soon and is scheduled to be completed in 1993, at which time final cleanup actions will begin.

Site Facts: Under a Consent Decree in March 1990, the parties potentially responsible for contamination at the site will perform landfill cleanup activities. Under a second Consent Decree entered into in January 1992, the potentially responsible parties will design the groundwater treatment technologies.

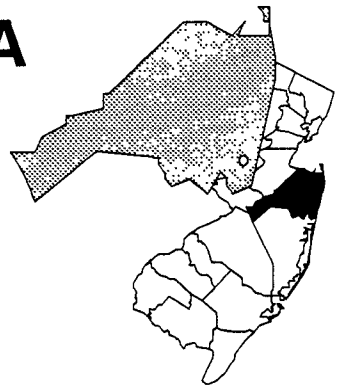
Environmental Progress

Construction activities addressing the landfill cleanup are underway. Based on field data that were collected in late 1991, the potentially responsible parties are expected to begin the engineering design of the remedy that will address groundwater cleanup.

Site Repository

Monmouth County Public Library, 25 Breod Street, Freehold, NJ 07728

M & T DELISA LANDFILL
NEW JERSEY
EPA ID# NJD085632164



EPA REGION 2
Monmouth County
Asbury Park

Other Names:
Seaview Square Mall

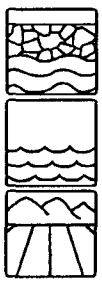
Site Description

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: 03/21/91

Threats and Contaminants



Sampling at the site showed that groundwater contained low levels of heavy metals such as arsenic, chromium, and lead and methylene chloride. Sediments contained low concentrations of 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.

Cleanup Approach

Intensive investigations of site conditions showed that the site does not pose a threat to people or the environment.

Response Action Status

Entire Site: The owner of the site, under EPA monitoring, conducted a study to determine the nature and 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 through monitoring by the State under its solid waste disposal regulations. These actions are pending.

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

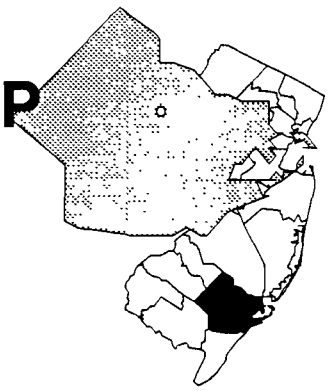
Environmental Progress

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 monitored under State waste disposal authorities.

Site Repository

Information is no longer available.

MANNHEIM AVENUE DUMP
NEW JERSEY
EPA ID# NJD980654180



EPA REGION 2
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: 12/30/82
Final Date: 09/08/83

Threats and Contaminants

The underlying aquifer contains the volatile organic compounds (VOCs) 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 and Energy (NJDEPE) action levels. There is a potential future risk of contaminants migrating in groundwater to residential wells. 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 remedy began in late 1991. Cleanup is scheduled to begin in early 1993. Since 1990, the EPA has been sampling nearby downgradient residential drinking water wells on a quarterly basis. Sampling to date has indicated that site-related contaminants have not migrated into the groundwater to threaten the residential wells.

Site Facts: The NJDEPE 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 activities.

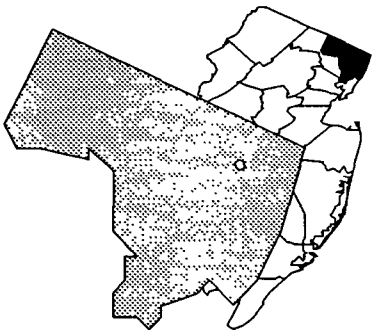
Environmental Progress

The removal of contaminated sludge and soil and the installation of a security fence have reduced the potential for exposure to hazardous materials at the Mannheim Ave. Dump site while a final groundwater remedy is being designed.

Site Repository

Galloway Township Public Library, 30 West Jim Leeds Road, Pomona, NJ 08240

MAYWOOD CHEMICAL COMPANY
NEW JERSEY
EPA ID# NJD980529762



EPA REGION 2
Bergen County
Maywood and Rochelle Park

Other Names:
Maywood Residences
Stepan Chemical

Site Description

The Maywood Chemical Company site consists of three connected areas: the Stepan Chemical Company property; the Sears and adjacent property; and the Maywood Interim Storage Site (MISS), owned by the U.S. Department of Energy (DOE). From 1916 to 1955, Maywood processed radioactive thorium ore to produce the mantles in gas lanterns and 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. Waste materials were also transported by surface water runoff and through poor waste management practices. The result was chemical and radioactive contamination over much of the local area. Maywood was bought by Stepan Chemical Company in 1959. Radiological contamination was accidentally discovered by an area resident in 1980 on property formerly owned by Stepan Chemical Company. Testing revealed extensive low-level contamination at several locations. The DOE owns 11 3/4 acres of land along the Stepan property on which it constructed the MISS. Contaminated soils that are removed from the various Maywood sites are stored there until a permanent storage facility is identified. The Sears, Roebuck and Co. leases 31 acres of property just south of the MISS and Stepan Chemical Company 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 properties have been certified for unrestricted use by DOE. 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 commercial, 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: 12/30/82
Final Date: 09/08/83

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. Radioactive pollutants are also present in the groundwater. 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 in contact with contaminated groundwater, inhaling contaminated dusts and volatile gases, or touching 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 cleanup of radiological contamination and cleanup of non-radiological contamination.

Response Action Status

Immediate Actions: 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, an area containing lagoons which received thorium processing wastes, and removed them to the MISS in 1985. Additional cleanup efforts took place through 1986 as other contaminated properties were identified.

Radiological Contamination: DOE is investigating the radiological contamination at the site. Field work has been completed; a draft report is expected to be submitted to the EPA in 1992. The investigation is determining the nature and extent of the contamination and will be the basis for recommending the final cleanup strategies at the MISS and all areas of the site where contamination is above the EPA/DOE action levels. A decision regarding the cleanup technologies is expected in late 1993.

Non-Radiological Chemical Contamination: In late 1991, the Stepan Chemical Company began an intensive study of non-radiological chemical contamination at the site. This investigation is exploring the nature and extent of contamination and will lead to the selection of final cleanup remedies in late 1993.

Site Facts: A Special Notice Letter for conducting a study of the site was issued to Stepan Chemical Company and all other owners of the contaminated property in 1987. After several negotiation meetings with the potentially responsible parties, Stepan Chemical Company presented a good faith offer to conduct the study. As a result of further negotiations, an Administrative Order on Consent was signed by Stepan Chemical Company and the EPA in 1987. A second Administrative Order on Consent was issued by the EPA and signed by both parties, requiring Stepan Chemical Company to conduct investigations at the Stepan Chemical Company property. As a result of an Interagency Agreement recently entered into by the EPA and DOE, the EPA is overseeing DOE investigations of radiological site contamination.

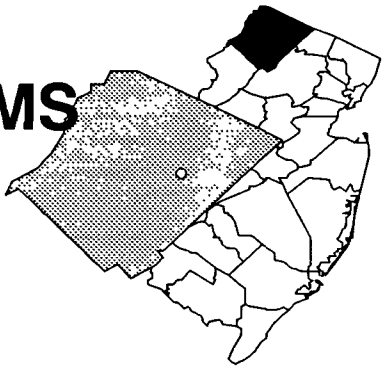
Environmental Progress

The removal of contaminated soil from residential areas has reduced the potential for exposure to radioactive materials at the Maywood Chemical Company site while investigations that will lead to selection of the final cleanup remedies are taking place.

Site Repository

Maywood Public Library, 459 Maywood Avenue, Maywood, NJ 07607

METALTEC/ AEROSYSTEMS
NEW JERSEY
EPA ID# NJD002517472



EPA REGION 2
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 and Energy (NJDEPE) 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. 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: 12/30/82
Final Date: 09/08/83

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: 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; 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; providing an alternate water supply for Franklin Borough to replace lost drinking water capacity; and 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 began with removal of the contaminated soils. The EPA excavated 5,000 cubic yards from Parcels 2, 3, and 4, 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. Excavation of the soil from Parcel 1 will begin in 1992. An alternate water supply pipeline providing water from two privately developed wells has been completed.

Groundwater: In 1990, the EPA proposed a plan for treating contaminated groundwater. 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 has been initiated and is scheduled to be completed in 1993.

Environmental Progress

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

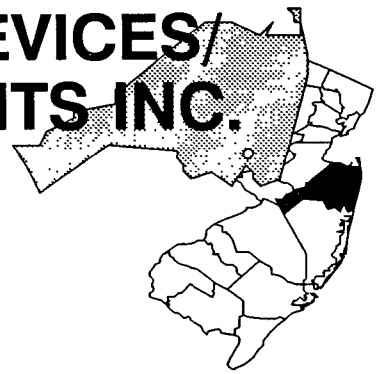
Site Repository

Sussex County Library, Dennis Memorial Branch Library, 101 Main Street,
Newton, NJ 07860

MONITOR DEVICES/ INTERCIRCUITS INC.

NEW JERSEY

EPA ID# NJD980529408



EPA REGION 2
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 leased the property from the site owner. Two structures stand on the property: the main building holding the business office and production lines, and a small storage shed. The process of discharging wastewater from operations involved the use of copper, tin, lead, nickel, and gold cyanide, and treatment with sulfuric acid, fluoboric acid, and acetone. Operators discharged process wastewater either into a small, unlined pond or directly on the ground at the rear of the building. 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 the company to sample groundwater and to clean up the site as necessary. The company moved out 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 has no warning signs. The site is surrounded by industrial and commercial areas located within a small airport; there are no residences within 1 mile. Two public water supply wells lie about 2 miles upgradient of the site, which supply drinking water to approximately 24,000 people. An industrial well is located downgradient of the site.

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

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

Threats and Contaminants

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

Cleanup Approach

This site is being addressed in a 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, which has been completed, involved investigation of soil, subsurface soil, and groundwater contamination. The second phase will fine-tune the findings from the first phase of the investigation by sampling several more wells to define the extent of the groundwater plume. The EPA is responsible for conducting the second phase of the investigation, scheduled to be completed in late 1993.

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 public health or the environment while further studies that will lead to the selection of final cleanup remedies are being completed.

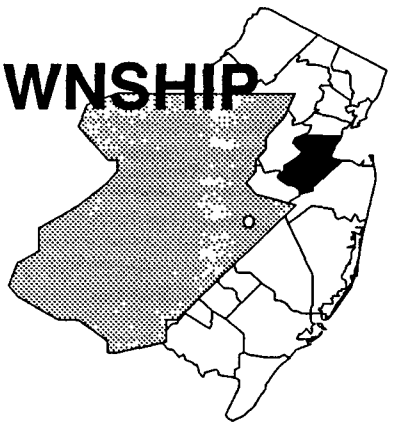
Site Repository

Wall Township Library, Old Mill Plaza, State Highway 35, Sea Girt, NJ 08750

MONROE TOWNSHIP LANDFILL

NEW JERSEY

EPA ID# NJD980505671



EPA REGION 2

Middlesex County
Monroe

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

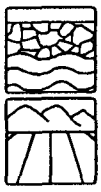
Site Description

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. (BFI) of South Jersey, Inc. in 1972. The New Jersey Department of Environmental Protection and Energy (NJDEPE) 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, State, and potentially responsible parties' actions.

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

Threats and Contaminants



Off-site groundwater is contaminated with phenols and VOCs. On-site leachate contains VOCs. Touching contaminated leachate and soil on site or drinking contaminated groundwater could 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: installing a leachate cut-off wall of varying depths around the landfill perimeter; building an underground leachate collection drain; temporarily discharging leachate into the sewer for treatment at the public wastewater treatment facility; installing a clay cover to reduce the spread of contaminants; and 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. In 1991, a fence was constructed to secure the site, the clay cover was repaired, and a leachate storage tank was built. All source control cleanup actions have been completed, and currently the site is being maintained to ensure the effectiveness of the remedy. Approximately 6,000 to 7,000 gallons of leachate are transported to the treatment plant each day.

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 1992, at which time a plan for site groundwater cleanup will be recommended.

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

Environmental Progress

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

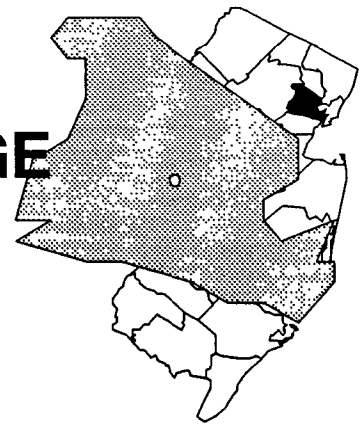
Site Repository

Jamesburg Public Library, 229 Gatzmer Road, Jamesburgh, NJ 08831

MONTCLAIR/ WEST ORANGE RADIUM SITE

NEW JERSEY

EPA ID# NJD980785653



EPA REGION 2
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: 10/15/84
Final Date: 02/14/85

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. Individuals who are exposed to the radium, radon, and radon decay products may be at risk. Accidental ingestion of soil may cause adverse health effects.

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 areas, 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 was provided in 12 homes. The radon systems were upgraded to higher efficiency units in 1990 and 1991.

Soil and Structures: In 1989, the EPA selected a remedy to address the most extensively contaminated properties. This remedy includes: 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; installing and maintaining indoor engineering controls at less contaminated properties; monitoring the site to ensure the remedy has been effective; and continuing alternative treatment remedies for future actions at the site. Cleanup designs have been completed for the majority of the remedies. Construction has been completed on five homes and is due to begin on several more in 1992.

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 late 1993, the EPA will recommend remedies for groundwater cleanup, as 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. Design of the cleanup remedies is underway at the remaining contaminated properties. Cleanup activities are expected to begin on several properties in 1992.

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 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.

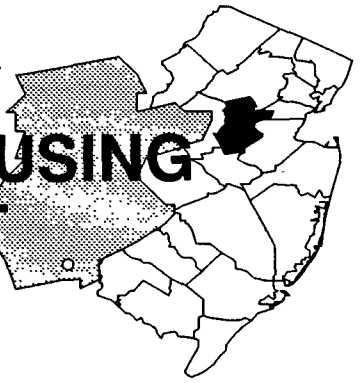
Site Repository

Montclair Public Library, 50 South Fullerton Avenue, Montclair, NJ 07042

MONTGOMERY TOWNSHIP HOUSING DEVELOPMENT

NEW JERSEY

EPA ID# NJD980654164



EPA REGION 2
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: 12/30/82
Final Date: 09/08/83

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 housing 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 housing development to all residents using contaminated or threatened wells and sealing affected private wells. Extension of the public water supply has been 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: extracting contaminated groundwater from the primary source area; treating it to Federal and State cleanup standards using an air stripper; reinjecting the cleaned water into the underlying aquifer; connecting additional residences to the public water supply as needed; sealing private wells and monitoring wells within the contaminant plume; and 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 activities are scheduled for completion in early 1993. Actual cleanup activities are expected to begin soon after.

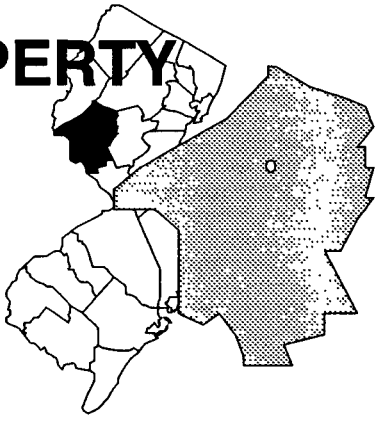
Environmental Progress

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

Site Repository

Somerset County Library, Main Library, North Bridge Street and Vogt Drive,
Bridgewater, NJ 08807

MYERS PROPERTY
NEW JERSEY
EPA ID# NJD980654198



EPA REGION 2
Hunterdon County
Franklin Township

Other Names:
Elko Chemical Company

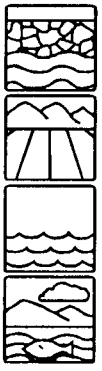
Site Description

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. When the site was first identified, 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 fishing.

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

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

Threats and Contaminants



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. Pesticides were also detected in on-site surface spring samples. Part of the adjacent wetland is highly contaminated. Those living or conducting 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 for off-site disposal, including soil, drummed wastes, asbestos, and debris. In 1987, after identifying the most contaminated areas, the EPA installed a fence around those areas to restrict access. Warning signs were posted at the perimeter of the site. 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 1989. 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, followed by soil washing to remove the inorganic contaminants. The treated soils will be backfilled on site. Shallow groundwater will be extracted, treated on site, and either reinjected into the ground or discharged into Cakepoulin Creek. The deeper bedrock groundwater also will be extracted, treated, and discharged as an interim cleanup measure. The effectiveness of the pump and treat remedy at cleaning up the shallow bedrock groundwater will be evaluated to develop a final deeper bedrock groundwater cleanup remedy. The groundwater will be periodically monitored to ensure it does not pose a threat to potable wells in the area. Potential damages to the wetland resulting from the remedy will be limited. The potentially responsible parties are expected to begin designing the selected remedy in 1992. The on-site buildings also will be decontaminated.

Site Facts: In September 1991, the EPA signed a Consent Decree with Atochem North America, Inc. to clean up site contamination under EPA supervision. Atochem North America is expected to begin designing the selected remedy in 1992.

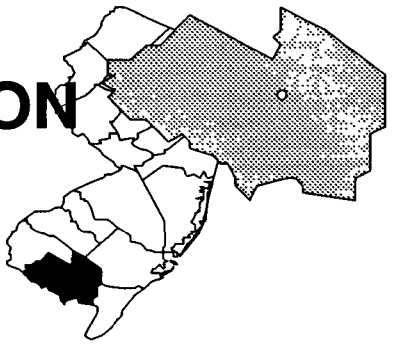
Environmental Progress

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

Site Repository

Hunterdon County Library, Route 12, Flemington, NJ 08822

NASCOLITE CORPORATION
NEW JERSEY
EPA ID# NJD002362705



EPA REGION 2
Cumberland County
In the cities of Millville and Vineland

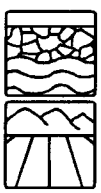
Site Description

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 the cities of 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. Liquid wastes leaked from the underground tanks into the surrounding soils and groundwater. In 1980, Nascolite Corporation ceased operations after being cited and fined by the New Jersey Department of Environmental Protection and Energy (NJDEPE) 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 in abandoned buildings on the site. EPA studies in the mid-1980s confirmed the presence of VOCs, acid and base/neutral extractables, and lead in soil and groundwater. Groundwater contamination is moving in a southwestern direction. 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: 09/08/83
Final Date: 09/21/84

Threats and Contaminants



Groundwater and soils are contaminated with MMA, phthalates, lead, and VOCs including benzene, toluene, and trichloroethylene (TCE). Surface soil samples from a ditch that was alleged to have received wastes from surface water runoff as well as soil samples from the northern part of the plant/production area showed high concentrations of lead. Sampling of the excavated sludge wastes revealed MMA, phthalates, VOCs, lead, and naphthalene. These buried wastes reportedly were disposed of on site during plant operations. Nearby residents may be exposed to chemicals through direct contact with or ingestion 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 buildings.

Response Action Status

Immediate Actions: In 1981, under State orders, Nascolite Corporation removed some contaminated soil and on-site drums from the site. In 1987, EPA workers placed a tarp above the lead-laden northern plant area 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. Roadways were repaved and private lawns were reseeded.

Groundwater Cleanup: The EPA selected a remedy for cleaning up groundwater in 1988. It features: extracting groundwater and treating it on site, then reinjecting the cleaned water into the aquifer; performing additional studies to determine the appropriate cleanup measures for contaminated soils, sediments, buildings, and wetlands on the site; and providing an alternative water supply for potentially affected residents. The Army Corps of Engineers initiated the engineering design for this remedy in 1988. In 1990, the design work, along with additional investigations, was subsequently undertaken by the potentially responsible parties. At the present time, treatability studies are being conducted on the contaminated groundwater in order to select the most effective and environmentally sound technology for groundwater treatment. The remedial design work is scheduled for completion in 1993.

Soils and Buildings: The EPA completed a study of contaminated soils and buildings on the site in 1991. A remedy was selected in early 1991 which includes demolition of on-site structures, including asbestos abatement, with appropriate disposal; excavation and solidification/stabilization of unsaturated and wetlands soil contaminated above cleanup standards; replacement of solidified material back on site; restoration of affected wetlands; and monitoring of the remedy to ensure its effectiveness. Designs of the selected remedy were initiated in 1991 and are expected to be completed in the spring of 1993.

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. Additional potentially responsible parties identified by the EPA have performed cleanup activities at the site. These parties conducted field work and investigations for groundwater cleanup in late 1991, and are currently designing the cleanup remedies.

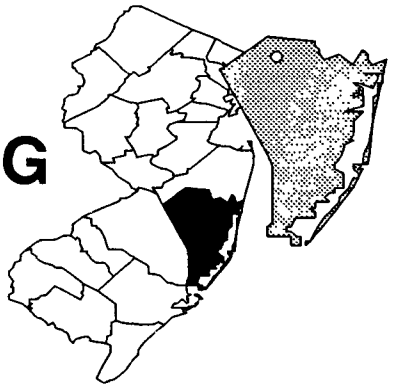
Environmental Progress

Initial cleanup work, including removal and isolation of contaminated soils, disposal of solid and liquid wastes, construction of a fence, and the provision of an alternate drinking water supply, has been completed at the Nascolite Corporation site. These actions have eliminated the immediate threats to the nearby public and the environment while work continues on designing the groundwater treatment system and the solidification/stabilization process for the treatment of lead-contaminated soils, sediments, wetlands, and buildings.

Site Repository

Millville Public Library, 210 Buck Street, Millville, NJ 08332

NAVAL AIR ENGINEERING CENTER
NEW JERSEY
EPA ID# NJ7170023744



EPA REGION 2
Ocean County
Lakehurst

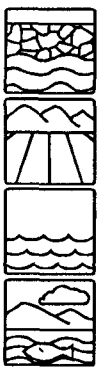
Site Description

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 NAEC. The 45 areas included landfills, open pits, unlined lagoons, and drainage ditches, several of which are near freshwater wetlands. The Navy reports that fuels, oils, metals, solvents, and various other organic compounds were disposed of on the NAEC 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, woodlands, Lakehurst Borough, and a State wildlife refuge area are adjacent to the site. The NAEC and the surrounding area are located within the Pinelands National Reserve. 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: 09/18/85
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. Polychlorinated biphenyls (PCBs) have also been detected in soil. Some stream sediments show significant levels of heavy metals such as chromium, lead, mercury, and nickel, and petroleum hydrocarbons above background levels. Those who come in 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 wildlife habitat and serving recreational and agricultural purposes, surrounds the site and could be subject to pollution from contaminated runoff.

Cleanup Approach

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

Response Action Status

Area C: A study initiated in 1988 showed groundwater and soil contamination in Area C, once the location of a fire training area and a fuel tank farm. In 1991, the EPA and the Navy agreed on pumping and treating the contaminated groundwater as an interim cleanup measure. Design of the treatment system was completed and actual cleanup activities initiated in 1991. The groundwater pump and treat system is expected to be operational in 1994.

Area H: Engine catapult test tracks, which contaminated the groundwater, used to be located in Area H. In 1991, the EPA and the Navy agreed to pump and treat contaminated groundwater as an interim cleanup measure. The cleanup design was completed in the fall of 1991; the system is expected to be operational in mid-1992. A final set of cleanup actions for this area will be chosen in 1993. Other contamination will be addressed in future agreements.

Nine Areas: Based on an investigation initiated in 1988, the NAEC and the EPA concluded in 1991 that no further action is needed at Areas 15, 18, 23, 26, 27, 30, 34, 40 and Area L. Contamination in these areas does not exceed State or Federal health and safety standards.

Area 28: In 1990, the Navy completed an investigation into the nature and extent of contamination of the groundwater in Area 28, an area containing above- and below-ground storage tanks. Contaminated soil was removed by the NAEC and taken to a hazardous waste disposal facility in the spring of 1991. Also in 1991, the EPA agreed to the NAEC's proposal for pumping and treating groundwater at Area 28 as an interim cleanup action. Design of the system was completed in 1991. The system is expected to be operational in late 1992.

Areas A and B: In 1990, the Navy completed an investigation of groundwater contaminated with petroleum and solvents in Areas A and B. The EPA selected an interim remedy for cleanup of the groundwater which features a groundwater pump and treat system. Design of the system was completed in mid-1992. Cleanup operations are expected to begin in early 1993.

Areas 5, 19, and 21: An investigation conducted by the Navy in 1990 detected contamination of the soils of these three areas. The NAEC removed contaminated soils in the spring of 1991. After further sampling, the EPA and the NAEC concluded that no further action is needed as the cleanup actions already taken have reduced contamination to within safety levels.

Area 44: A 1990 study conducted by the Navy showed significant PCB-contamination in the soil of Area 44. Contaminated soils were removed by the NAEC in the spring of 1991. Subsequent sampling indicated contamination had been reduced to within safety levels. In 1991, the EPA and the NAEC decided that no further action is needed at Area 44.

Additional Areas: The Navy is conducting additional investigations to determine the nature and extent of contamination at 30 additional areas. The investigation report is expected to divide and prioritize the areas into several additional cleanup groups for selection of appropriate remedies. All studies and the final cleanup remedy for all areas, except those now undergoing groundwater cleanup, are expected to be completed in mid-1993. Final cleanup remedies will be selected if needed for the groundwater sites once interim actions are completed.

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 additional studies to determine final cleanup strategies and is beginning to conduct cleanup activities at 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.

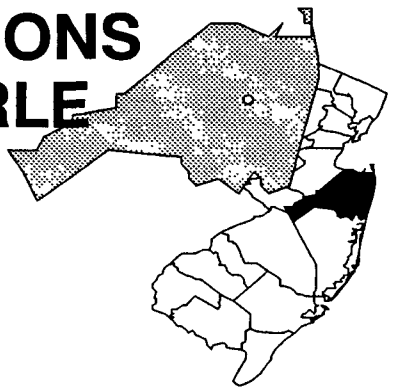
Site Repository

Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753

NAVAL WEAPONS STATION EARLE (SITE A)

NEW JERSEY

EPA ID# NJ0170022172



EPA REGION 2

Monmouth County
Colts Neck

Other Names:
Earle Naval Weapons Station

Site Description

The Naval Weapons Station Earle (Site A) covers 11,134 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 numerous waste areas identified by the Navy; 44 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 spill of polychlorinated biphenyls (PCBs) in one area; 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; 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: 10/15/84
Final Date: 08/30/90

Threats and Contaminants

Groundwater, surface water, sediments, and soils are suspected to contain lead, zinc, and titanium. Those who come in 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 three long-term remedial phases directed at the cleanup of three distinct groups of waste areas.

Response Action Status

11 Waste Areas: In late 1989, the Navy submitted a plan for investigating 11 waste areas 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 1994.

16 Waste Areas: The Navy submitted a plan in spring 1991 for an investigation of the nature and extent of contamination and to identify cleanup alternatives at 16 other waste areas. Preliminary field work began in mid-1992, and is scheduled t be completed in 1995.

17 Waste Areas: Seventeen additional areas of contamination were recently discovered through aerial photographs. Investigations into the nature and extent of contamination in these 17 ares will lead to the selection of cleanup actions.

Site Facts: The Naval Weapons Station Earle 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.

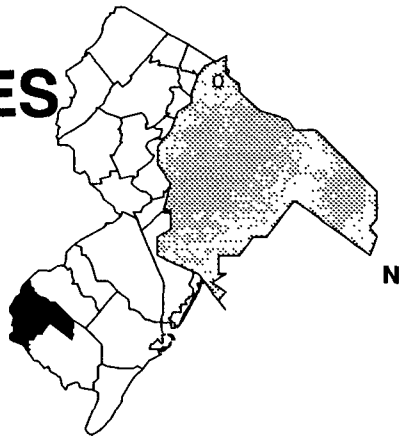
Environmental Progress

The Navy is conducting investigations to identify cleanup strategies for the 44 areas of contamination. The two other areas will be addressed under RCRA guidelines. The EPA has determined that the Naval Weapons Station Earle site does not pose an imminent threat to the surrounding population or the environment while investigations leading to the selection of final cleanup remedies are taking place.

Site Repository

Monmouth County Library, Colts Neck Branch Library, 15 Heyers Mill Pond,
Colts Neck, NJ 07722

NL INDUSTRIES
NEW JERSEY
EPA ID# NJD061843249



EPA REGION 2
Salem County
Pedricktown

Other Names:
National Smelting of New Jersey

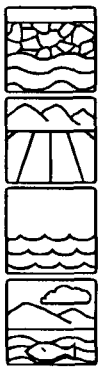
Site Description

The 46-acre NL Industries site is a former secondary lead smelting facility that was operated by NL Industries, Inc. 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. There are two streams near the site, and 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. Testing conducted in 1987 and 1991 indicated that these private wells are within drinking water standards. The Delaware River is approximately 1 1/2 miles from the site.

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

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

Threats and Contaminants

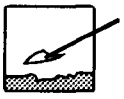


Groundwater and soils are contaminated with heavy metals, especially lead and cadmium. Sampling of on-site and off-site areas and two nearby streams has identified elevated levels of lead in soils, groundwater, surface water, and stream sediments. Testing of nearby residential wells indicates that the water is safe for drinking and household use; however, the migration of contaminants in the groundwater may threaten these wells in the future. Moreover, individuals may be exposed to health risks if contaminated soils, surface water, or sediments in and around the site are accidentally ingested.

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 cleanup of 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 recycling, emptying on-site containers holding materials that potentially could be released, and storing the materials in covered areas; 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 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, surface water, and sediment 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: In 1991, the EPA completed a focused investigation to identify and evaluate cleanup alternatives for further stabilizing of the site. The selected remedy features solidification/stabilization and on-site placement of the slag materials; decontamination and off-site treatment and disposal of debris and contaminated surfaces; off-site treatment and disposal of the ponded water and sediments; and monitoring, as appropriate, of the remedy to ensure its effectiveness. In addition, any materials that can be recycled in a safe and cost-effective manner may be recycled. In 1992, the EPA decided that slag would be treated and disposed of off site. Designs of the remedy are expected to begin in late 1992, with actual cleanup activities scheduled to begin soon after.

Site Facts: In 1982, the State issued an Administrative Order on Consent requiring NL Industries, Inc. 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, Inc. signed a Consent Order with the EPA under which the company agreed to investigate the site. In 1992, the EPA issued a Unilateral Order for NL Industries, Inc. to clean up the ponded water, slag piles, building structures, and debris.

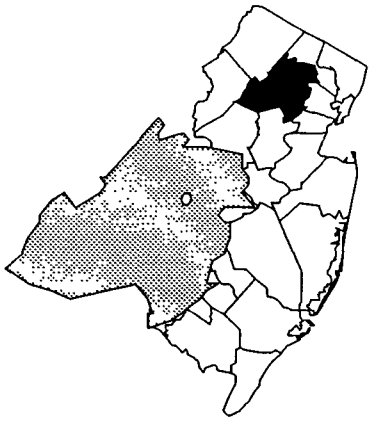
Environmental Progress

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

Site Repository

Penns Grove-Carney's Point Library, South Broad Street, Penns Grove, NJ 08069

PEPE FIELD
NEW JERSEY
EPA ID# NJD980529598



EPA REGION 2
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 the 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. 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: 12/30/82
Final Date: 09/08/83

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 of 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. The State began the design of these remedies in 1991. However, the State transferred the lead back to the EPA in order to expedite the design process. This remedy is expected to be completed by the end of 1993.

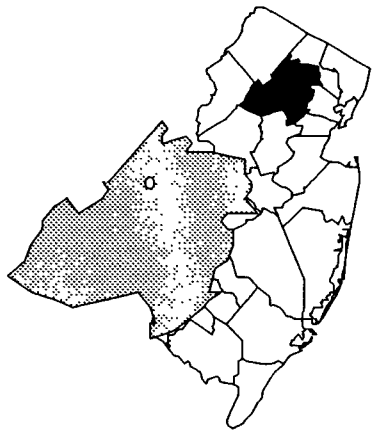
Environmental Progress

The New Jersey Department of Environmental Protection and Energy, with EPA assistance, has determined 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 completed.

Site Repository

Boonton Holmes Library, 621 Main Street, Boonton Town, NJ 07005

PICATINNY ARSENAL
NEW JERSEY
EPA ID# NJ3210020704



EPA REGION 2
Morris County
Rockaway Township

Site Description

The Picatinny Arsenal site covers 6,491 acres in Morris County. The arsenal has been in operation for over 100 years, and was once 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 156 potentially hazardous locations exist on the site, according to a 1991 U.S. Army Corps of Engineers report. They include areas used 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 three on-site wells, two of which have been found to have trace amounts of an explosive compound. 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 and discovered low levels of an explosive compound in three residences. These residences are receiving bottled water from the Army. Lake Denmark and Picatinny Lake, which are on the base, are used for recreational activities.

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 if accidentally ingested. Contaminated groundwater has apparently migrated off site at the southern boundary where low levels of explosive compounds have been found in private wells. 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 the Building 24 Area, Building 95 Area, 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 preventing VOC-contaminated groundwater from discharging into Green Pond Brook: extracting contaminated groundwater; installing a pre-treatment system for the removal of metals and solids; air stripping to remove VOCs from the groundwater; filtering to remove VOCs from the air stripper exhaust and additional VOCs from the air stripper effluent; discharging treated water via a holding tank and piping it to Green Pond Brook; operating and maintaining the system; and monitoring the effluent. The Army completed the design of the remedies in 1990. Construction of the groundwater remedy was completed in late 1991. The pump and treat system has remained idle pending further studies to satisfy concerns of the New Jersey Department of Environmental Protection and Energy (NJDEPE). In addition to the pump and treatment system, the U.S. Geological Survey (USGS) will conduct a field test to determine whether bioremediaton of VOC-contaminated soils above the groundwater table is feasible. Cleanup of soils associated with the Building 24 Area is being addressed under the Resource Conservation and Recovery Act (RCRA).

Building 95 Area: Two unlined sand filter lagoons received treated wastewater from a metal plating and etching operation in Building 95. The Army is conducting a study to determine the extent and the nature of contamination. The study is expected to be completed in late 1992, when cleanup methods will be chosen. Removal of contaminated soils and piping of the lagoons is scheduled to begin under RCRA program authority in 1992.

Burning Ground Area: Contaminated explosive sludge and sediment from manufacturing processes are sent to the burning grounds to be incinerated in pans, which were formerly on ground surface. 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 1995.

Remaining Areas: A site-wide investigation work plan was completed for the 156 remaining areas of contamination in 1991. This plan prioritizes the areas for investigation and potential cleanup. To facilitate this process, these 156 areas have been divided into three phases. The work plan for the first phase is expected to be completed by mid-1992; the remaining work plans are expected to follow 10 months after the first phase work plan is approved. The first phase will investigate off-site well contamination.

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.

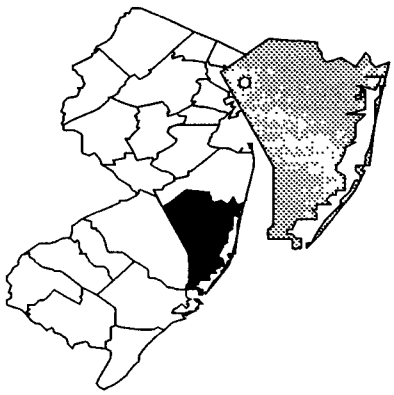
Environmental Progress

The groundwater cleanup remedy has been constructed and will be operational once the NJDEPE issues a discharge permit. While further investigations leading to the selection of final remedies for the remaining contaminated areas are being conducted at the Picatinny Arsenal site, the EPA has determined that there is no immediate danger to the nearby residents or the environment.

Site Repository

Office of Environmental Affairs, SMCRA-EA, U.S. Army Armament Research, Development, and Engineering Center, Picatinny Arsenal, NJ 07806

PIJAK FARM
NEW JERSEY
EPA ID# NJD980532808



REGION 2
Ocean County
Plumsted Township

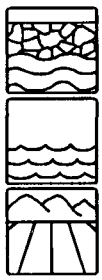
Site Description

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: 10/23/81
Final Date: 09/08/83

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). Accidentally ingesting or inhaling 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: removal and off-site disposal of all drums and lab packs at a federally approved disposal facility; excavation and off-site disposal of visibly contaminated soil at a federally approved disposal facility; pumping and removal of contaminated groundwater, as necessary, during excavation; monitoring of on-site wells annually for a five-year period; and 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 two years to ensure that groundwater contamination has been eliminated. Other cleanup actions are scheduled to take place in late 1992 to address residual soil contamination.

Site Facts: An Administrative Order on Consent between Morton Thiokol and the New Jersey Department of Environmental Protection and Energy (NJDEPE) 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.

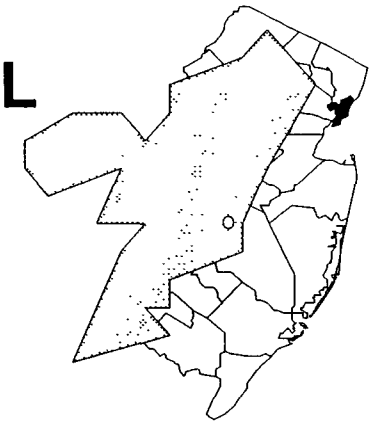
Environmental Progress

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.

Site Repository

Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753

PJP LANDFILL
NEW JERSEY
EPA ID# NJD980505648



EPA REGION 2
Hudson County
Jersey City

Other Names:
Pulaski Skyway

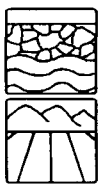
Site Description

The PJP Landfill covers 87 acres in Jersey City. The landfill has a history of underground fires. The site may have been used as early as 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 fenced. 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: 12/30/82
Final Date: 09/08/83

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 are possible from the accidental ingestion of contaminated groundwater and leachate. Direct contact with the contaminants also poses a potential health threat. Because it is used for recreational boating, pollution in 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: Major excavation work and capping of the landfill 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.

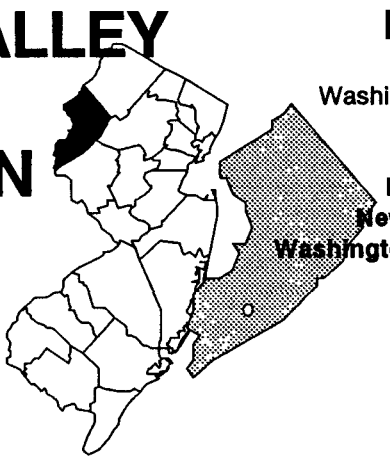
Site Repository

Jersey City Public Library, Five Corners Branch, 678 Newark Avenue, Jersey City, NJ 07306

POHATCONG VALLEY GROUNDWATER CONTAMINATION

NEW JERSEY

EPA ID# NJD981179047



EPA REGION 2

Warren County
Washington and Franklin Townships

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

Site Description

The Pohatcong Valley Groundwater 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: 03/31/89

Threats and Contaminants

The groundwater is polluted with various VOCs. The Pohatcong Valley residents are currently using a new potable water supply.

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 public health safety standards, Warren County supplied bottled water to affected residences. In 1988, the New Jersey Department of Environmental Protection and Energy hooked 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 1994. 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 Groundwater Contamination site until investigation activities are completed and groundwater resources are returned to safety standards.

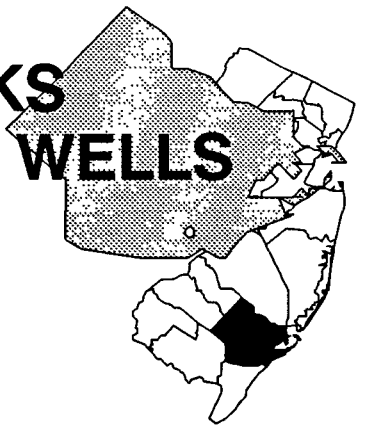
Site Repository

Washington Borough Municipal Building, 100 Belvidere Avenue, Washington, NJ 07882

POMONA OAKS RESIDENTIAL WELLS

NEW JERSEY

EPA ID# NJD980769350



EPA REGION 2
Atlantic County
Galloway Township

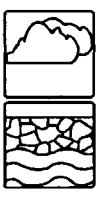
Site Description

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 all of the affected 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: 10/15/84
Final Date: 06/10/86

Threats and Contaminants



Testing for a variety of indoor air contaminants detected the presence of VOCs including 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 and the resulting air contamination.

Cleanup Approach

The site is being addressed through immediate actions; further investigations showed that no other cleanup actions are required.

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 mid-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 and Energy 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 put a groundwater monitoring plan in place in late 1992. Sampling results have shown that groundwater remains within federal standards.

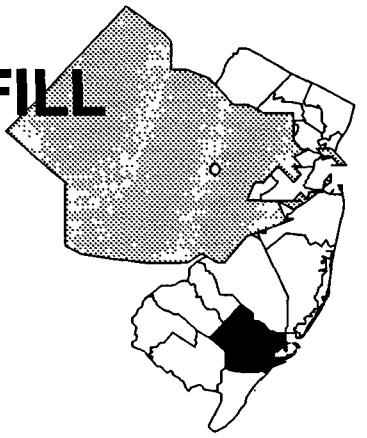
Environmental Progress

By providing an alternate safe drinking water source to the residents of the Pomona Oaks subdivision, the possibility of exposure to polluted water has been 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. The EPA will continue to monitor conditions at the site and report the results to the public.

Site Repository

Galloway Township Public Library, 30 West Jim Leeds Road, Pomona, NJ 08240

PRICE LANDFILL
NEW JERSEY
EPA ID# NJD070281175



EPA REGION 2
Atlantic County
Egg Harbor Township

Other Names:
Price Chem Dump
Price's Pit

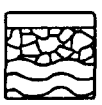
Site Description

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 wastes, 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 the spring of 1973, and municipal waste disposal 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 is still occurring.

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

NPL LISTING HISTORY
Proposed Date: 10/23/81
Final Date: 09/08/83

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. Potential 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 ACMUA refused to accept wastewater from the on-site treatment facility. The New Jersey Department of Environmental Protection and Energy (NJDEPE) 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 to the ACMUA water system, and affected residents have been supplied with a safe drinking water source, thus reducing the potential for exposure to contaminated groundwater while the site awaits final cleanup actions.

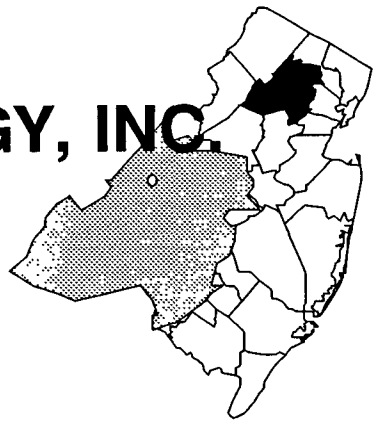
Site Repository

Atlantic City Public Library, 1 North Tennessee Avenue, Atlantic City, NJ 08401

RADIATION TECHNOLOGY, INC.

NEW JERSEY

EPA ID# NJD047684451



EPA REGION 2
Morris County
Rockaway Township

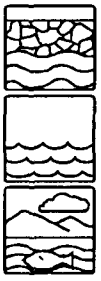
Site Description

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 and Energy (NJDEPE) 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 NJDEPE 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: 09/08/83
Final Date: 09/21/84

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. Potential health risks may exist for individuals who drink the contaminated well water or come into direct contact with the contaminated waters.

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 in 1986 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 1993.

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

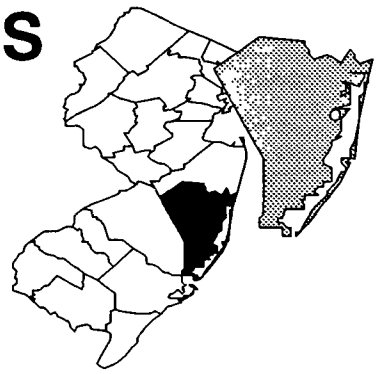
Environmental Progress

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, Inc. site does not pose an imminent threat to the surrounding residents or the environment.

Site Repository

Rockaway Township Public Library, 61 Mount Hope Road, Rockaway Township, NJ 07866

REICH FARMS
NEW JERSEY
EPA ID# NJD980529713



EPA REGION 2
Ocean County
1 mile northeast of Toms River
in Dover Township

Site Description

The Reich Farms 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 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 the Union Carbide Corporation. 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: 12/30/82
Final Date: 09/08/83

Threats and Contaminants

Groundwater is contaminated with volatile organic compounds (VOCs), including trichloroethylene (TCE). VOCs, including 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 may 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 the Union Carbide Corporation. Also in 1974, 148 private wells near the Reich Farms 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 Farms, based on a recommendation by the New Jersey Department of Environmental Protection and Energy. 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: the installation of extraction wells; treatment of extracted groundwater by air stripping and carbon adsorption; discharge of the treated groundwater into injection wells upgradient of the site; excavation of approximately 1,100 cubic yards of soil contaminated with VOCs and treatment in an enhanced volatilization unit; backfilling of the excavated area with the treated soils; excavation of approximately 900 cubic yards of soil contaminated with semi-volatile organics and off-site incineration; and off-site disposal of the soil at an EPA-approved facility and backfilling with clean fill. Under EPA monitoring, the Union Carbide Corporation is undertaking additional sampling and performing treatability studies on the chosen soil remedy and is scheduled to complete the technical design in late 1993.

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, the Union Carbide Corporation will perform cleanup activities at the site, and the property owners will provide access.

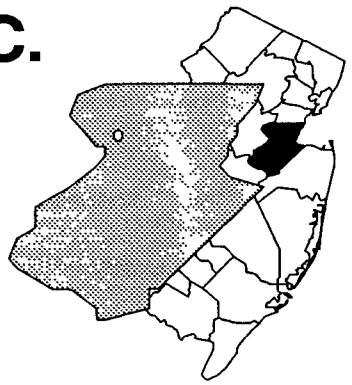
Environmental Progress

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.

Site Repository

Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753

RENORA, INC.
NEW JERSEY
EPA ID# NJD070415005



REGION 2
Middlesex County
Edison Township

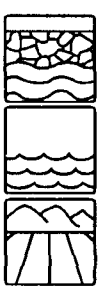
Site Description

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 and Energy (NJDEPE) inspection reports consistently noted lack of site security, poor housekeeping, and leaking drums and tankers. The NJDEPE detected several minor spills on site in 1978 and subsequently determined that Renora, Inc. lacked the proper registration to act as a special waste transfer station. In 1980, the NJDEPE ordered Renora, Inc. to cease all activities and clean up the site. Subsequent investigation by the NJDEPE showed that, while the company had ceased operations, it had not begun any efforts to clean up the site. As a result, its 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 the Bonhantown section of Edison Township.

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

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

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 oversight, 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: In 1987, 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 were 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. Field work for the additional studies was completed in 1992. Once the investigation is reviewed, a final cleanup remedy will be selected.

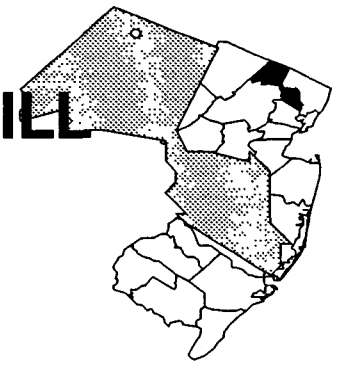
Environmental Progress

The cleanup actions described above have removed the exposed sources of contamination and have 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 safe levels.

Site Repository

Edison Main Library, 340 Plainfield Drive, Edison, NJ 08817

RINGWOOD MINES/LANDFILL
NEW JERSEY
EPA ID# NJD980529739



EPA REGION 2
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 also 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: 12/30/82
Final Date: 09/08/83

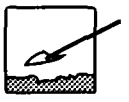
Threats and Contaminants

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 was the risk to those people who accidentally ingested contaminated soils. The removal of contaminated soil has 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 in the groundwater 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. Further testing of the site is currently underway to determine if any contamination remains. 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.

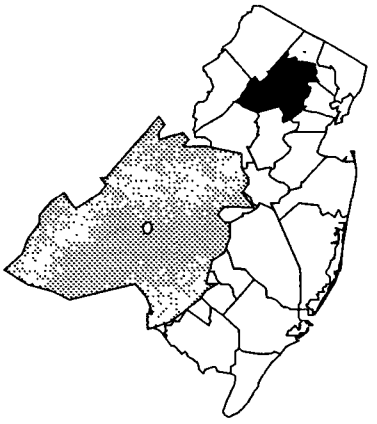
Environmental Progress

By removing the contaminated soil and drums containing hazardous wastes and disposing of them 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.

Site Repository

Ringwood Library, 145 Sylands Road, Ringwood, NJ 07456

ROCKAWAY BOROUGH WELL FIELD
NEW JERSEY
EPA ID# NJD980654115



EPA REGION 2
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: 12/30/82
Final Date: 09/08/83

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 four stages: initial actions and three long-term remedial phases focusing on cleanup of the wells, groundwater plume, and additional source areas 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. Besides monitoring the water, it was determined in 1986 that no further actions were necessary to address contamination at the wells.

Groundwater Plume: In 1991, the EPA selected the cleanup action to treat contaminated groundwater to restore the aquifer. The remedy includes: the installation of extraction wells; treatment of extracted groundwater by chemical precipitation and air stripping; reinjection of treated groundwater; and appropriate environmental monitoring to ensure the effectiveness of the remedy. The design phase for this remedy is expected to begin in 1993.

Source Control: A subsequent study is expected to begin in late 1992 to further delineate the nature and extent of the source of contamination. Once this investigation is completed, the EPA will evaluate the study findings and select a final cleanup remedy.

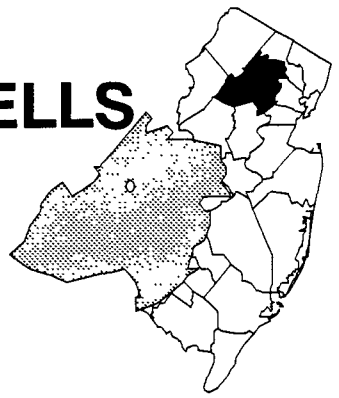
Environmental Progress

The installation of a water filtration system has reduced the threat of exposure to contaminants in drinking water while activities leading to the design of a final cleanup remedy are being planned.

Site Repository

Rockaway Borough Municipal Complex, 1 East Main Street, Rockaway, NJ 07866

ROCKAWAY TOWNSHIP WELLS
NEW JERSEY
EPA ID# NJD980654214



EPA REGION 2
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: 12/30/82
Final Date: 09/08/83

Threats and Contaminants

Groundwater is contaminated with VOCs including trichloroethylene (TCE). Inhaling volatilized organics released into indoor air during water use and ingesting or making 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 alternatives for final groundwater cleanup. The investigation is planned to be completed in late 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.

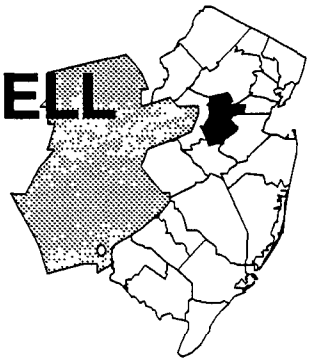
Environmental Progress

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.

Site Repository

Rockaway Township Public Library, 61 Mount Hope Road, Rockaway Township, NJ 07866

ROCKY HILL MUNICIPAL WELL
NEW JERSEY
EPA ID# NJD980654156



EPA REGION 2
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 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 Federal and State actions.

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

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; the presence of other chemicals may be unrelated to it. The contaminated groundwater is treated before the residents of Rocky Hill receive it. 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 treatment of the wells, the State conducted an investigation into alternatives for groundwater cleanup. The remedy chosen for this site includes: continuing groundwater extraction and on-site treatment through air stripping and reinjecting the treated water into the ground; connecting residences still using private well water to the public water supply; and 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 remedy began in 1989 and is expected to continue until 1993. The EPA expects to start the cleanup of the contaminated groundwater shortly thereafter.

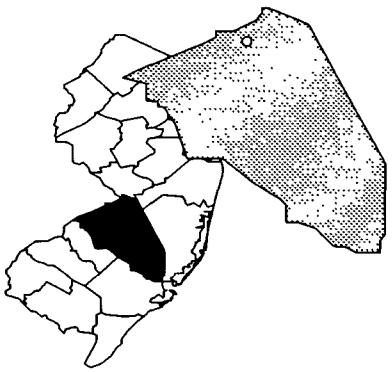
Environmental Progress

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 Well site. The air stripping treatment system continues to remove contamination from impacted groundwater and will be operated until safety levels are achieved.

Site Repository

Somerset County Library, Main Library, North Bridge Street and Vogt Drive, Bridgewater, NJ 08807

ROEBLING STEEL CO.
NEW JERSEY
EPA ID# NJD073732257



EPA REGION 2
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 Company 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, an abandoned landfill, a 34-acre slag disposal area, soils soaked with oils and other potentially hazardous materials, tanks and pits containing sludges and liquids, asbestos pipe insulation, and a network of underground piping. 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 actions.

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

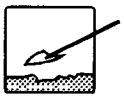
Threats and Contaminants

Buildings on the site contain exposed asbestos and chemical dust. Groundwater under the site is contaminated with various heavy metals including chromium, lead, cadmium, nickel, zinc, and copper. River and creek sediments are potentially contaminated with heavy metals 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, contaminated soil, process dust in the buildings, and tank and pit contents. 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: initial 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



Initial 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 and Energy 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 the remaining high hazard sources of contamination, such as additional drums and tanks, transformers contaminated with polychlorinated biphenyls, baghouse dust and chemical piles, tires, and contaminated soils from the adjacent playground. The total quantity of material removed off site for treatment, disposal, and recycling included 263 overpacked drums and 663 crushed drums; 45,864 gallons of transformer oil and 860,709 pounds of transformer carcasses; 266,843 gallons of tank liquids and 1,351 tons of tank sludges; 800 tons of baghouse dust; 251 tons of chemical piles and asbestos; and 126 tons of burnt tires and 261 tons of recyclable tires. This removal action was completed in late 1991.

Slag Area and Southeast Park: In late 1991, remedies were selected to address the slag area and Southeast Park. The cleanup plan selected for the 34-acre slag area includes treating the hot spots, and then covering the entire 34-acre lag area with a soil cover and vegetation. Two areas of concern in the Southeast Park will be excavated and hazardous materials disposed of off site. The technical designs for the remedies are now underway. The EPA restricted access to the slag disposal area by installing a fence. The fence is a temporary measure until the EPA completes the final cleanup of this area. Cleanup activities are scheduled to begin in mid-1993.

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 in mid-1992.

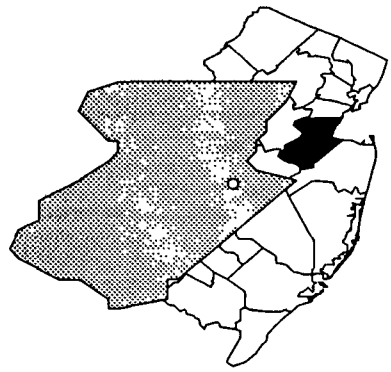
Environmental Progress

The EPA initiated and carried out numerous waste removal actions at the Roebling Steel Company site, thereby 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 slag area and Southeast Park are currently being designed while investigations leading to a final remedy for the remaining contamination at the site are underway.

Site Repository

Florence Township Public Library, 1350 Hornberger Avenue, Roebling, NJ 08554

SAYREVILLE LANDFILL
NEW JERSEY
EPA ID# NJD980505754



EPA REGION 2
Middlesex County
Sayreville

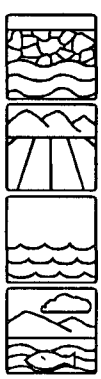
Site Description

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 Federal, State, and potentially responsible parties' actions.

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

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 was shown to be 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 has not been 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 and Energy (NJDEPE), in coordination with the New Jersey Division of Criminal Justice, excavated and sampled 30 drums from the site in 1982. Additional drums may exist on the site.

Entire Site: The EPA selected a remedy for cleanup of the site in 1990. The remedy includes the removal 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, at which time a decision on further cleanup work will be made.

Site Facts: The State signed an Administrative Order on Consent (AOC) with the potentially responsible parties in 1986 requiring that they fund the investigation to determine the type and extent of contamination. In late 1991, a second AOC with the potentially responsible parties was signed, which requires them to perform the cleanup activities at the site.

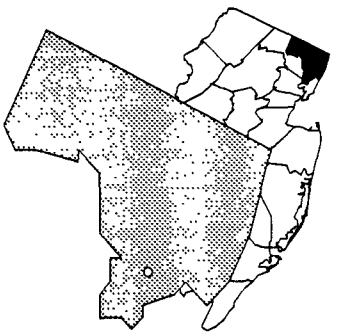
Environmental Progress

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 additional cleanup activities is underway and further studies are being completed.

Site Repository

Sayreville Free Public Library, 1050 Washington Road, Parlin, NJ 08859

SCIENTIFIC CHEMICAL PROCESSING
NEW JERSEY
EPA ID# NJD070565403



EPA REGION 2
Bergen County
Carlstadt

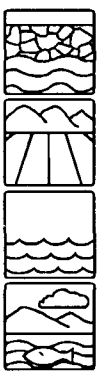
Site Description

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 and a roll-off container holding a polychlorinated biphenyl (PCB) sludge tank. 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 nearby 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 Federal, State, and potentially responsible parties' actions.

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

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. Potential health risks may exist for those who come into direct contact with site pollutants, specifically those who accidentally ingest or touch 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 four stages: immediate actions and three long-term remedial phases focusing on interim cleanup of the on-site groundwater and soil, final cleanup of the aquifer and off-site groundwater contamination, and final cleanup of the on-site groundwater and soil.

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 and Energy supervision between 1985 and 1986. Some delays were caused due to the high PCB concentrations in one of the tanks.

Interim Cleanup of On-Site Groundwater/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 1992, will contain the contamination until a permanent remedy can be selected. Investigations to identify final cleanup alternatives are ongoing, as described below.

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 1993.

Final On-Site Groundwater/Soil: In 1993, a subsequent investigation is expected to begin to identify the contaminants of concern and recommend effective alternatives for final on-site groundwater and soil cleanup.

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.

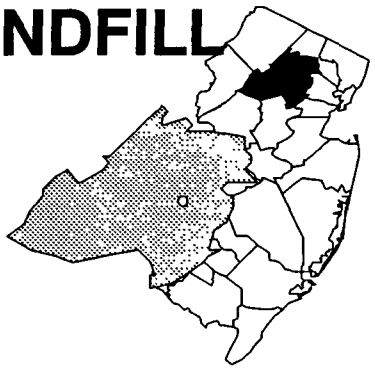
Environmental Progress

The removal of contaminated tanks and a tank trailer by the owner of the property addressed immediate threats posed by the Scientific Chemical site. 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, and on-site groundwater and soil contamination are being conducted by the parties potentially responsible for the site contamination.

Site Repository

William E. Dermody Free Public Library, 420 Hackensack Street, Carlstadt, NJ 07072

SHARKEY LANDFILL
NEW JERSEY
EPA ID# NJD980505762



EPA REGION 2
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 and 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: 12/30/82
Final Date: 09/08/83

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. Those 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: capping of the landfill with a 2-foot clay cap that conforms to Federal requirements; installation of a venting system for landfill gases and extraction and treatment of shallow groundwater and leachate; surface water controls to handle rainfall, storm runoff, and erosion of river banks; installation of security fencing to restrict site access; and 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 1993.

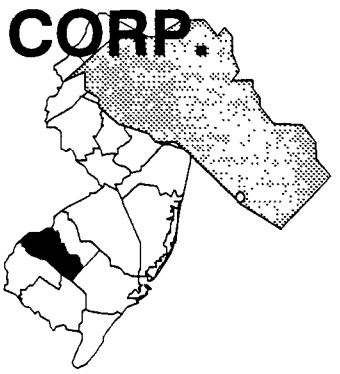
Environmental Progress

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

Site Repository

Morris County Public Library, 30 East Hanover Avenue, Whippany, NJ 07981

SHIELDALLOY CORP.
NEW JERSEY
EPA ID# NJD002365930



EPA REGION 2
Gloucester County
Borough of Newfield

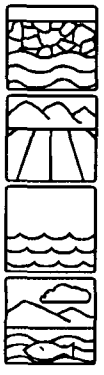
Site Description

The 61-acre Shieldalloy Corp. site houses an active specialty plant that manufactures chromium alloy products. Past disposal practices included the release of process wastewater directly to an unlined lagoon, causing surface water and groundwater contamination. 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. Since 1979, the plant has 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 Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/08/83
Final Date: 09/21/84

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 public health include drinking or coming in direct contact with groundwater and surface water, inhaling contaminated air particles, and eating 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 groundwater 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.

Groundwater 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 VOC and chromium contamination currently is being evaluated, and this study is expected to be completed in 1992.

Source Control: The potentially responsible party and the State, under EPA monitoring, currently are conducting a study into the nature and extent of soil and sludge 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 scheduled to be completed in 1992.

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 Energy and Shieldalloy Corp. 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 public health and the environment while studies leading to the final selection 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.

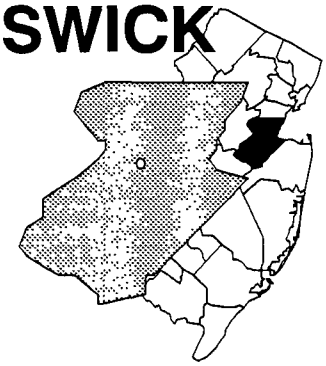
Site Repository

Newfield Borough Library, Catawba Avenue and Church Street, Newfield, NJ 08344

SOUTH BRUNSWICK LANDFILL

NEW JERSEY

EPA ID# NJD980530679



EPA REGION 2

Middlesex County
1/2 mile northwest of Route 1

Other Names:
Browning-Ferris Industries

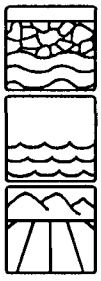
Site Description

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: 12/30/82
Final Date: 09/08/83

Threats and Contaminants



The groundwater, sediments, soils, leachate, and surface water are contaminated with VOCs and heavy metals including iron. People who touch 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 and treat the leachate; construction of a trench, known as a slurry wall, filled with materials that prevent seepage; covering of the landfill with clay; and the installation of a system to vent gas buildup. The EPA completed all 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 has 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 necessary remedies for cleanup of the area surrounding the South Brunswick Landfill site.

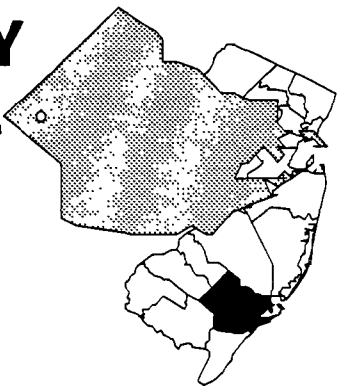
Site Repository

South Brunswick Public Library, 110 Kingston Lane, Monmouth Junction, NJ 08852

SOUTH JERSEY CLOTHING CO.

NEW JERSEY

EPA ID# NJD980766828



EPA REGION 2
Atlantic County
Minotola

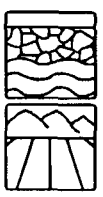
Site Description

The South Jersey Clothing Co. (SJCC) is an active facility that once manufactured military uniforms. As part of the manufacturing process, assembled garments were treated by a dry cleaning unit that utilized 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 and Energy (NJDEPE) 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. In addition, the SJCC installed a groundwater pump and treatment system which still remains in operation. Buena Borough began construction of a municipal water supply system in 1985 independent of NJDEPE efforts, and expanded it in 1988 to serve approximately 75 percent of its population. The SJCC is located 500 feet from Garden State Cleaners (GSC), also a site on the NPL. The SJCC and GSC sites 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 and soil are contaminated with volatile organic compounds (VOCs), primarily TCE. Use of contaminated groundwater for domestic purposes and agricultural irrigation may pose a potential health threat. There are potential public health concerns associated with homes that have not yet been connected to the area-wide water supply. Private residences located approximately 4,000 feet downgradient from the two sites 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. Based on the results of the investigation, the following remedy was chosen: in-place treatment of contaminated soil using a vapor extraction process; extraction of groundwater with concentrations of VOCs above Federal standards; treatment of groundwater with an on-site air stripping column and carbon absorption units; reinjection of the treated water into the aquifer; and long-term monitoring of groundwater. The design of the remedy is currently underway and is expected to be completed by late 1993.

Site Facts: The EPA sent a special Notice Letter to the owners in 1988 requesting a proposal to conduct or finance site studies. Based on information obtained from the site owners and other sources, the EPA determined that the company is neither financially nor technically capable of undertaking the cleanup activities. Instead, the EPA will conduct the required work using Trust Fund monies.

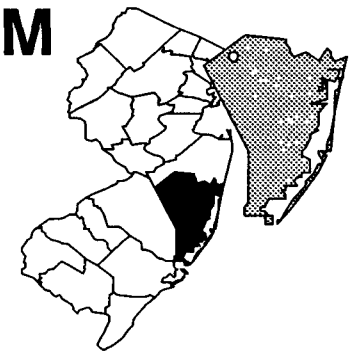
Environmental Progress

The EPA performed preliminary evaluations and determined that, as a result of previous actions taken to address contaminated groundwater and soil, the site does not present an immediate threat to the surrounding residents or the environment while the engineering design for the selected remedy is in progress.

Site Repository

Buena Borough Municipal Building, 616 Central Avenue, Minotola, NJ 08341

SPENCE FARM
NEW JERSEY
EPA ID# NJD980532816



EPA REGION 2
Ocean County
Plumsted Township

Other Names:
Thiokol Corporation Site

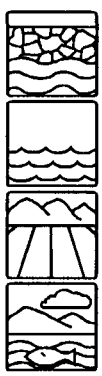
Site Description

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 NPL, 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 Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 10/23/81
Final Date: 09/08/83

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) are still 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 contact with or ingesting the water, as well as sediments, may have posed a health threat. Individuals who come in 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. Those who use the creek for recreation may suffer adverse health effects by coming in contact with or accidentally ingesting 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 which included removing all drums and laboratory wastes and disposing of them at a federally approved facility; excavating contaminated soil and disposing of it at a federally approved facility; installing a system to control the sediment so contaminants do not migrate during excavation; and 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 are contaminated with PCBs. Additional soil sampling will be conducted in 1992 to determine the quantity of contaminated soil to be excavated. Although the groundwater has now been determined to be clean, monitoring will continue for two more 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 two years to ensure the groundwater pollution has completely dissipated.

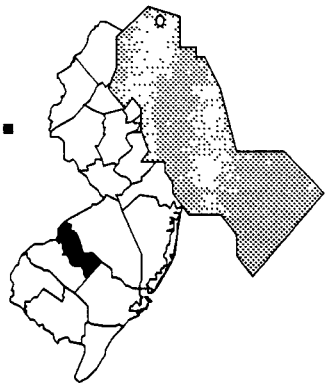
Site Repository

Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753

SWOPE OIL & CHEMICAL CO.

NEW JERSEY

EPA ID# NJD041743220



EPA REGION 2
Camden County
Pennsauken Township

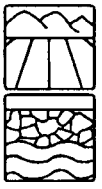
Site Description

The Swope Oil & Chemical Co. site is located in an industrial area in the northern Pennsauken Township. The 2-acre site is bordered by a railway and national highway. Swope Oil & Chemical 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 municipal wells located 175 feet south of the site.

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

NPL LISTING HISTORY
Proposed Date: 07/23/82
Final Date: 09/08/83

Threats and Contaminants



The soil is contaminated with polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), phthalates, and metals. The groundwater is primarily contaminated with VOCs. Railroad employees and trespassers may be exposed to contaminants through direct contact with and accidental ingestion of contaminated soil. 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: In 1985, the EPA selected the following cleanup methods: removal of tanks and buildings with off-site incineration, treatment, or disposal of tank contents, and off-site disposal of tanks and building debris; construction of a cap at the site; preparation of a supplemental investigation to determine the nature and extent of groundwater contamination and to identify alternatives for cleanup; excavation of up to 1 1/2 feet of contaminated soil containing PCBs and off-site disposal; excavation of up to 1 1/2 feet of PCB-contaminated soils below the lagoon and off-site disposal; and 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 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: In late 1991, the EPA selected a remedy for the treatment of contaminated subsurface soils which are contributing contamination to groundwater. The selected remedy calls for the in-place treatment of volatile and semi-volatile organic subsurface soil contaminants through vapor extraction with biodegradation. In addition, the groundwater will be monitored for a period of five years to assess the impact of surface contamination on the groundwater. The engineering design of the selected remedy is scheduled to begin in late 1992. The EPA has postponed installation of a cap over the site, since the in-place treatment of subsurface soils may make installation of the cap unnecessary.

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

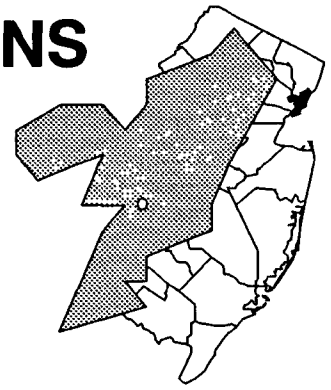
Environmental Progress

The EPA and potentially responsible parties have removed large quantities of the contaminated surficial materials and soils from the Swope Oil & Chemical Co. site and temporarily 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 reduced the potential for exposure to hazardous materials at the site while cleanup proceeds.

Site Repository

Clerk's Office, Township of Pennsauken, 5605 North Crescent Boulevard, Pennsauken, NJ 08110

SYNCON RESINS
NEW JERSEY
EPA ID# NJD064263817



EPA REGION 2
Hudson County
Kearny

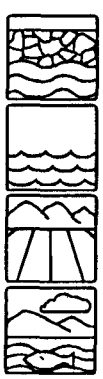
Site Description

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, and at least two chemical reactor buildings housing stainless steel vessels. Prior to removal, the site also contained approximately 12,800 55-gallon drums. Some of the 55-gallon drums had 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: 07/23/82
Final Date: 09/08/83

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. These actions were 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, in 1986 the EPA selected the following methods for site cleanup: remove the contents of the storage tanks and vessels for off-site disposal; decontaminate buildings and tank structures as necessary; excavate lagoon liquids, sediments, and contaminated surface soil and dispose of off site; install a cover over the site that allows natural flushing of underlying soil and groundwater contaminants; collect and treat contaminated water from the shallow aquifer, with discharge to the Passaic River; and 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 1992. 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 reduced. The EPA has determined that the site is safe to the surrounding community and the environment while final cleanup actions are being taken.

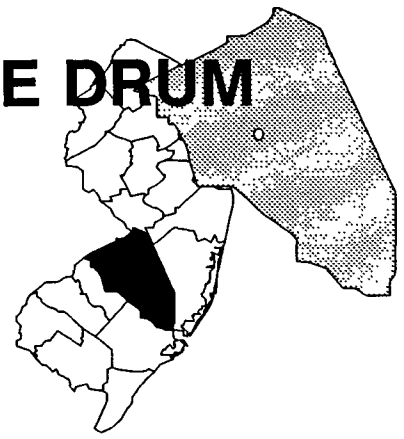
Site Repository

Kearny Public Library, 318 Kearny Avenue, Kearny, NJ 07302

TABERNACLE DRUM DUMP

NEW JERSEY

EPA ID# NJD980761357



EPA REGION 2
Burlington County
1/2 mile from Bozarthtown

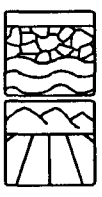
Site Description

The Tabernacle Drum Dump site is a wooded, 1-acre parcel of undeveloped land located on Carranza Road in Tabernacle Township in the northern region of the New Jersey Pine Barrens. In a one-time dumping incident in the summer of 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 property. These containers were stored at the site until 1984. Deterioration and leakage of some containers resulted in visible soil and 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. The New Jersey Department of Environmental Protection and Energy (NJDEPE) followed-up with a more detailed site inspection, collecting drum and soil samples. Sampling revealed the presence of carbon tetrachloride, benzene, toluene, ethylbenzene, xylenes, chromium and lead. Land in the area is used primarily for agriculture and recreation. Approximately 75 to 100 residences living within a 1-mile radius of the site are dependent on groundwater wells for potable and agricultural purposes.

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

NPL LISTING HISTORY
Proposed Date: 09/08/83
Final Date: 09/21/84

Threats and Contaminants



The heavy metals lead, chromium, and cadmium and the volatile organic compounds (VOCs) tetrachloroethylene and dichloroethylene are the major groundwater contaminants. On-site soils are mainly contaminated with chromium, cyanide, and lead. A Public Health Evaluation (PHE) was conducted which showed that ingestion of contaminated groundwater, especially by residents downgradient of the site, poses the greatest threat to the community. The PHE also showed that since the site is unfenced, individuals entering the site are at risk when contaminated soil is touched or accidentally swallowed. However, this risk has been reduced by the excavation of the contaminated soil and the removal of all the drums and containers. In addition, the EPA has implemented a residential well sampling program which, thus far, indicates that the sampled residential water meets federal health-based standards.

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: installation of groundwater monitoring wells and a monitoring program to trace the groundwater plume; groundwater pump and treatment using air stripping and possibly carbon adsorption followed by reinjection of treated water, groundwater monitoring, and exhaust gas analysis; and 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. In early 1991, the EPA approved the design of the final cleanup remedy prepared by USX Corporation. The company completed the soil sampling in the former drum dumping storage in March 1991 and began a groundwater plume investigation at that time. The investigation included a quick plume tracking methodology, known as drive point sampling, to delineate the general location of the plume. Drive point sampling occurred in two phases and was completed in mid-1991. As follow-up to the drive point sampling, twenty-two monitoring wells were installed in 1991. Six additional wells were installed in early 1992. The well network was sampled from late 1991 through early 1992. The design of the groundwater extraction, treatment, and injection system has been on-going and is expected to be completed in 1992. 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.

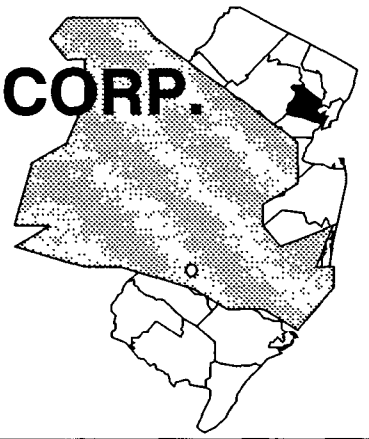
Environmental Progress

By removing the contaminated containers, soil, and liquids from the Tabernacle Drum Dump site, the EPA and the potentially responsible parties have reduced the potential for exposure to hazardous materials at the site while further cleanup activities are taking place.

Site Repository

Tabernacle Township Building, 163 Carranza Road, Tabernacle Township, NJ 08088

U.S. RADIUM CORP.
NEW JERSEY
EPA ID# NJD980654172



EPA REGION 2
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 1917 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 properties covering about 21 acres in the vicinity of the site, and 22 satellite properties located throughout the Cities of Orange, East Orange, and South Orange. Approximately 50,000 people live within a mile of the site. The vicinity and satellite properties are occupied by light industries, offices, houses, grocery stores, and apartments. The main site is located in a urban residential neighborhood.

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

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

Threats and Contaminants

Soil contains radium-226 and other radioactive materials. The radium-226 decays to radon gas and radon decay products which can concentrate in basements and other ground-level enclosed spaces. People who are directly exposed to radiation, inhale radioactive dust particles, or inadvertently ingest radioactive particles from 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: The EPA will be installing radon control systems and gamma radiation shielding at certain properties where elevated contaminant levels have been detected. In 1989, a fence was installed around the perimeter of the site to prevent trespassers from coming into contact with contaminated material.

Entire Site: The EPA is conducting an investigation to determine the nature and extent of contamination on the site. In addition, the EPA is investigating both vicinity and satellite properties for radium-contaminated soil. Once the study is completed, scheduled for 1993, 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. In addition, the installation of radon control systems at certain properties will minimize potential radiation exposures.

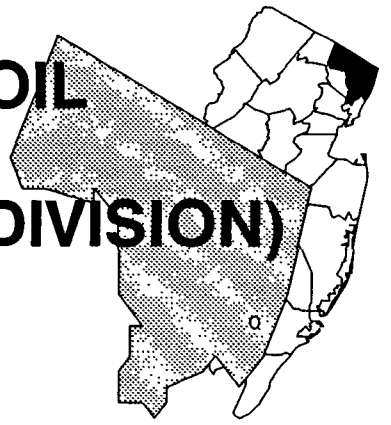
Site Repository

Orange City Public Library, 348 Main Street, Orange, NJ 07050

UNIVERSAL OIL PRODUCTS (CHEMICAL DIVISION)

NEW JERSEY

EPA ID# NJD002005106



EPA REGION 2

Bergen County
East Rutherford

Other Names:
UOP Chemical Division

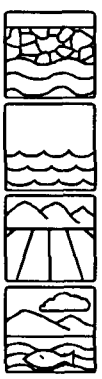
Site Description

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 Federal, State, and potentially responsible parties' actions.

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

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: Allied Signal, the parent company of Universal Oil Products, removed 950,000 gallons of contaminated water from the lagoon areas of the site in 1990. Of the 950,000 gallons of water removed, 350,000 gallons were treated and discharged on-site and 600,000 gallons were transported to and treated at a treatment facility in Newark. Over 1,000 cubic yards of contaminated soils were removed from the lagoon area and were transported to a hazardous waste landfill.

Entire Site: The potentially responsible party, under New Jersey Department of Environmental Protection and Energy (NJDPE) and 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 NJDPE, Allied Signal 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 threat of exposure to hazardous materials has been reduced and further environmental degradation has been prevented at the Universal Oil Products site. The investigations leading to the selection of final remedies for the site currently are taking place.

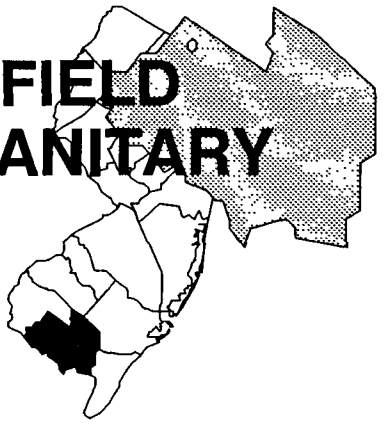
Site Repository

East Rutherford Memorial Library, 143 Boiling Spring Avenue, East Rutherford, NJ 07073

UPPER DEERFIELD TOWNSHIP SANITARY LANDFILL

NEW JERSEY

EPA ID# NJD980761399



EPA REGION 2
Cumberland County
Upper Deerfield Township

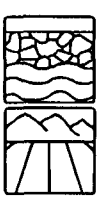
Site Description

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 and Energy, 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. In 1986, utilizing funds provided by the State of New Jersey, the Township installed a public water supply well and distribution system to provide potable water to residents in the area. Approximately 100 people live within a mile of the site, and the nearest residence is about 100 feet away. Upper 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: 09/08/83
Final Date: 09/21/84

Threats and Contaminants



Groundwater is contaminated with low levels of 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. People who drink or touch the contaminated groundwater may suffer adverse health affects. In addition, people who touch or accidentally ingest the contaminated soils may be at risk. The immediate threat to the residents in the vicinity of the landfill was eliminated by the installation of the alternate water supply in 1986.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase addressing 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 supply of 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. The results of the investigation showed that the groundwater and soil contamination associated with the site no longer pose a health threat under current or likely future land use. In 1991, it was determined that no further actions were necessary to address the contamination at the site. However, since groundwater contamination did exist in the vicinity of the landfill and because low levels of hazardous substances will remain on site, continued air and groundwater monitoring is necessary. A comprehensive monitoring program of the air and groundwater is currently being implemented and monitoring is expected to begin in late 1992.

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.

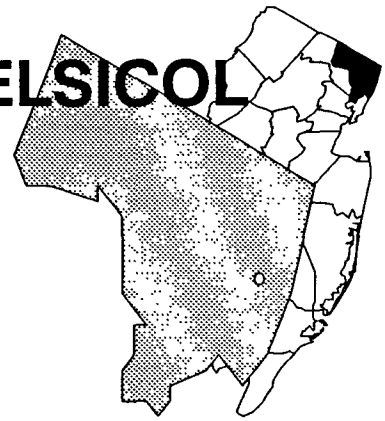
Environmental Progress

Provision of an alternate water supply has reduced the threat of exposure to contaminants in drinking water. After the EPA performed a detailed investigation, it was determined that the Upper Deerfield Township Sanitary Landfill site no longer posed a health threat. No cleanup actions are required except groundwater and air monitoring to ensure the safety of the site.

Site Repository

Cumberland County Library, 800 East Commerce Street, Bridgeton, NJ 08302

VENTRON/VELSICOL
NEW JERSEY
EPA ID# NJD980529879



EPA REGION 2
Bergen County
Wood-Ridge Borough

Other Names:
Berry's Creek
Thiokol Chemical
Wood-Ridge Chemical

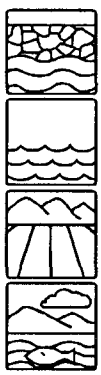
Site Description

The 40-acre Ventron/Velsicol site operated as a chemical processing plant from 1929 until 1974. During that time, approximately 160 tons of process waste were buried on site. The Ventron facilities were abandoned and demolished in 1974. Two buildings have been erected on site where the old Mercury processing plant stood. Presently, one of these buildings 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: 09/08/83
Final Date: 09/21/84

Threats and Contaminants



Groundwater and sediments on site 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. Nearby residents could be exposed to site-related contaminants when drinking or touching the water or sediments in the creek. Because wastes were dumped directly onto the ground, on-site workers also may be exposed to contaminated soils and sediments. The migration of site-related contaminants is threatening nearby wetlands.

Cleanup Approach

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

Response Action Status

Immediate Actions: In late 1990, soils contaminated with elevated levels of mercury were removed from nine surrounding residential properties and one publicly-owned tract. The contaminated soils were replaced with clean fill.

Entire Site: The EPA and the State of New Jersey have began investigating the 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 nature and extent 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. 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.

Environmental Progress

The removal of contaminated soils from nine residential properties and one publicly owned tract has reduced the threat of exposure to hazardous materials from the Ventron/Velsicol site while investigations leading to the selection of final cleanup remedies taking place.

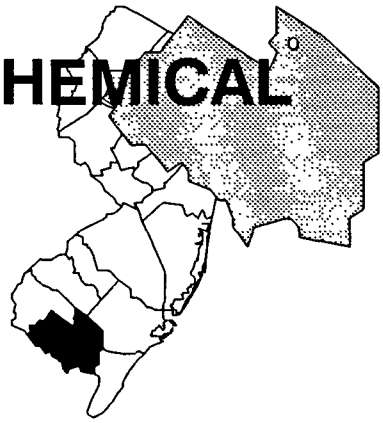
Site Repository

Carlstadt Public Library, 420 Hackensack Street, Carlstadt, NJ 07062

VINELAND CHEMICAL CO., INC.

NEW JERSEY

EPA ID# NJD002385664



EPA REGION 2
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 former chicken coops. 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 coops. 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: 09/08/83
Final Date: 09/21/84

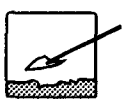
Threats and Contaminants

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 only with arsenic. 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 subject workers or trespassers to an increased exposure to 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.

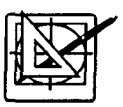
Cleanup Approach

The site is being addressed in five phases: initial actions and four long-term remedial phases focusing on plant site source control and migration management, and cleanup of the river and Union Lake sediments.

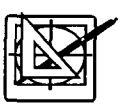
Response Action Status



Initial Actions: The EPA currently is boarding up the chicken coops and abandoned buildings, removing hazardous chemicals stored on site and fencing off the contaminated areas because the owners are planning to abandon the site.



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 1993.



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 by 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 1993. Construction is expected to be completed by late 1994. After construction, treatment of the contaminated groundwater is expected to take 13 years to complete.

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 of natural river flushing will then be used to complete cleanup of 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.

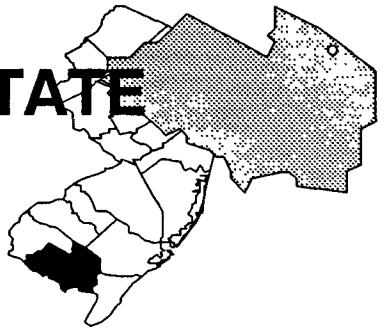
Environmental Progress

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.

Site Repository

Vineland Public Library, 1058 East Landis Avenue, Vineland, NJ 08360

VINELAND STATE SCHOOL
NEW JERSEY
EPA ID# NJD980529887



EPA REGION 2
Cumberland County
Vineland

Other Names:
Vineland Development Center (VDC)

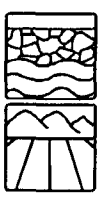
Site Description

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: 12/30/82
Final Date: 09/08/83

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 oil contaminated with PCBs 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 through immediate actions; further investigations showed that no other cleanup actions are required.

Response Action Status

Immediate Actions: The New Jersey Department of Environmental Protection and Energy (NJDEPE) installed three monitoring wells and sampled soils at the site. The City of Vineland extended its water main to the school and several homes near the site that previously used water from private wells. In 1988, the NJDEPE 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 determined that no further cleanup actions were needed at the site because of the following conditions: subsite 2 was cleaned up by the immediate actions described above; the State's study of the four remaining areas shows that low contamination levels do not pose a threat to human health; and 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 of soil remains protective 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.

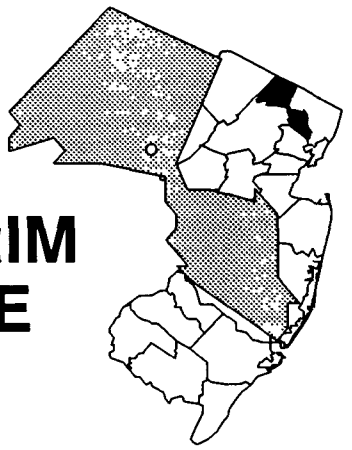
Site Repository

Vineland Public Library, 1058 East Landis Avenue, Vineland, NJ 08360

W.R. GRACE & CO., INC./ WAYNE INTERIM STORAGE SITE (USDOE)

NEW JERSEY

EPA ID# NJ1891837980



EPA REGION 2
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., Inc./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. In 1974, the company decontaminated the property, burying much of the materials to the then-established criteria. In 1975, the NRC released the land for unrestricted use, provided that the deed indicated the presence of radioactive material under the site's surface. In 1980, the EPA conducted an aerial survey that showed elevated radiation levels at the plant site, an adjacent school bus maintenance facility, a township park, the banks of Sheffield Brook, and the Pompton Plains railroad spur. Much of the off-site contamination was spread by runoff and water discharges from the site. From 1985 through 1987, the U.S. Department of Energy (DOE), acting under its authority through the 1984 Energy and Water Appropriations Act, which specifically addressed the W.R. Grace site, investigated and removed radioactively contaminated soils from the school bus maintenance facility, township park, and the banks of the Sheffield Brook, and stockpiled them at the W.R. Grace & Co., Inc. facility. This facility was acquired by DOE for this purpose. Radioactive process wastes, process equipment, and building rubble still are buried beneath 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: 09/08/83
Final Date: 09/21/84

Threats and Contaminants

The contaminants identified in the groundwater and surface water are radioactive particles in the thorium and uranium decay series. The cleanup and stockpiling of waste has decreased the health risk to the surrounding community. Radionuclide contamination in soil and sediment is still a potential concern at the Pompton Plains railroad spur.

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 DOE's "Formerly Utilized Sites Remedial Action Program" (FUSRAP). The DOE excavated and contained about 39,000 cubic yards of contaminated soil from all areas except the railroad spur area. A stockpile was constructed at the interim storage site to contain the contaminated soil. Another 70,000 cubic yards of contaminated wastes exist below-grade at the site. 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, the railroad spur area, and the material buried on site below the storage pile. Field work was completed in late 1991. The entire investigation is expected to be completed in 1994, at which time final cleanup remedies will be selected.

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. In accordance with an Interagency Agreement, a draft investigation report will be submitted to the EPA by mid-1993.

Environmental Progress

Initial cleanup activities were completed by the DOE in 1987, and close monitoring by the by the DOE and the EPA to ensure that radiation levels do not become elevated is keeping the site safe while further investigations leading to a selection of final cleanup technologies are underway.

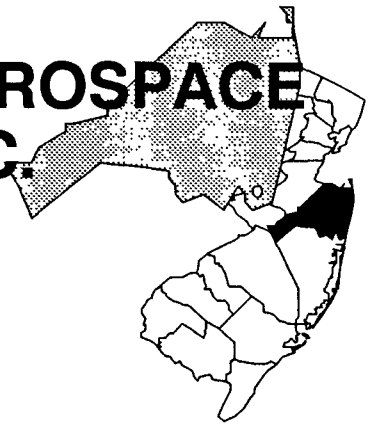
Site Repository

Wayne Municipal Library, 474 Valley Road, Wayne, NJ 07470

WALDICK AEROSPACE DEVICES, INC.

NEW JERSEY

EPA ID# NJD054981337



EPA REGION 2
Monmouth County
Sea Girt section of Wall Township

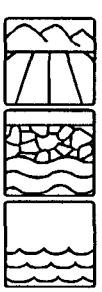
Site Description

The Waldick Aerospace Devices, Inc. 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 is being built just north of the site. 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 only. 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: 10/15/84
Final Date: 06/10/86

Threats and Contaminants



The main and auxiliary buildings are contaminated with low levels of petroleum hydrocarbons, pesticides, dyestuffs, and polycyclic aromatic hydrocarbons (PAHs). Contaminated soil and groundwater contain VOCs and heavy metals, primarily 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.

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 authorities excavated about 40 cubic feet of contaminated soil from the southeastern corner of the main building and about 40 cubic feet more from an area behind the building. In January 1985, after the facility was abandoned, the EPA discovered about 30 drums and other containers of varying sizes containing hazardous materials, as well as a storage cabinet of laboratory chemicals. The material was securely repackaged and shipped to a hazardous waste disposal facility.

Source Control: The EPA selected a remedy for controlling the source of contamination on the site in 1987 that featured: in-situ air stripping to treat contaminated soils; excavating all treated soils showing elevated levels of metal contamination and disposing of them off site; decontaminating or demolishing the buildings, depending on how severely they are undermined by excavation; installing additional groundwater monitoring wells; establishing an environmental monitoring program; and completely fencing the site to restrict access. The EPA began the engineering design for this remedy in 1988. Sampling conducted during the design phase determined that the originally selected air stripping technology for soils is not appropriate. Therefore, the remedy has been modified to include the on-site low temperature thermal treatment of contaminated soil prior to its disposal. The design was completed in late 1991 and final cleanup actions are expected to begin in 1992.

Off-Site Contamination: The EPA completed an investigation of the extent of groundwater, surface water, and stream sediment contamination and selected an interim cleanup remedy in March 1991. The interim remedy involves extracting contaminated groundwater and treating it by chemical precipitation to remove metals, followed by air stripping to remove VOCs. Once the groundwater is treated, it will be reinjected into the aquifer. Additional investigations will be conducted to determine a final cleanup remedy for the groundwater. Interim cleanup actions will begin once the engineering design of the selected remedy is completed. The design phase began in late 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, and securing the building, the EPA has reduced the potential for exposure to contamination at the Waldick Aerospace Devices site. Source control cleanup activities are scheduled to begin in 1992, while the design for the off-site contamination remedy in ongoing.

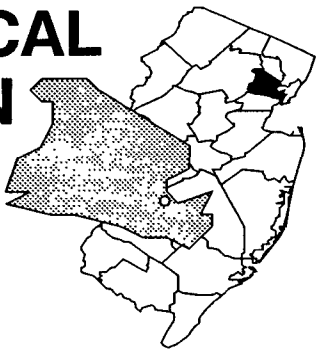
Site Repository

Wall Township Library, 2700 Allaire Road, Wall, NJ 07719

WHITE CHEMICAL CORPORATION

NEW JERSEY

EPA ID# NJD980755623



EPA REGION 2
Essex County
Newark

Site Description

The White Chemical Corporation site is a 4.4-acre, inactive facility that formerly manufactured acid chlorides and flame retardant compounds. The site is located in a heavily populated and industrialized area of Newark, Essex County, New Jersey. The site consists of five major buildings and three smaller, facility support buildings. White Chemical Corporation (WCC) operated the facility from 1983 until July 1990 when it ceased most operations. During its operational years WCC was issued numerous violations of the Resource Conservation and Recovery Act (RCRA) by the New Jersey Department of Environmental Protection and Energy (NJDEPE). Initially the EPA found over 10,000 55-gallon drums and other containers of hazardous substances precariously stacked or in other ways improperly stored throughout the site. Drums and other containers were found in various stages of deterioration, fuming or leaking their contents onto the soil. Other containers found on the site included 150 gas cylinders; 126 storage tanks, vats, and process reactors; hundreds of fiberpack drums; glass and plastic bottles; carboys; and boxes. In addition, an on-site laboratory was found to contain approximately 12,000 laboratory-size containers haphazardly stored on structurally unsound shelving, or stacked in piles on the floor. Site conditions suggest that the present unstable situation could lead to a catastrophic release of hazardous material that would likely affect the surrounding community. Mixtures of incompatible substances can lead to fire, explosion or release of vapors. Improper storage of incompatible substances on site could result in a rapidly spreading fire upon uncontrolled release, which could involve large quantities of flammable and toxic materials and result in a significant airborne release of toxic organic and inorganic chemicals. Approximately 12,000 people live and work within a one-quarter mile radius of the site. Exposed or potentially exposed populations include nearby residents, workers, trespassers, fire-fighting personnel and railway commuters. The predominant route of exposure is inhalation for all of the exposed populations, and direct contact for trespassers or fire-fighting personnel.

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

NPL LISTING HISTORY
Proposed Date: 05/09/91
Final Date: 09/25/91

Threats and Contaminants

Non-carcinogenic and carcinogenic adverse health effects have been associated with many of the contaminants identified on the site. Many of the substances will react upon contact with moisture or air, forming toxic and irritating substances. A catastrophic release would likely cause the generation of a plume that could contain hazardous concentrations of acid gases, or irritating and toxic substances which would significantly endanger the public and workers in the area.
Chronic inhalation of or direct contact with site contaminants could pose a serious health threat.

Cleanup Approach

The site is being addressed in three stages: emergency actions and two long-term remedial phases focusing on the cleanup of the surface contamination and of the remaining areas.

Response Action Status

Emergency Actions: A removal action to stabilize the site was initiated by NJDEPE in 1990, under the New Jersey Spill Compensation and Control Act. However, later in 1990, after removing 1,000 drums, NJDEPE requested that the EPA consider taking an interim cleanup action at the site. The EPA initiated its removal action late 1990, which included drum overpacking, separating incompatible substances, sampling chemicals, and further assessing the nature of the chemicals present.

Surface Contamination: In 1991, the EPA selected a remedy for the surface contamination at the site, which includes the tanks, drums, vats, laboratory-size containers and other containers. The selected remedy is a continuation of the initial actions which were initiated in 1990. To date, 4,200 empty drums have been shipped off the site; the remaining 6,700 have been staged, sampled and remain on the site. All of the 126 tanks have been inventoried; all laboratory-size containers have been staged and segregated; shock-sensitive material has been isolated. Off-site disposal to approved EPA facilities and recycling of material has begun. It is expected that all material will be removed off the site by the end of the summer of 1992.

Remaining Areas: Once the cleanup of the surface contamination is completed, the EPA plans to conduct a detailed investigation at the site for other possibly contaminated media (e.g., groundwater, surface water, soil, and buildings).

Site Facts: In May 1992, three potentially responsible parties, under an Unilateral Administrative Order, agreed to participate in the cleanup of the surface contamination at the site. The EPA will remove all the drums and its contents off site and the potentially responsible parties will perform the remaining cleanup work.

Environmental Progress

The EPA is presently maintaining 24-hour security at the inactive facility and is continuing to perform response activities. On-going actions addressing the surface contamination have reduced the threat of exposure to hazardous materials while future investigations addressing other possibly contaminated media are being planned.

Site Repository

Not established.

WILLIAMS PROPERTY
NEW JERSEY
EPA ID# NJD980529945

EPA REGION 2
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. The remaining residences along the Sigetown Road have been provided with a municipal water supply. The private wells at these homes are no longer in use. 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 Federal and State actions.

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

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. Nearby residents have been connected to the municipal water supply and, therefore, are no longer threatened by the contaminated groundwater. However, 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. 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: extracting and treating contaminated groundwater and discharging the cleaned water to the underlying aquifer; excavating contaminated soils and removing the soils to an off-site disposal facility for incineration; backfilling the excavation with clean soil, regrading it, and revegetating it; and providing an alternate water supply to nearby residents with polluted wells. Portions of the final cleanup remedy have been conducted by the EPA. Approximately 1,500 tons of contaminated soils were excavated and transported to a facility in South Carolina to be treated by incineration, with the ash to be reused as a cement aggregate. Restoration and revegetation activities of the excavation area were completed in the spring of 1991. In addition, 55-gallon drums, 5-gallon pails, and compressed gas cylinders found on the property were disposed of and warning signs and security gates were installed to restrict access to the site.

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 and Energy, 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. Both the State and the EPA currently are involved in cost recovery litigation with a potentially responsible party.

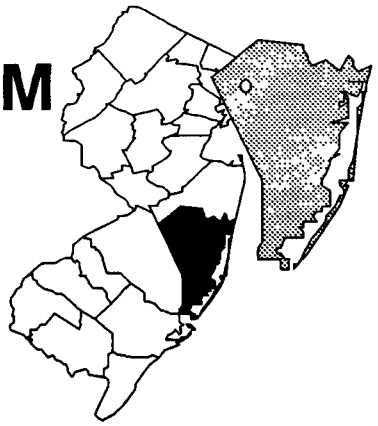
Environmental Progress

Removal of contaminated sludge and soil and the completion of most of the final remedy has reduced the potential for exposure to hazardous materials while remaining groundwater cleanup activities take place at the site.

Site Repository

Cape May County Public Library, Cape May Court House, Mechanic Street,
Cape May, NJ 08210

WILSON FARM
NEW JERSEY
EPA ID# NJD980532824



EPA REGION 2
Ocean County
Plumsted Township

Other Names:
Thiokol Corporation

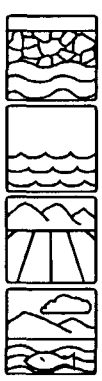
Site Description

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. The 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: 09/08/83
Final Date: 09/21/84

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 threat to public health 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 and Energy (NJDEPE) workers installed six groundwater monitoring wells, removed drums, and excavated and removed sludge, solid wastes, and approximately 620 cubic yards of contaminated soil. In addition, the party potentially responsible for site contamination is scheduled to perform other interim cleanup actions during 1992 which will address surface waste at the site.

Entire Site: In 1987, the NJDEPE 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.

Environmental Progress

The removal of drums and the excavation and removal of sludge, solid wastes, and contaminated soil have reduced the potential for exposure to contaminants at the Wilson Farm site while further studies of site contamination are taking place.

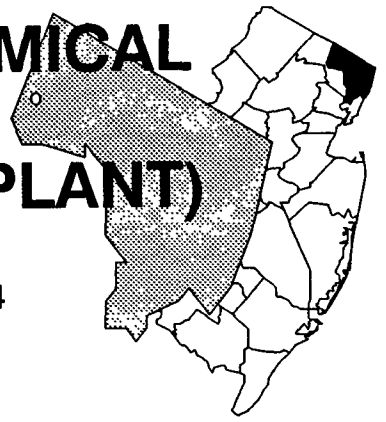
Site Repository

Ocean County Library, Main Library, 101 Washington Street, Toms River, NJ 08753

WITCO CHEMICAL CORP. (OAKLAND PLANT)

NEW JERSEY

EPA ID# NJD045653854



EPA REGION 2
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 and Energy (NJDEPE) 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 Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 06/24/88
Final Date: 10/04/89

Threats and Contaminants

Groundwater contained petroleum hydrocarbons, the VOCs toluene and ethyl benzene, and carbon disulfide and phthalates. Soil was 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.

Cleanup Approach

The site is being addressed through initial actions; further investigations showed that no other cleanup actions are required.

Response Action Status

Initial Actions: Under a 1982 directive from the NJDEPE, 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.

Entire Site: To ensure that Witco's cleanup meets standards, the EPA ordered the company to conduct a study of any remaining contamination. In 1992, Witco completed further groundwater and soil investigations to determine the nature and extent of any remaining contamination present on site. Based on the results of the investigations, the EPA determined that the initial actions conducted by the potentially responsible party have reduced contamination to within safety levels. A residential well situated between the site and the Town water supply wells will be monitored once a year for the next five years to ensure the effectiveness of the remedies.

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 initial actions completed by the potentially responsible party have eliminated the threat of exposure to contamination at the Witco Chemical Corp. (Oakland Plant) site. The EPA has determined that no further cleanup actions are needed at the site while monitoring continues for the next five years.

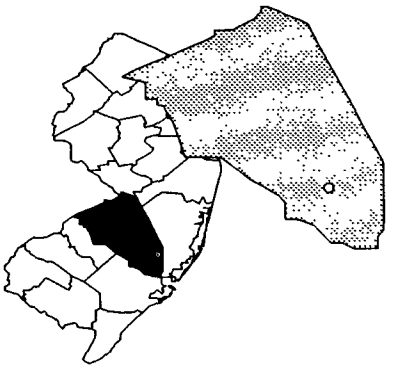
Site Repository

Free Public Library of Oakland, Municipal Plaza, Oakland, NJ 07436

WOODLAND ROUTE 532 DUMP

NEW JERSEY

EPA ID# NJD980505887



EPA REGION 2

Burlington County
Woodland Township

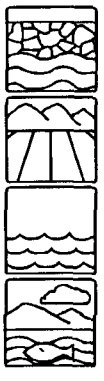
Site Description

The Woodland Route 532 Dump site is an inactive chemical waste dump covering about 20 acres along Route 532. Illegal dumping started after nearby residents forced abandonment of an almost identical site along Route 72 about 2 miles away from the Woodland Route 72 dump, which also is on the NPL. 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: 09/08/83
Final Date: 09/21/84

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. Sub-surface soils are contaminated with VOCs, metals, and semi-volatiles. 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 may be at risk from direct contact with contaminated sludge, soil, surface water or sediments. People who drink contaminated groundwater also 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 three stages: immediate actions and two long-term remedial phases directed at cleanup of the soil and groundwater and cleanup of the sub-surface soils.

Response Action Status

Immediate Actions: In 1986, a security fence was constructed to restrict site access.

Soil and Groundwater Contamination: 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 early 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.

Sub-surface Soils Contamination: In 1992, an investigation began to explore the nature and extent of sub-surface soils contamination at the site. The study will define the contaminants of concern and will recommend effective alternatives for final cleanup. The investigation is expected to be completed in 1993. Once completed, the EPA will evaluate the study findings and select a final remedy.

Site Facts: In 1991, an Administrative Order on Consent was signed between the State and several potentially responsible parties. The parties agreed to pay for the groundwater cleanup and perform a study on the sub-surface soils.

Environmental Progress

By constructing a fence to limit site access and removing a substantial amount of waste materials, the EPA, the State, 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 and an investigation to explore sub-surface soils contamination is underway.

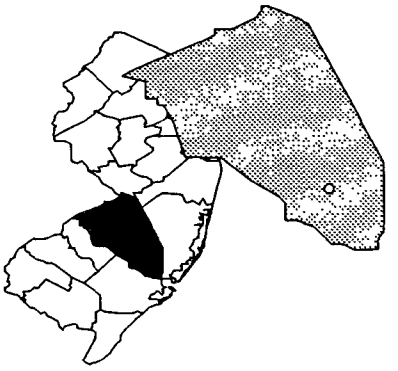
Site Repository

Woodland Township Municipal Building, Main Street, Chatsworth, NJ 08019

WOODLAND ROUTE 72 DUMP

NEW JERSEY

EPA ID# NJD980505879



EPA REGION 2

Burlington County
Woodland Township

Other Names:
Manahawkin Site

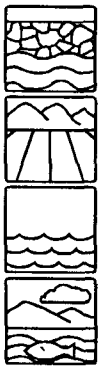
Site Description

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 called the Woodland Route 532 Dump site. Both sites are on the NPL; 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. 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, State and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 09/08/83
Final Date: 09/21/84

Threats and Contaminants

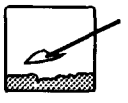


Groundwater is contaminated with volatile organic compounds (VOCs), semi-volatiles, heavy metals, and pesticides. Two areas on the site have elevated levels of gamma radioactivity (from thorium-232, radium-226, and uranium-238). Off-site sediments contain lead. Surface and subsurface soils are contaminated with metals, VOCs, semi-volatiles, polychlorinated biphenyls (PCBs), and the pesticide DDT. 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 somewhat restrict site access, but there is evidence that children and adults use the property for recreation. People may be at risk from direct contact with contaminated sludge, soil, surface water or sediments. In addition, people who drink contaminated groundwater may be at risk. Pollutants migrating from the site may be harmful to wildlife inhabiting the Pinelands National Reserve.

Cleanup Approach

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

Response Action Status



Immediate Actions: In 1986, a security fence was constructed to restrict site access.

Soil and Groundwater Contamination: The state conducted a study of soil and groundwater pollution at the site in 1989. In 1990, the EPA selected the cleanup remedy, which includes excavating all contaminated surface materials and disposing of them at an approved off-site facility, and installing a groundwater treatment system consisting of air stripping, metals removal, biological treatment, and advanced oxidation or carbon adsorption. By early 1991, waste materials were removed and disposed of by the potentially responsible parties at an EPA-approved facility. Design of the groundwater cleanup remedy currently is underway.

Sub-surface Soil Contamination: In 1992, an investigation began to explore the nature and extent of sub-surface soil contamination at the site. The study will define the contaminants of concern and will recommend effective alternatives for final cleanup. The investigation is expected to be completed in 1993. Once completed, the EPA will evaluate the study findings and select a final remedy for final sub-surface soil contamination.

Site Facts: In 1991, an Administrative Order on Consent was signed between the State and several potentially responsible parties. The parties agreed to pay for the groundwater cleanup and to perform a study of the sub-surface soil contamination.

Environmental Progress

The construction of a fence to restrict site access and removal and disposal of contaminated soil have reduced the threat of exposure to the public and the environment at the Woodland Route 72 Dump Site while groundwater cleanup activities are being designed and an investigation to explore sub-surface soils contamination is underway.

Site Repository

Woodland Township Municipal Building, Main Street, Chatsworth, NJ 08019

GLOSSARY

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. A table of common toxic chemicals found at NPL sites, their sources, and their potential threats is located on page G-15

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). This type of Order is not signed by the PRPs and does not require approval by a judge.

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 the contaminated material 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.

Applicable or Relevant and Appropriate Requirements (ARARs): Federal, State, or local laws which apply to Superfund activities at NPL sites. Both emergency and long-term actions must comply with these laws or provide sound reasons for allowing a waiver. ARARs must be identified for each site relative to the characteristics of the site, the substances found at the site, or the cleanup alternatives being considered for the site.

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 percent or more of the drinking water of an area.

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

Asbestos: A mineral fiber that can pollute air or water and is known to cause cancer or asbestosis when inhaled.

Attenuation: The naturally occurring process by which a compound is reduced in concentration over time through adsorption, degradation, dilution, 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 ground-water.

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

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

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

Carbon Disulfide: A degreasing agent formerly used extensively for parts washing. This compound has both inorganic and organic

properties, which increase cleaning efficiency. However, these properties also cause chemical reactions that increase the hazard to human health and the environment.

Carbon Treatment: [see Carbon Adsorption].

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

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

Characterization: The sampling, monitoring, and analysis of a site to determine the extent and nature of toxic releases. Characterization provides the basis for acquiring the necessary technical information to develop, screen, analyze, and select appropriate cleanup techniques.

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

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

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

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

Comment Period: A specific interval during which the public can review and comment on various documents and EPA actions related to site cleanup. For example, a comment period is provided when the EPA proposes to add sites to the NPL. Also, 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. The goals of community relations programs include creating an understanding of EPA programs and related actions, assuring public input into decision-making processes related to affected communities, and making certain that the Agency is aware of, and responsive to, public concerns. Specific community relations activities are required in relation to Superfund cleanup actions [see Comment Period].

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

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

Confined Aquifer: An aquifer in which groundwater is confined under pressure that is significantly greater than atmospheric pressure.

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, or the costs incurred by the government that the parties will reimburse, and 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.

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.

Deletion: A site is eligible for deletion from the NPL when Superfund response actions at the site are complete. A site is deleted from the NPL when a notice is published in the Federal Register.

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.

Dioxin: An organic chemical by-product of pesticide manufacture which is known to be one of the most toxic man-made chemicals.

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.

Ecological Assessment: A study of the impact of man-made or natural activity on living creatures and their environment.

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

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

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

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

Enforcement: EPA, State, or local legal actions taken against parties to facilitate settlements; to compel compliance with laws, rules, regulations, or agreements; 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. In this volume, the feasibility study is referred to as a site study [see also Remedial Investigation].

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

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

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

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

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

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

General Notice Letter: [See Notice Letter].

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

Good Faith Offer: A voluntary offer, generally in response to a Special Notice letter, made by a potentially responsible party, consisting of a written proposal demonstrating a potentially responsible party's qualifications and willingness to perform a site study or cleanup.

Groundwater: 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. Hazardous waste possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appears on special EPA lists.

Heavy Metals: Metallic elements with high atomic weights, such as arsenic, lead, mercury, and cadmium. Heavy metals are very hazardous even at low concentrations and tend to accumulate in the food chain.

Herbicide: A chemical pesticide designed to control or destroy plants, weeds, or grasses.

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

Hydrocarbons: Chemical compounds that consist entirely of hydrogen and carbon.

Hydrology: The properties, distribution, and circulation of water.

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

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

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

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

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

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

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

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

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

Interagency Agreement: A written agreement between the EPA and a Federal agency that has the lead for site cleanup activities, setting forth the roles and responsibilities of the agencies for performing and overseeing the activities. States often are parties to interagency agreements.

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

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

Landfarm: To apply waste to land 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].

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 [n]: The liquid that trickles through or drains from waste, carrying soluble components from the waste.

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.

Long-term Response Action: An action which requires a continuous period of on-site activity before cleanup goals are achieved. These actions typically include the extraction and treatment of groundwater and monitoring actions.

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

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

Mill Tailings: [See Mine Tailings].

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

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

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

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

Natural Attenuation: [See Attenuation].

Neutrals: Organic compounds that have a relatively neutral pH, complex structure and, due to their organic bases, are easily absorbed into the environment. Water is the most commonly known neutral, however, naphthalene, pyrene, and trichlorobenzene also 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 from the PRPs within that period. [See also Good Faith Offer].

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 may be 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.

Pesticide: A substance or mixture of substances intended to prevent, destroy, or repel any pest. If misused, pesticides can accumulate in the foodchain and contaminate the environment.

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

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

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

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

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

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

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

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

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

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

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

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

Potentially Responsible Parties (PRPs): Parties associated with a Superfund site who may be liable for the cost of remedying the release of hazardous substances. This may include owners or operators of the site or transporters who disposed of materials at the site. PRPs may admit liability, or liability may be determined by a court of law. PRPs may sign a Consent Decree or Administrative Order on Consent to participate in the site cleanup without admitting liability.

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

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

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

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

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. In this volume, the remedial investigation is referred to as a site study [see also Feasibility Study].

Remedial Project Manager (RPM): The EPA or State official responsible for overseeing cleanup actions at the 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 the particulates remaining in air after the air passes through a scrubber.

Resource Conservation and Recovery Act (RCRA): A Federal law that established a regulatory system to track hazardous substances from the time of generation to disposal. The law requires safe and secure procedures to be used in treating, transporting, storing, and disposing of hazardous substances. RCRA is designed to prevent new, uncontrolled hazardous waste sites.

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

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

Scrubber: An air pollution control 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 the storage of liquids, usually in the form of leachate, from waste disposal areas. The liquid gradually leaves the pit by moving through the surrounding soil.

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

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

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

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

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

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

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

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

Soil Gas: Gaseous elements and compounds that occur in the small spaces between particles of soil. Such gases can move through or leave the soil or rock, depending on changes in pressure.

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

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

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

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

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

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

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

Special Notice Letter: [See Notice Letter].

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

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

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

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

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

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

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

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

Trichloroethylene (TCE): A stable, colorless liquid with a low boiling point. TCE has many industrial applications, including use as a solvent and as a metal degreasing agent. TCE may be toxic to people when inhaled, ingested, or through skin contact and can damage vital organs, especially the liver [see Volatile Organic Compounds].

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

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

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

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

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

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

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

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

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

Water Table: The upper surface of the groundwater.

Weir: A barrier to divert water or other liquids.

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

Some Common Contaminants at NPL Sites

Contaminant Category	Example Chemical Types	Sources	Potential Health Threats*
Heavy Metals	Arsenic, Barium, Beryllium, Cadmium, Cobalt, Copper, Chromium, Lead, Manganese, Mercury, Nickel, Silver, Selenium, Zinc	Electroplating, batteries, paint pigments, photography, smelting, thermometers, fluorescent lights, solvent recovery	Tumors, cancers, and kidney, brain, neurological, bone and liver damage
Volatile Organic Compounds (VOCs)	Trichloroethylene (TCE), Perchloroethylene (PCE), Acetone, Benzene, Ketone, Methyl chloride, Toluene, Vinyl Chloride, Dichlorethylene	Solvents and degreasers, gasoline octane enhancers, oils and paints, dry cleaning fluids, chemical manufacturing.	Cancers, kidney and liver damage, impairment of the nervous system resulting in sleepiness and headaches, leukemia
Pesticides/ Herbicides	Chlordane, DDT 4-4, DDE, Heptachlor, Aldrin, Endrin, Atrazine, Dieldrin, Toxaphene	Agricultural applications, pesticide and herbicide production	Various effects ranging from nausea to nervous disorders. Dioxin is a common by-product of the manufacture of pesticides and is both highly toxic and a suspected carcinogen.
Polychlorinated biphenyls (PCBs)	—	Electric transformers and capacitors, insulators and coolants, adhesives, caulking compounds, carbonless copy paper, hydraulic fluids.	Cancer and liver damage.
Creosotes	Polyaromatic hydrocarbons (PAHs), Polynuclear aromatics (PNAs), Phenolic Tars, Pentachlorophenol (PCP)	Wood preserving, fossil fuel combustion	Cancers and skin ulcerations with prolonged exposure
Radiation (Radionuclides)	Radium-226, Radon, Uranium-235, Uranium-238	Mine tailings, radium products, natural decay of granites	Cancer

Sources *Toxic Chemicals—What They Are, How They Affect You (EPA, Region 5)*
Glossary of Environmental Terms (EPA, 1988)

**The potential for risk due to these contaminants is linked to a number of factors; for example, the length and level of exposure and environmental and health factors such as age.*

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