Introduction

The *Publicly Funded Cleanups Site Status Report 2002* details efforts by the New Jersey Department of Environmental Protection's (NJDEP) Site Remediation and Waste Management Program to investigate and clean up contaminated properties using public funds. NJDEP issues the *Publicly Funded Cleanups Site Status Report* every year pursuant to P.L. 1997, chapter 234, the state legislation that dedicated appropriations of New Jersey's annual Corporate Business Tax receipts for site investigations and cleanups.

The report summarizes work conducted through December 31, 2002 at 235 sites in the Remedial Response Element of the Division of Remediation Management and Response, including 52 federal Superfund sites where NJDEP is working with the United States Environmental Protection Agency (USEPA) to resolve environmental problems. Sites covered in this report include industrial facilities where operational procedures resulted in discharges of hazardous substances to the environment, inactive landfills that are leaching contaminants into the ground water or emitting methane gas, gasoline stations with leaking underground storage tanks, and illegal hazardous waste disposal sites. Many sites are unknown source ground water contamination areas where municipal or private potable wells have been affected and which were designated Immediate Environmental Concern (IEC) cases by NJDEP. These unknown source areas represent an increasing proportion of the sites addressed in this report.

Most of the sites summarized here are being investigated and cleaned up entirely with public funds because the parties responsible for the contamination are unknown or unwilling or unable to conduct the work. Responsible parties are assisting in the remedial activities at several sites. The Site Remediation and Waste Management Program was allocated approximately $25 million in Corporate Business Tax revenues to conduct publicly funded site investigations and cleanups in 2002. The federal Superfund program, 1981 and 1986 Hazardous Discharge Bond Funds and the Hazardous Discharge Site Cleanup Fund were also significant sources of funding for investigative and remedial activities at sites in this report during the past year.

For a thorough discussion of the types of activities conducted by NJDEP and USEPA at these sites, please review the section entitled "The Remedial Process" **http://www.state.nj.us/dep/srp/publications/site_status/2002/pdf/remedial_process.pdf**. It provides an in depth explanation of the investigation, design, construction and operation and maintenance phases of the remedial process. The report also contains a list of "Completed Sites" **http://www.state.nj.us/dep/srp/publications/site_status/2002/pdf/completed_sites.pdf** where all investigation and remedial work are finished. Also available is "Site Transfers" **http://www.state.nj.us/dep/srp/publications/site_status/2002/pdf/transfer.pdf** , a list of contaminated sites that were initially addressed with public funds, but where the responsible parties ultimately agreed to complete the necessary work with USEPA and/or NJDEP oversight.

In addition to these site descriptions, the Site Remediation and Waste Management Program maintains the "Known Contaminated Sites in NJ" list **http://www.state.nj.us/dep/srp/kcs-nj/**, which lists all known sites, both privately and publicly funded, in New Jersey.

Site Descriptions by County

Alphabetical Index of Site Descriptions by Site Name

Site Name	Type	County
1st Street Ground Water Contamination	State Lead-IEC	Union
1603 Dumont Terrace	State Lead-IEC	Monmouth
2043 Ocean Heights Avenue	State Lead-IEC	Atlantic
23 Kerhart Avenue	Non Superfund	Camden
243 North Texas Avenue	Non Superfund	Atlantic
398 Olden Avenue	State Lead-IEC	Mercer
5 Devon Avenue	Non Superfund	Burlington
661 South Broad Street	Non Superfund	Salem
A-Z Automotive Repair Center	Non Superfund	Passaic
Absecon Lighthouse	Non Superfund	Atlantic
Adron Inc.	Non Superfund	Morris
Alan & Son Car Care	State Lead-IEC	Somerset
Alexander Cleaners	Non Superfund	Bergen
Alfonso's Restaurant	State Lead-IEC	Camden
Allendale Borough Water Department Well Field Contamination	State Lead- IEC	Bergen
Allendale Road Ground Water Contamination	State Lead-IEC	Cape May
Amoco Service Station Camden City	Non Superfund	Camden
Amoco Service Station Milltown Borough	State Lead-IEC	Middlesex
Amoco Service Station Union City	Non Superfund	Hudson
Amwell Road Ground Water Contamination	State Lead-IEC	Somerset
Arky Property	Non Superfund	Monmouth
Arrowhead Road Ground Water Contamination	State Lead-IEC	Hunterdon
Arthur Gundacker Property	Non Superfund	Middlesex
Asbestos Dump	Superfund	Morris
Atco Avenue Ground Water Contamination	State Lead-IEC	Camden
Atlantic Resources Corporation	Superfund	Middlesex
B&V Tailoring and Cleaning	State Lead-IEC	Morris
Babcock & Forest Walk Ground Water Contamination	Non Superfund	Atlantic
Bayville Russo Gas	State Lead- IEC	Ocean
Beachwood & Veeder Avenues Ground Water Contamination	Non Superfund	Ocean
Beesley's Point Ground Water Contamination	State Lead-IEC	Cape May
Bergen County Sanitary Landfill	Non Superfund	Bergen
Big Hill Sanitary Landfill	Non Superfund	Burlington
Black Brook Treatment Plant	State Lead-IEC	Morris
Blue Bell Estates Ground Water Contamination	State Lead-IEC	Gloucester
Bog Creek Farm	Superfund	Monmouth
Bridgeton Avenue Ground Water Contamination	State Lead-IEC	Cumberland
Bridgeton City Water Department Well Field Contamination	State Lead-IEC	Cumberland
Brook Industrial Park	Superfund	Somerset
Burning Hollow Road Ground Water Contamination	State Lead-IEC	Bergen
Burnt Fly Bog	Superfund	Monmouth
Camden City Water Department Parkside Well Field Contamination	State Lead-IEC	Camden
Cheesequake State Park	State Lead-IEC	Middlesex
Chemical Components Incorporated	Non Superfund	Morris
Chemical Insecticide Corporation	Superfund	Middlesex
Chester Borough Ground Water Contamination	State Lead-IEC	Morris
Christ Care United Missionary	State Lead-IEC	Camden
Citgo Service Station North Brunswick	State Lead-IEC	Middlesex
Citgo Service Station Upper Township	State Lead-IEC	Cape May
Claire Drive Ground Water Contamination	State Lead-IEC	Somerset
Cleaveland Industrial Center	Non Superfund	Morris

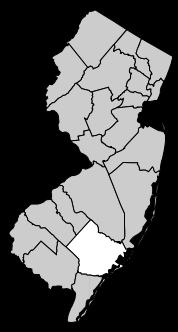
Site Name	Type	County
Collingswood Borough Water Department Well Field Contamination	State Lead-IEC	Camden
Combe Fill North Landfill	Superfund	Morris
Combe Fill South Landfill	Superfund	Morris
Cornell Dubilier Electronics Incorporated	Superfund	Middlesex
Cosden Chemical Coatings Corporation	Superfund	Burlington
Cranberry Lake Ground Water Contamination	State Lead-IEC	Sussex
Cross Roads Ground Water Contamination	State Lead-IEC	Morris
Crown Vantage Landfill	Non Superfund	Hunterdon
Deerfield Township Ground Water Contamination	State Lead-IEC	Cumberland
Delancy Avenue Ground Water Contamination	State Lead-IEC	Atlantic
Delsea Drive & Hall Avenue Ground Water Contamination	State Lead-IEC	Gloucester
Denzer & Schafer X Ray Company	Superfund	Ocean
DeRewal Chemical Company	Superfund	Hunterdon
Dogwood Drive Ground Water Contamination	State Lead-IEC	Morris
Domi Drive Ground Water Contamination	State Lead-IEC	Cape May
Dover Town Water Department Well 4	Superfund	Morris
East Hanover Township Regional Ground Water Contamination	State Lead-IEC	Morris
Eastwoods Development Ground Water Contamination	State Lead-IEC	Gloucester
Edgewood Village Mobile Home Park	Non Superfund	Cape May
Edison Road & Cliffside Drive Ground Water Contamination	State Lead-IEC	Warren
Electronic Parts Specialty Company	Non Superfund	Burlington
Elk Township Municipal Building Ground Water Contamination	State Lead-IEC	Gloucester
Ellis Property	Superfund	Burlington
Elm Avenue & 9th Street Ground Water Contamination	State Lead-IEC	Somerset
Elmer Road East Ground Water Contamination	State Lead-IEC	Cumberland
Emmell's Septic Landfill	Superfund	Atlantic
Eric's Main Street Mobil Service Station	State Lead-IEC	Hunterdon
Essex Fells Water Department Well 13	State Lead-IEC	Essex
Exxon Service Station Lakehurst Borough	Non Superfund	Ocean
Fairfield Adult Medical Day Care	State Lead-IEC	Cumberland
Fazzio Sanitary Landfill	Non Superfund	Camden
Federal Creosote Company	Superfund	Somerset
Fenimore Sanitary Landfill	Non Superfund	Morris
Flemington Water Department Well 7	State Lead-IEC	Hunterdon
Florence Land Recontouring Incorporated Landfill	Superfund	Burlington
Foundations and Structures (F&S) Sanitary Landfill	Non Superfund	Cape May
Franklin Burn Sites (1-7)	Superfund	Gloucester
Fried Industries Incorporated	Superfund	Middlesex
Fuelmart Incorporated	Non Superfund	Ocean
Gagliardi Demolition	Non Superfund	Cumberland
Garden State Cleaners	Superfund	Atlantic
Gary's Gas & Go	State Lead-IEC	Cape May
Genoa Avenue Ground Water Contamination	State Lead-IEC	Atlantic
Germania Gardens Ground Water Contamination	State Lead-IEC	Atlantic
GESG Reclamation Material Incorporated	Non Superfund	Sussex
Giordano Lane Ground Water Contamination	State Lead-1EC	Atlantic
G J Redner Incorporated	Non Superfund	Passaic
Glen Ridge Radium	Superfund	Essex
Glenwood Terrace Ground Water Contamination	State Lead-IEC	Somerset
Grand Street Mercury	Superfund	Hudson
Grant Industries Incorporated	State Lead-IEC	Bergen
Greenbriar Avenue Ground Water Contamination	State Lead-IEC	Atlantic
Harborage Avenue & Dockage Road Ground Water Contamination	State Lead-IEC	Ocean
Hemlock Avenue Landfill	Non Superfund	Sussex
Higgins Disposal Services Incorporated	Superfund	Somerset

Site Name	Type	County
Higgins Farm	Superfund	Somerset
High Bridge Water Department Well Field Contamination	State Lead-IEC	Hunterdon
Hope Auto Care	Non Superfund	Warren
Hopewell Borough Water Department Well 4	State Lead-IEC	Mercer
Horseshoe Road	Superfund	Middlesex
Hudson County Chromate-Public	Non Superfund	Hudson
Iceland Coin Laundry & Dry Cleaning	Superfund	Cumberland
Ideal Cooperage Incorporated	Non Superfund	Hudson
Imperial Oil Company	Superfund	Monmouth
Independence Township Ground Water Contamination	State Lead-IEC	Warren
Industrial Latex	Superfund	Bergen
Ivins & Madison Avenues Ground Water Contamination	State Lead-IEC	Atlantic
Jack's Auto Service Station	Non Superfund	Gloucester
James H. James Landfill	Non Superfund	Ocean
John L. Armitage & Company	State Lead-IEC	Essex
Joseph Roller Leather Company	Non Superfund	Essex
Kauffman & Minteer Incorporated	Superfund	Burlington
Kenvil Ground Water Contamination	State Lead-IEC	Morris
Kingtown Diesel	Non Superfund	Morris
Lake Shore Drive Ground Water Contamination	State Lead-IEC	Atlantic
Lang Property	Superfund	Burlington
Liberty State Park	Non Superfund	Hudson
Lipari Landfill	Superfund	Gloucester
Livingston Township Water Department Well 11	State Lead-IEC	Essex
Lusardi's Cleaners	Non Superfund	Morris
Magnolia Avenue Ground Water Contamination	State Lead-IEC	Monmouth
Manchester Machinery & Salvage Company	Non Superfund	Gloucester
Martin Aaron Incorporated	Superfund	Camden
Matt Drive Ground Water Contamination	State Lead-IEC	Essex
Matteo Iron & Metal	Non Superfund	Gloucester
McFarland's Service Station	State Lead-IEC	Somerset
Metaltec Aerosystems	Superfund	Sussex
Mobil Service Station Frenchtown Borough	State Lead-IEC	Hunterdon
Monitor Devices Incorporated	Superfund	Monmouth
Montclair & West Orange Radium Contamination	Superfund	Essex
Montgomery Township Housing Development	Superfund	Somerset
Municipal Sanitary Landfill Authority	Non Superfund	Hudson
Nascolite Corporation	Superfund	Cumberland
Neighborhood Garage	State Lead-IEC	Middlesex
Nicholas Drive Ground Water Contamination	State Lead-IEC	Gloucester
Nicoletti Road Ground Water Contamination	State Lead-IEC	Ocean
Noble Oil Company	Non Superfund	Burlington
North Main Street Ground Water Contamination	State Lead-IEC	Gloucester
North Maple Avenue Ground Water Contamination	State Lead-IEC	Ocean
North Shore Water Associates	State Lead-IEC	Sussex
North Third Street Ground Water Contamination	State Lead-IEC	Camden
Oak Ridge Road Ground Water Contamination	State Lead-IEC	Passaic
Old Rifle Camp Road Ground Water Contamination	State Lead-IEC	Passaic
Paperboard Specialties Incorporated	Non Superfund	Passaic
Parsippany-Troy Hills Water Department Wells 4 & 4A	State Lead-IEC	Morris
Petro 31 Service Station	State Lead-IEC	Warren
Pitt Street Ground Water Contamination	State Lead-IEC	Middlesex
Plaza Gas & Car Wash	State Lead-IEC	Cape May
Pleasant Woods Ground Water Contamination	State Lead-IEC	Atlantic
Pohatcong Valley Ground Water Contamination	Superfund	Warren

Site Name	Type	County
Pratt Gabriel	Non Superfund	Passaic
Prices Landfill 1	Superfund	Atlantic
Princeton Farms Ground Water Contamination	State Lead-IEC	Mercer
Princeton Gamma Technical Incorporated	Non Superfund	Somerset
Prospect Street Ground Water Contamination	State Lead-IEC	Morris
Puchack Well Field	Superfund	Camden
Red Horse Shoppes Incorporated	State Lead-IEC	Hunterdon
Research Organics Inorganics	Non Superfund	Essex
Rex Avenue Ground Water Contamination	State Lead-IEC	Gloucester
Rocky Hill Municipal Well	Superfund	Somerset
Roebling Steel Company	Superfund	Burlington
Route 17 & Pleasant Road Ground Water Contamination	State Lead-IEC	Bergen
Route 202 Corridor Ground Water Contamination	State Lead-IEC	Somerset
Route 206 Andover	Non Superfund	Sussex
Route 22 Petroleum	State Lead-IEC	Somerset
Route 50 Ground Water Contamination	State Lead-IEC	Cape May
Roycefield Road Ground Water Contamination	Non Superfund	Somerset
Schaffernoth's Nursery	State Lead-IEC	Hunterdon
Shoreco North	Non Superfund	Bergen
Shoreco South	Non Superfund	Bergen
Somerville Borough Sanitary Landfill	Non Superfund	Somerset
South Black Horse Pike Ground Water Contamination	State Lead-IEC	Gloucester
South Brunswick Asphalt	Non Superfund	Ocean
Southeast Boulevard Ground Water Contamination	State Lead-IEC	Cumberland
South Jersey Clothing Company	Superfund	Atlantic
Spring Lane Well Contamination	State Lead-IEC	Somerset
Stafford Township Landfill	Non Superfund	Ocean
Stephen Drive & Linda Lane Ground Water Contamination	State Lead-IEC	Camden
Stor Dynamics Corporation	Non Superfund	Bergen
Struthers Dunn Incorporated	Non Superfund	Gloucester
Sunoco Service Station Branchburg Township	State Lead-IEC	Somerset
Sunset Ridge Ground Water Contamination	State Lead-IEC	Somerset
Supreme Petroleum Company of NJ	State Lead-IEC	Camden
Syncon Resins	Superfund	Hudson
Texaco Service Station Burlington City	Non Superfund	Burlington
The Decorators Well Contamination	State Lead-IEC	Camden
Trenton Fibre Drum Company Incorporated	Non Superfund	Mercer
Tunis Cox Road & Coddington Road	State Lead-IEC	Hunterdon
Tysely Road Ground Water Contamination	State Lead-IEC	Somerset
US Radium Corporation	Superfund	Essex
US Route 22 & Mountain Road Ground Water Contamination	State Lead-IEC	Hunterdon
Veronica Lane & Lillian Drive Ground Water Contamination	State Lead-IEC	Gloucester
Villas Ground Water Contamination	State Lead-IEC	Cape May
V Ottilio & Sons	Non Superfund	Essex
Vineland Chemical Company Incorporated	Superfund	Cumberland
Waldick Aerospace Devices Incorporated	Superfund	Monmouth
Washington Township Well # 18	State Lead-IEC	Gloucester
Welsbach General Gas Mantle Sites (Camden Radiation)	Superfund	Camden
Western Boulevard Ground Water Contamination	State Lead-IEC	Ocean
Wheat Road & Route 40 Ground Water Contamination	State Lead-IEC	Atlantic
White Chemical Corporation	Superfund	Essex
White Horse Pike Ground Water Contamination	State Lead-IEC	Atlantic
Whitehouse Station Ground Water Contamination	State Lead-IEC	Hunterdon
William Hurley Industrial Complex	Non Superfund	Monmouth
Williams Property	Superfund	Cape May

Site Name	Type	County
Willocks Court Ground Water Contamination	State Lead-IEC	Hunterdon
Winslow Road Ground Water Contamination	State Lead-IEC	Gloucester
Winslow Township Sanitary Landfill	Non Superfund	Camden
Woods Road Ground Water Contamination	State Lead-IEC	Somerset
Woodstown Pilesgrove Sanitary Landfill	Non Superfund	Salem
Yard Road Ground Water Contamination	State Lead-IEC	Mercer
Zion Road Ground Water Contamination	State Lead-IEC	Atlantic
Zschiegner Refining Company	Superfund	Monmouth

Atlantic County



Atlantic County Index of Sites

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Ivins & Madison Avenues Ground Water Contamination	12
Pleasant Woods Ground Water Contamination	13
Prices Landfill 1	14
South Jersey Clothing Company	16
Wheat Road & Route 40 Ground Water Contamination	17
White Horse Pike Ground Water Contamination	18
Zion Road Ground Water Contamination	19

2043 Ocean Heights Avenue

2043 Ocean Heights Avenue

Egg Harbor Township Atlantic County

BLOCK: 5210 **LOT:** 13

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.75 Acre

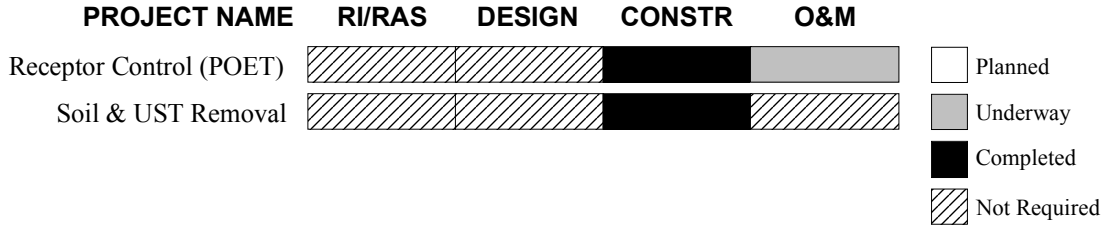
SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$1,000
Corporate Business Tax	$279,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site operated as a gasoline service station for approximately 18 years, until 1983. It is now abandoned. In 2000, the Atlantic County Health Department determined that the private potable well at a residence adjacent to the gas station was contaminated with benzene and dichloroethane (DCA) at levels exceeding the New Jersey Drinking Water Standards for these volatile organic compounds. A Point-of-Entry Treatment (POET) system was installed on the well with funds provided by NJDEP to supply potable water for the resident. Sampling of potable wells at 10 nearby residences did not identify any others that were contaminated above Drinking Water Standards. NJDEP's Responsible Party Remediation Element issued a directive to the site owner that required removal of the four underground gasoline storage tanks and subsurface contaminated soils, but the owner did not comply. NJDEP's Remedial Response Element removed the four tanks and 740 tons of contaminated soil in 2001 using public funds and is periodically sampling private potable wells in the area to monitor ground water quality.



243 North Texas Avenue

243 North Texas Avenue — Atlantic City — Atlantic County

BLOCK: 68A **LOT:** 58

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Private Residence
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 0.5 Acre

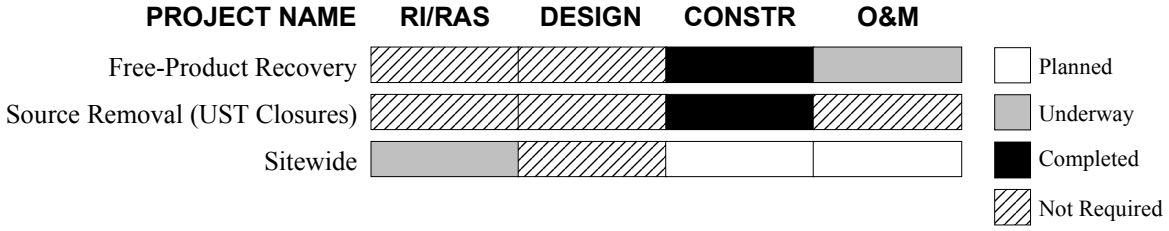
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Petroleum Hydrocarbons	Removing/Monitoring

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$482,000
1981 Bond Fund	$2,000
1986 Bond Fund	$75,000
Corporate Business Tax	$250,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Leaking underground fuel oil tanks contaminated the tidal saline aquifer beneath this residential property. In 1990, NJDEP's Remedial Response Element began delineating the contamination and installed a free-product recovery system to capture a layer of fuel oil that was floating on the water table. The system successfully collected approximately one gallon of fuel oil per week for several years and was decommissioned in 1994 after recovery fell off to a minimal amount. However, significant quantities of fuel oil product were again observed in recovery wells at the site in 1997 and NJDEP reinstalled the free-product recovery system and resumed collection of fuel oil from the aquifer. In 1999, NJDEP closed 15 residential underground heating oil tanks in the area that were either abandoned or potential sources of contamination to the ground water. NJDEP has installed additional ground water monitor wells near the site and is sampling the wells to evaluate the effectiveness of the remedial actions. Operation and maintenance (O&M) of the free-product recovery system are ongoing.



Absecon Lighthouse

Pacific & Vermont Avenues Atlantic City Atlantic County

BLOCK: 4 **LOT:** 55

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Lighthouse
OPERATION STATUS: Inactive

PROPERTY SIZE: 2 Acres

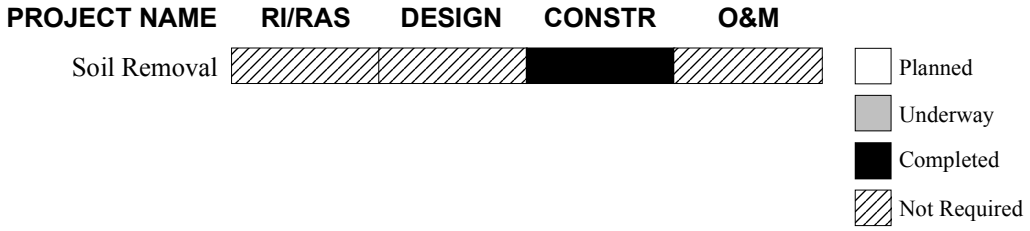
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Soil	Lead	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Parks Capital Fund	$136,000
Spill Fund	$4,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is an historic lighthouse that has been restored and now operates as a museum. Past maintenance activities included scraping of old lead-based paints and repainting, which caused the shallow soil around the lighthouse to become contaminated with lead. In 2001, NJDEP's Remedial Response Element conducted soil sampling around the lighthouse to delineate the contamination. The sampling confirmed the presence of lead at levels that significantly exceeded NJDEP's residential soil cleanup criteria of 400 parts per million. In 2002, the Remedial Response Element excavated 780 tons of contaminated soil from around the site, disposed of it at an off-site location, and backfilled the excavated areas with clean soil. Final restoration of the site (reseeding and landscaping) will be conducted by the Inlet Private/Public Association.



Babcock & Forest Walk Ground Water Contamination

Babcock & Mays Landing-Somers Point Roads

Hamilton Township Atlantic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

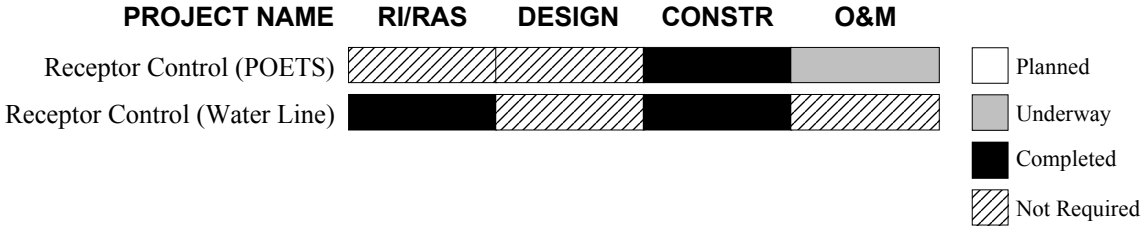
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water Provided	Volatile Organic Compounds Mercury	Treating/Alternate Water Supply

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$323,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Atlantic County Health Department in 1991 identified six private potable wells in this area that were contaminated with volatile organic compounds and mercury at levels exceeding New Jersey Drinking Water Standards. The primary volatile organic contaminants were benzene, dichloroethylene (DCE), trichloroethylene (TCE), tetrachloroethylene (also known as perchloroethylene, or PCE) and vinyl chloride. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. NJDEP's Remedial Response Element subsequently completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at five of the six homes. The Township used funds provided by NJDEP to extend the public water line to the sixth residence in 1993. Potable well sampling conducted in 1995 indicated decreasing levels of volatile organic compounds.

NJDEP completed a source investigation for the Babcock and Forest Walk Ground Water Contamination site in 2001. Based on the investigation, NJDEP identified the Hamilton Township Landfill on Mays Landing-Somers Point Road as a possible source of the volatile organic contamination. However, NJDEP does not believe the mercury contamination that affects some of the wells in the Babcock and Forest Walk area is due to the landfill. The mercury contamination is likely attributable to one or more non-point sources.



Delancy Avenue Ground Water Contamination

Delancy Avenue Egg Harbor Township Atlantic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential/Recreational

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed/Monitoring
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$19,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Atlantic County Health Department in 1992 identified seven private potable wells in this area were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were methyl tertiary-butyl ether (MTBE) and benzene, both of which are components of gasoline. Egg Harbor Township extended public water lines to the affected homes in 1993. NJDEP's Remedial Response Element is implementing a two-year monitoring program to evaluate ground water quality downgradient from the area of contamination. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.

Emmell's Septic Landfill

128 Zurich Avenue Galloway Township Atlantic County

BLOCK: 650 **LOTS:** 7 & 9

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Sewage Sludge Disposal
OPERATION STATUS: Inactive

PROPERTY SIZE: 38 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Lead	Delineating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Metals	Partially Removed/Delineating

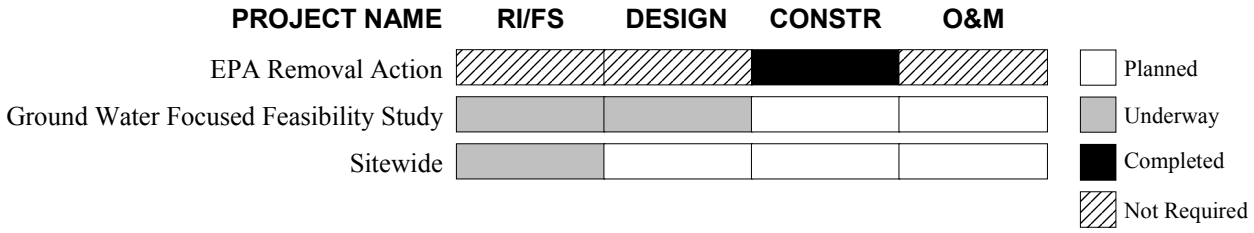
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$2,119,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site operated as a septic and sewage sludge disposal facility between 1967 to 1979. During this time, waste sludges were deposited in on-site trenches and lagoons. Solid and chemical wastes were also disposed of at the site, including construction debris, gas cylinders, household garbage and drums, some of which contained paint sludges. Sampling of private potable wells at nearby residences between 1984 and 1988 revealed the presence of various volatile organic compounds above New Jersey Drinking Water Standards. The Atlantic County Health Department subsequently closed the contaminated wells and drilled deeper replacement wells at the residences. A preliminary assessment and site investigation completed by NJDEP in 1997 identified Emmell's Septic Landfill as the likely source of the potable well contamination.

In 1998, USEPA completed a Site Activity Investigation at the landfill. The results of sampling conducted during the Site Activity Investigation indicated the soil and ground water were contaminated with volatile organic compounds and confirmed the presence of waste materials (paints, charred materials and sludges) in the subsurface soil. USEPA added Emmell's Septic Landfill to the National Priorities List of Superfund sites (NPL) in 1999.

In 2000, USEPA completed a removal action to address materials that may have been serving as a source of ground water contamination. During the removal action, 438 buried drums and over 28,000 cubic yards of contaminated soil were excavated and disposed of at an off-site facility. USEPA is conducting a Remedial Investigation (RI) to determine the nature and extent of the contamination remaining at the facility, as well as a Focused Feasibility Study (FFS) to evaluate whether the contaminated ground water should be treated while the RI work is underway.



Garden State Cleaners

Summer Road — Buena Borough — Atlantic County

BLOCK: 175 **LOT:** 6

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Dry Cleaners
OPERATION STATUS: Active

PROPERTY SIZE: 3000 Sq. Ft.

SURROUNDING LAND USE: Residential

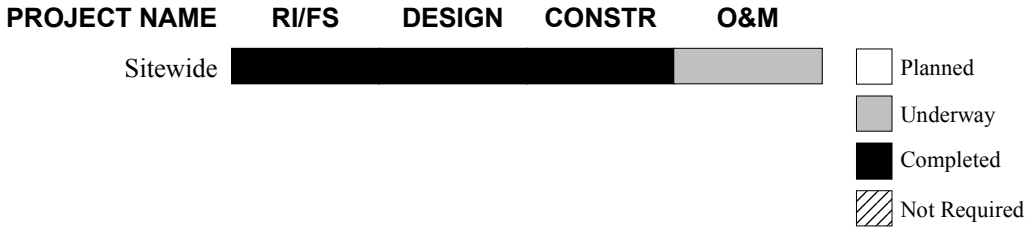
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Remediated

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$13,210,000
1986 Bond Fund	$575,000
Corporate Business Tax	$675,000
Spill Fund	$40,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Garden State Cleaners has operated a dry cleaning establishment at this property since 1966. In 1984, NJDEP determined that the facility was discharging dry cleaning fluid onto the ground via a steam discharge pipe. Sampling revealed that the soil and ground water at the site were contaminated with the volatile organic compounds tetrachloroethylene (also known as perchloroethylene, or PCE) and trichloroethylene (TCE). Garden State Cleaners is located two blocks south of the South Jersey Clothing Company site and plumes of contaminated ground water from both sites intermingle. In 1985, Buena Borough extended public water lines to properties with private wells that had become contaminated as a result of these sites. The Borough expanded the public water line system in 1988 to service additional residences in the immediate area.

In 1989, USEPA added Garden State Cleaners and South Jersey Clothing Company to the National Priorities List of Superfund sites (NPL). USEPA conducted a joint Remedial Investigation and Feasibility Study (RI/FS) for the two sites and signed a Record of Decision (ROD) with NJDEP concurrence in 1991. The ROD required installation of individual soil vapor extraction systems to treat the contaminated soil at each of the sites and installation of a single ground water remediation system to address the entire ground water plume. USEPA installed a soil vapor extraction system at Garden State Cleaners in 1994 and it operated until 1996, when the soil remediation was determined to be complete. USEPA completed construction of the ground water remediation system in 1998 and operation and maintenance (O&M) of the system are underway.



Genoa Avenue Ground Water Contamination

Genoa Avenue & Cologne Port Road

Galloway Township & Port Republic City

Atlantic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

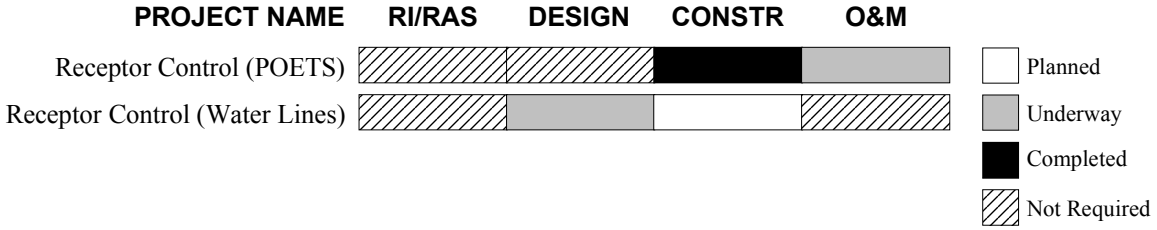
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$367,000
1981 Bond Fund	$149,000
Corporate Business Tax	$1,604,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Atlantic County Health Department, Galloway Township and NJDEP's Remedial Response Element between 1991 and 2001 identified 108 private potable wells in Galloway Township and Port Republic City that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants are 1,2 dichloropropane, ethylene dibromide, dibromochloropropane and 1,2,3 trichloropropane. These compounds are banned and/or have been removed from the market since the early 1980s. With the exception of 1,2,3 trichloropropane, all were used largely as agricultural fumigants to control nematodes. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. In 2001, the Remedial Response Element delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis for Galloway Township that concluded the most cost-effective long-term remedy was extension of public water lines to the properties in the CKE. Extension of the water lines to the properties in Galloway Township area is scheduled to begin in 2003. A separate water supply alternatives analysis for Port Republic City is underway and scheduled to be completed in 2003. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Germania Gardens Ground Water Contamination

Cologne Avenue — Galloway Township — Atlantic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

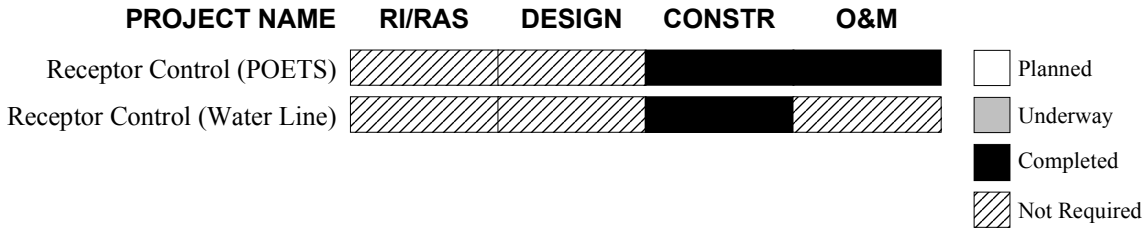
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$101,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Atlantic County Health Department in 1990 identified 24 private potable wells in this area that were contaminated with mercury and volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary volatile organic contaminants are tetrachloroethylene (also known as perchloroethylene, or PCE) and methylene chloride. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. Galloway Township extended public water lines to affected homes in 1994 as a permanent remedy. NJDEP subsequently reimbursed the Township for the cost of the water line. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Greenbriar Avenue Ground Water Contamination

Greenbriar Avenue Buena Vista Township Atlantic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

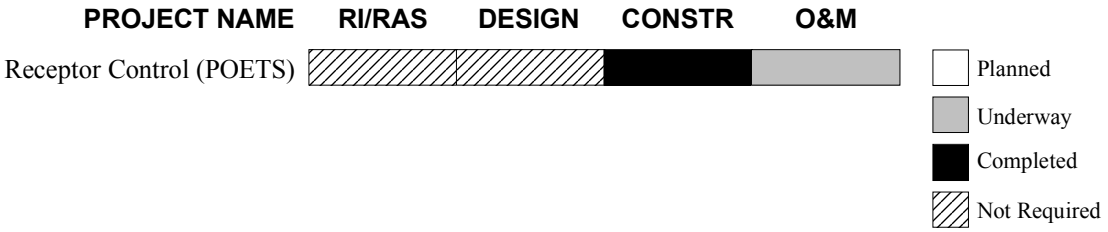
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Mercury	Confirmed
Potable Water	Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$46,000
1981 Bond Fund	$18,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted between 1992 and 1999 by the Atlantic County Health Department identified nine private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element plans to conduct additional potable well sampling in 2003 and will use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area. Due to the limited extent and low levels of mercury in the ground water, identification of the source is unlikely; however, NJDEP plans to conduct a limited investigation to determine possible sources.



Ivins & Madison Avenues Ground Water Contamination

Ivins & Madison Avenues

Egg Harbor Township — Atlantic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

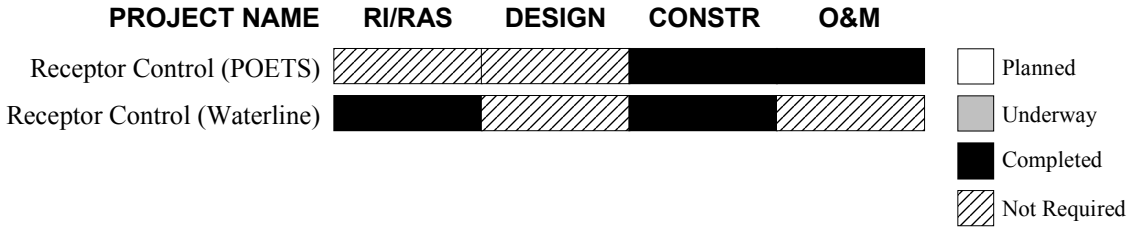
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$74,000
1986 Bond Fund	$7,000
Corporate Business Tax	$373,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by Atlantic County Health Department and several independent laboratories between 1983 and 1996 identified 10 contaminated private potable wells in this area. Of these 10 wells, five were contaminated with mercury and five were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary volatile organic contaminant was trichloroethylene (TCE). The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element subsequently delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was extension of public water lines to the homes in the CKE. The local water purveyor installed water lines in the area in 1998 using its own funds. NJDEP has provided residents within the CKE with funds to pay for the connection costs and to seal their wells.



Pleasant Woods Ground Water Contamination

Tilton Road, Atlantic City Expressway & Garden State Parkway
Egg Harbor Township Atlantic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential/Commercial

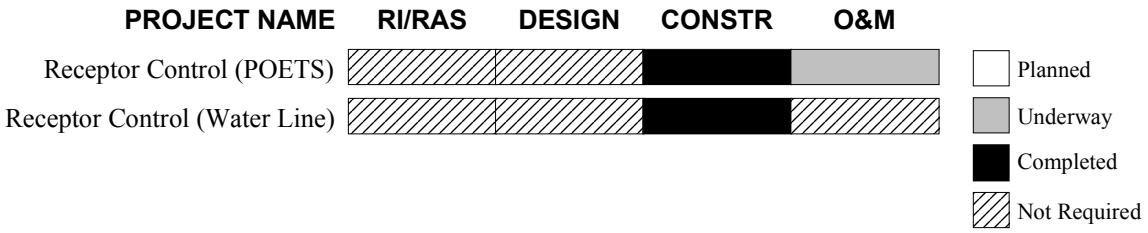
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Alternate Water Supply Provide/Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$571,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Atlantic County Health Department and NJDEP in 1989 identified 64 private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. NJDEP delineated a Ground Water Impact Area (GWIA) that encompassed 128 properties and these properties were connected to the public water supply in 1992. NJDEP's Remedial Response Element conducted additional sampling in 1998 that revealed seven private potable wells located outside the GWIA were contaminated with mercury and/or volatile organic compounds at levels exceeding Drinking Water Standards. However, the contamination in these wells is probably not related to the Pleasant Woods site based on their distance from the GWIA. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents.

NJDEP completed an unknown source investigation for the Pleasant Woods Ground Water Contamination site in 2000. Due to the widely scattered locations of the contaminated wells inside the GWIA, a discernible plume of mercury contamination could not be delineated and the source of the mercury contamination could not be identified. Investigation of possible sources of the volatile organic contamination in the seven private wells located outside of the original GWIA has not been concluded.



Prices Landfill 1

Mill Road Pleasantville City & Egg Harbor Township

Atlantic County

BLOCK: 36A, 190 **LOT:** 3 & 6, 3

CATEGORY: Superfund, State Lead

TYPE OF FACILITY: Landfill

OPERATION STATUS: Inactive

PROPERTY SIZE: 26 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Treating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds Petroleum Hydrocarbons	Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$6,973,000
Spill Fund	$589,000
General State Fund	$1,009,000
Responsible Party Settlement Fund	$4,101,000
1981 Bond Fund	$6,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The site was originally a sand and gravel pit before it was converted into a private landfill in 1969. During the early 1970s, industrial wastes were disposed of at the site. Records indicate that liquid chemical wastes were poured directly into the landfill as well as buried in 55 gallon drums. It is estimated that nine million gallons of chemical wastes were disposed of at the landfill in this manner. The operator of the landfill stopped accepting chemical wastes in 1972 and ceased operations entirely in 1978.

In the early 1980s, state and local officials determined that contaminated ground water at the landfill presented a substantial threat to nearby private potable wells and the Atlantic City Well Field, which was located less than a mile away. In 1982, USEPA placed the landfill on the National Priorities List of Superfund sites and NJDEP began a Remedial Investigation and Feasibility Study (RI/FS) to determine the extent of the contamination and evaluate cleanup alternatives. USEPA issued a Record of Decision (ROD) with NJDEP concurrence in 1983 that required relocation of the Atlantic City Well Field and replacement of private potable wells with public water supplies. This work was completed in 1985.

Based on the RI/FS, NJDEP determined that the ground water at Prices Landfill was significantly contaminated with a variety of volatile organic compounds and metals, including benzene, vinyl chloride, cadmium and lead, and that a plume of contaminated ground water was migrating off site. In 1986, after the RI/FS was completed, USEPA issued a second ROD for the site with NJDEP concurrence that required the following actions: 1) installation of a security fence around the landfill; 2) installation of an on-site remediation system to collect and pretreat contaminated ground water and landfill leachate, followed by discharge of the treated effluent to the Atlantic County Wastewater Treatment Facility (ACWTF); 3) installation of a cap over the landfill; and 4) implementation of a long-term ground water monitoring program to evaluate the effectiveness of the remedial actions. Progress on the ground water remediation system was delayed when ACWTF changed its discharge criteria and would no longer accept treated effluent from the landfill, which required NJDEP to modify the Remedial Design to incorporate discharge of the treated effluent to the ground water through infiltration galleries.

NJDEP completed construction of an interim ground water remediation system at the landfill in 2000. The interim system collects contaminated ground water from a recovery well on the eastern side of the site, conveys it to an on-site treatment system that removes the volatile organic compounds, and discharges the treated water into an infiltration gallery located on the landfill. It currently extracts and treats approximately 100,000 gallons of ground water each day. The interim system will be evaluated and modified over a period of two years to optimize its performance. NJDEP began the Remedial Design for the landfill cap and a final ground water remediation system in 2002. The Remedial Design is expected to be completed in 2004.

Prices Landfill 1

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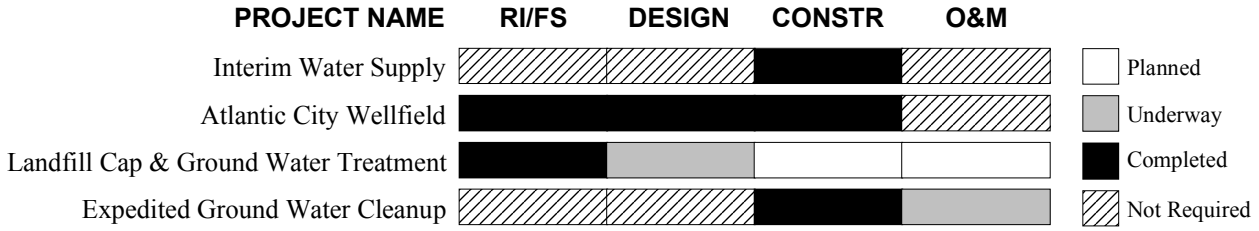


South Jersey Clothing Company

One Central Avenue — Buena Borough — Atlantic County

BLOCK: 144 **LOT:** 3

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Clothing Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.2 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Remediated

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$12,324,000
1986 Bond Fund	$575,000
Corporate Business Tax	$675,000
Spill Fund	$40,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The South Jersey Clothing Company formerly manufactured military clothing in the Minotola section of Buena Borough. While the facility was in operation, waste waters contaminated with solvents were routinely discharged onto the ground and hazardous wastes were stored in leaking drums on the premises. Sampling conducted by the NJDEP and the Atlantic County Health Department in 1981 revealed contamination in the soil and ground water at the site. South Jersey Clothing Company implemented several actions to address the contamination between 1981 and 1985, including excavating and disposing of some of the contaminated soil and installing a small-scale ground water treatment system.

South Jersey Clothing Company is located two blocks north of the Garden State Cleaners site and the plumes of contaminated ground water from both sites intermingle. In 1985, Buena Borough installed public water lines to service several nearby properties with private wells that had become contaminated as a result of these sites. The Borough expanded the public water line system in 1988 to service additional residences in the immediate area.

In 1989, USEPA added South Jersey Clothing Company and Garden State Cleaners to the National Priorities List of Superfund sites (NPL). USEPA conducted a joint Remedial Investigation and Feasibility Study (RI/FS) for the two sites and issued a Record of Decision (ROD) with NJDEP concurrence in 1991. The ROD required installation of individual soil vapor extraction systems to treat the contaminated soil at each of the sites and installation of a single ground water remediation system to address the entire ground water plume. USEPA completed construction of the soil vapor extraction system at the South Jersey Clothing Company site and ground water remediation system in 1998. Cleanup of the soil at the South Jersey Clothing Company was completed in 2001. Operation and maintenance (O&M) of the ground water remediation system are underway.

Wheat Road & Route 40 Ground Water Contamination

Wheat Road & Route 40 Buena Borough & Buena Vista Township Atlantic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

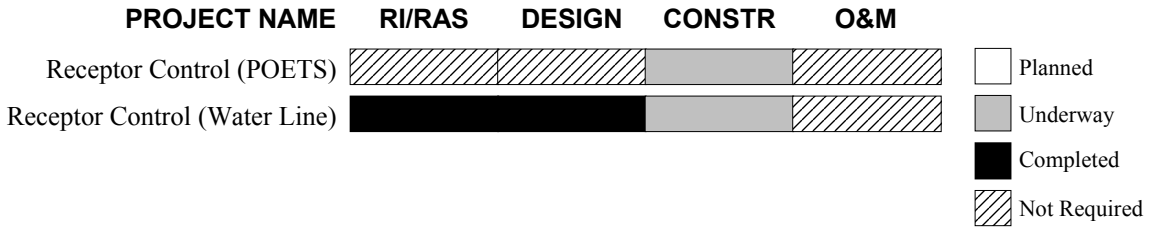
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$77,000
Corporate Business Tax	$342,000
1986 Bond Fund	$15,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Atlantic County Health Department in 1997 identified several private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. NJDEP's Remedial Response Element subsequently identified 19 additional wells that were contaminated with volatile organic compounds and/or mercury at levels exceeding Drinking Water Standards; however, three of these wells were too distant from the others to include in the Currently Known Extent (CKE) of the potable well contamination. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. In 1999, the Remedial Response Element completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes. However, Buena Vista Township and Buena Borough elected to extend public water lines to the properties in the CKE instead. NJDEP agreed to provide the Township and Borough with funds equal to the cost of monitoring and maintaining the POET systems for 20 years to help pay for the water lines. Installation of the water lines began in 2002 and is scheduled to be completed in 2003. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



White Horse Pike Ground Water Contamination

White Horse Pike Mullica Township Atlantic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

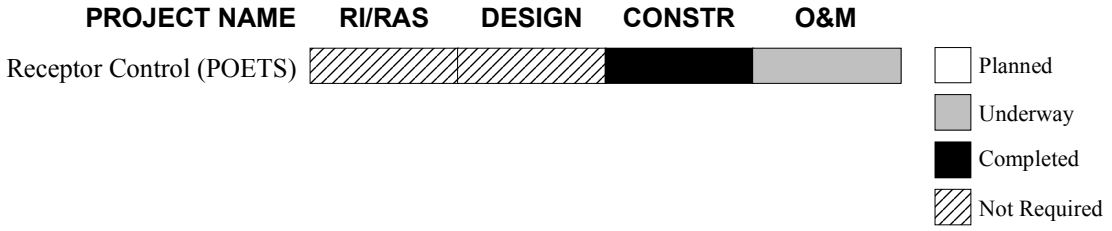
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$8,000
Corporate Business Tax	$17,500

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Atlantic County Health Department and NJDEP's Remedial Response Element in 1999 identified six private potable wells in this area that were contaminated with chlorinated volatile organic compounds and/or mercury at levels exceeding New Jersey Drinking Water Standards. The primary volatile organic contaminants were trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. NJDEP's Responsible Party Remediation Element has issued Notices of Violation to three property owners along the White Horse Pike requiring them to close unused or abandoned underground storage tanks that could be contributing to the ground water contamination. The Remedial Response Element plans to conduct additional sampling in the area in 2003 to further delineate the potable well contamination. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Zion Road Ground Water Contamination

Zion Road & Schoolhouse Road — Egg Harbor Township — Atlantic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

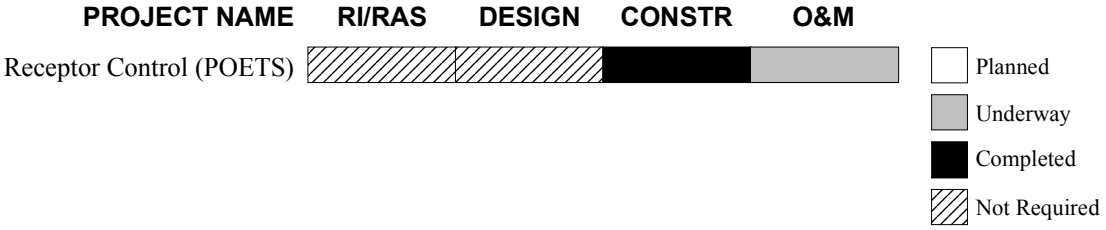
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Mercury	Confirmed
Potable Water	Mercury	Treating

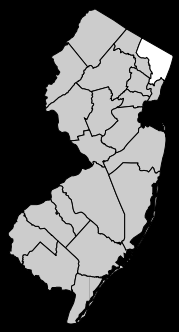
FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$13,000
Corporate Business Tax	$12,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Atlantic County Health Department and NJDEP's Remedial Response Element between 1998 and 2000 identified seven private potable wells in this neighborhood that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element has delineated the Currently Known Extent (CKE) of the potable well contamination and is evaluating long-term water supply alternatives for residences within CKE. The water supply alternatives analysis is scheduled to be completed in 2003.



Bergen County



BERGEN

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Alexander Cleaners

137 Broadway Hillsdale Borough Bergen County

BLOCK: 1102 **LOT:** 4

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Dry Cleaners
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.2 Acres

SURROUNDING LAND USE: Commercial

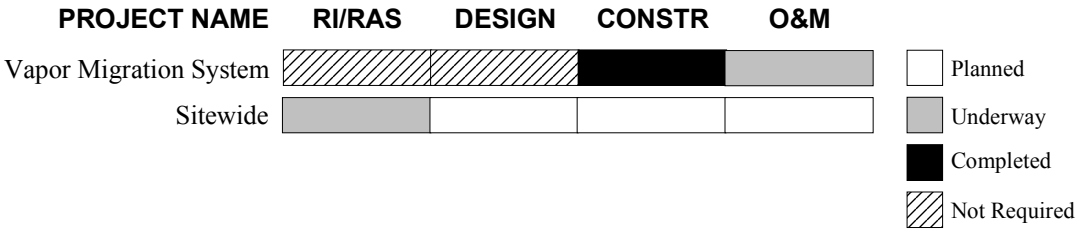
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Soil	Volatile Organic Compounds	Partially Removed/Investigating
Air	Volatile Organic Compounds	Venting

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$104,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site operated as a dry cleaning establishment between 1960 and 1996. It consists of a two story building and a paved parking area. A real estate office currently occupies the property. Sampling by the property owner between 1995 and 1996 revealed the soil and ground water at the site were contaminated with chlorinated volatile organic compounds. The primary contaminant was tetrachloroethylene (also known as perchloroethylene, or PCE), a common dry cleaning solvent. The contaminated soil was found under the basement slab and the parking area, both of which have been identified as locations where solvent drums were stored. The property owner agreed to investigate and clean up the property under a Memorandum of Agreement (MOA) with NJDEP in 1996. The property owner subsequently excavated approximately 135 tons of contaminated soil from beneath the basement slab and parking area and conducted additional investigative work that confirmed PCE product was present in the ground water beneath the building. Testing of the air inside the basement in 1998, more than a year after the contaminated soil was removed from beneath the slab, indicated elevated levels of PCE vapors. The MOA was terminated by NJDEP in 2001 after the property owner did not conduct any additional investigative or cleanup work.

In 2001, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water at the site and evaluate cleanup alternatives. The Remedial Response Element installed a subsurface vapor mitigation system in the basement of the building in 2002 to reduce PCE vapors in the indoor air to acceptable levels. The soil and ground water sampling phase of the RI/RAS is scheduled to begin in 2003.



Allendale Borough Water Department Well Field Contamination

New Street — Allendale Borough — Bergen County

BLOCK: 21.01 **LOT:** 4

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 10 Acres

SURROUNDING LAND USE: Residential

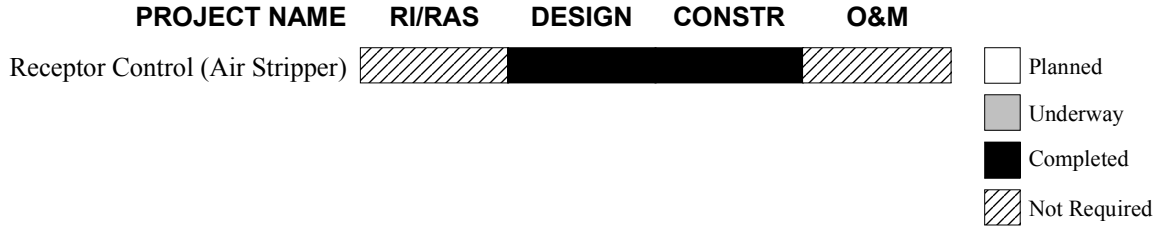
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$456,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

During the 1980s and 1990s, the Allendale Water Department was forced to take three of its five municipal supply wells out of regular service due to the presence of volatile organic compounds above New Jersey Drinking Water Standards. Two of the municipal supply wells were closed in the early 1980s and contamination was first detected in the third well in 1992. The primary contaminant in all three wells is tetrachloroethylene (also known as perchloroethylene, or PCE). The Allendale Water Department installed a temporary treatment system on the third well but used the well only when it was necessary to meet peak seasonal demand.

In 1996, NJDEP's Bureau of Safe Drinking Water notified Allendale Borough that it must either install permanent treatment systems on the contaminated wells or abandon the wells and obtain supplemental water supply from another source. NJDEP's Remedial Response Element completed a water supply alternatives analysis in 1998 that concluded the most cost-effective remedy was to install an air stripper at the well field to remove the volatile organic contamination. Allendale Borough completed construction of the air stripper in 1999 using funds provided by NJDEP and is operating and maintaining the system. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Bergen County Sanitary Landfill

Fort Lee Road Teaneck Township Bergen County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Sanitary Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Recreational/Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Pesticides Metals	Confirmed
Soil	Volatile Organic Compounds Pesticides Metals	Potential
Air	Methane	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$62,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The former Bergen County Landfill encompasses approximately 1,000 contiguous acres in the southern end of Bergen County within the Hackensack Meadows and extends across portions of Leonia, Ridgefield Park, Palisades Park, Teaneck and Englewood. The landfilled area is currently known as Overpeck Park and is named after Overpeck Creek, a navigable waterway that flows through the site in a north to south direction. The land adjacent to the creek was donated to Bergen County by the municipalities for use as a sanitary landfill in exchange for converting it into a public park after disposal activities were completed. Landfilling of municipal wastes began at the site in 1952 and continued until 1975. Portions of the landfilled area have been capped and redeveloped, including the Overpeck County Golf Course, Overpeck Office Park Center, the Ridgefield Ball Park section, the Aerodrome section, the Overpeck Riding Center and the Henry Hoeble Area. Bergen County has until 2006 to complete closure and redevelopment of the landfill into a park.

One portion of the landfill that has not yet been closed pursuant to New Jersey solid waste regulations and converted to public use is the Leonia section (also known as Area IV), located on the east side of Overpeck Creek and south of Fort Lee Road. Area IV encompasses approximately 75 acres and is mostly overgrown with dense brush, trees and other vegetation. NJDEP's Remedial Response Element is implementing closure actions at Area IV to prevent the release of methane, a greenhouse gas, from the waste fill and mitigate the impact of landfill leachate on the environment. NJDEP is reviewing the landfill's history and past sampling results to obtain preliminary information for the landfill closure project. NJDEP plans to conduct an Immediate Environmental Concern Assessment at the site in 2003 to identify conditions that could present immediate threats to human health or the environment.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Burning Hollow Road Ground Water Contamination

Burning Hollow, Stone Wall and Cameron Roads

Saddle River Borough — Bergen County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

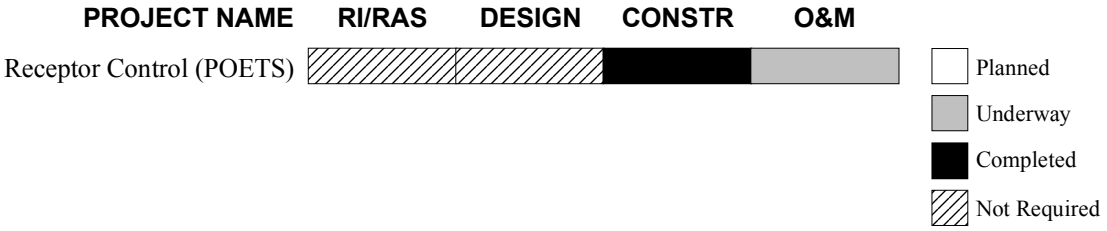
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$19,000
Corporate Business Tax	$38,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the local health department and NJDEP's Remedial Response Element in 1995 identified 26 private potable wells in this residential development that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants are tetrachloroethylene (also known as perchloroethylene, or PCE) and trichloroethylene (TCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. The Remedial Response Element subsequently delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes. The Remedial Response Element is periodically sampling private potable wells inside and outside of the CKE to monitor ground water quality. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Grant Industries

125 Main Street — Elmwood Park — Bergen County

BLOCK: 804 **LOT:** 6

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Active

PROPERTY SIZE: 1.0 Acre

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Partially Removed/Delineating
Soil	Volatile Organic Compounds	Levels Not of Concern

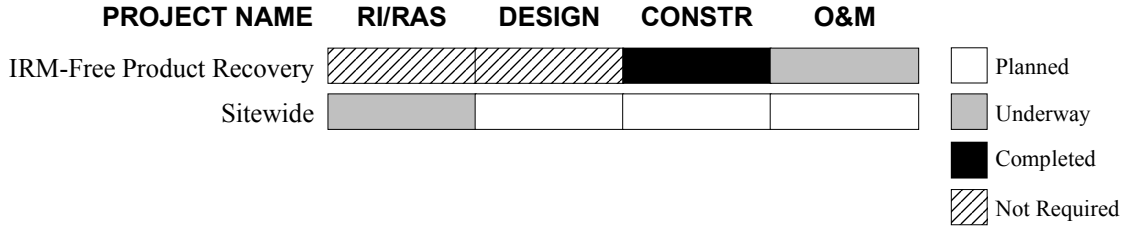
FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$301,000
1986 Bond Fund	$295,000
Corporate Business Tax	$104,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Grant Industries has operated a chemical manufacturing plant at this site since 1967. It is approximately 1,000 feet from the Garfield Municipal Well Field, where a ground water treatment system is removing volatile organic contaminants from the supply wells. Grant Industries was identified as a Potentially Responsible Party for the contamination at the well field due to documented incidences of chemical spills and discharges between the mid-1970s to the early 1990s and the presence of volatile organic compounds in the ground water at the site. LaPlace Chemical Company and the former Stor Dynamics facility, both located adjacent to Grant Industries, have also been identified as Potentially Responsible Parties for the well field contamination. The Responsible Parties for LaPlace Chemical Company are addressing their site under the supervision of NJDEP's Responsible Party Remediation Element.

In 1994, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination at the Grant Industries property, identify remedial alternatives and evaluate the facility's possible role in the contamination of the Garfield well field. A separate RI/RAS was conducted concurrently for the Stor Dynamics property. NJDEP determined based on the RI that there was no significant contamination in the soil at Grant Industries, but high levels of chlorinated volatile organic compounds were present in the ground water at an area of the property adjacent to LaPlace Chemical. NJDEP implemented a ground water Interim Remedial Measure (IRM) between 2001 and 2002 that entailed extracting ground water from a recovery well in the area of the Grant Industries property where high levels of contaminants were present and sending it off site for treatment and disposal.

In 2002, NJDEP completed the RI/RAS for the Grant Industries and Stor Dynamics sites and the Responsible Parties for LaPlace Chemical Company completed an RI/RAS for their facility. Additional rounds of ground water sampling are being conducted in preparation for selecting a final remedial action to address the contaminated ground water at all three sites. NJDEP plans to issue a Decision Document outlining the final remedial action to address the ground water in 2003.



Industrial Latex

350 Mount Pleasant Avenue Wallington Borough Bergen County

BLOCK: 70 **LOT:** 80

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 10 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Levels Not of Concern
Soil	Polychlorinated Biphenyls (PCBs) Volatile Organic Compounds Semi-Volatile Organic Compounds Arsenic	Remediated

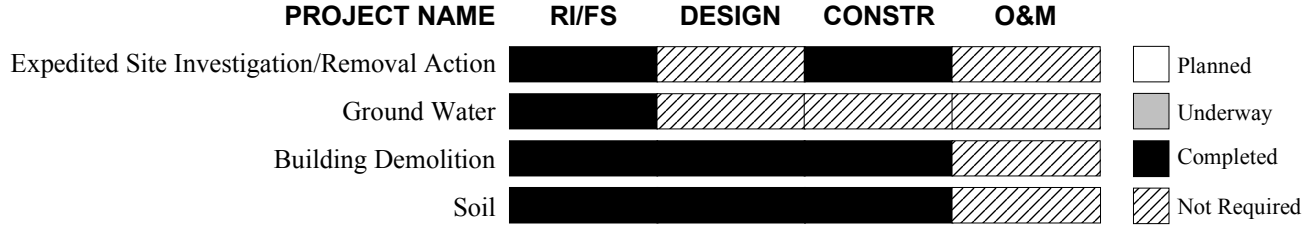
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$25,078,000
Spill Fund	$14,000
1986 Bond Fund	$1,650,000
Corporate Business Tax	$1,200,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Industrial Latex manufactured chemical adhesives and natural and synthetic rubber compounds at this facility between 1951 and 1980. Poor operational procedures and on-site waste disposal practices resulted in widespread areas of surface and subsurface soil contamination. The company also allegedly disposed of chemical wastes in the plant's septic systems. An inspection by NJDEP in 1983 revealed approximately 1,600 drums of chemical wastes were being stored on the property and some of the drums were open or leaking. USEPA removed approximately 100,000 gallons of hazardous liquid wastes, 16,000 gallons of PCB-contaminated wastes, 1,400 drums and 22 underground storage tanks from the site between 1986 and 1987. In 1988, USEPA began a Remedial Investigation/Feasibility Study (RI/FS) to delineate the contamination in the soil and ground water and evaluate remedial alternatives. The site was added to the National Priorities List of Superfund sites in 1989.

In 1992, after completing the investigation of the site structures and soils, USEPA issued a Record of Decision (ROD) that required the following: 1) demolition and off-site disposal of the buildings and chemical vats; 2) excavation and disposal of approximately 600 buried drums, and 3) on-site treatment of PCB-contaminated soils using low temperature thermal desorption. NJDEP subsequently concurred with the ROD. USEPA completed demolition of the buildings and other on-site structures in 1995 and completed excavation and treatment of the contaminated soil in 2000. Approximately 53,000 cubic yards of soil were treated and backfilled on site during the remedial action.

USEPA completed the RI/FS for ground water in 2000. The RI/FS revealed that no site-related contaminants were present at levels exceeding New Jersey Drinking Water Standards. USEPA concluded the ground water did not pose an unacceptable threat to human health or the environment and issued a ROD in 2001 that stipulated no further action to address ground water at the site. USEPA plans to propose deletion of this site from the NPL.



Route 17 & Pleasant Road Ground Water Contamination

Route 17 & Pleasant Road & Lenape Trail

Upper Saddle River Borough Bergen County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

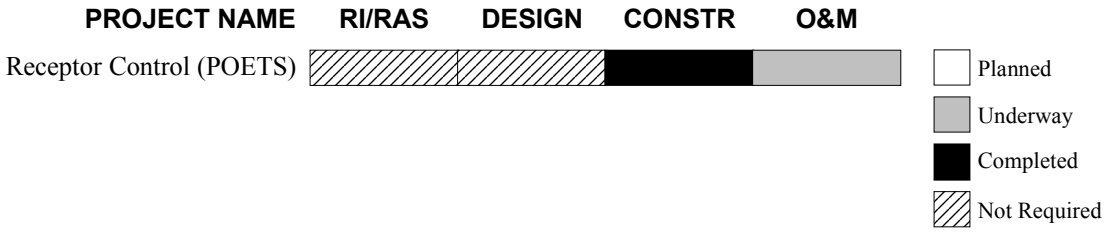
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Trichloroethylene	Confirmed
Potable Water	Trichloroethylene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$34,000
Corporate Business Tax	$15,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted in 1999 during the investigation of a nearby gas station identified 11 private potable wells in this neighborhood that were contaminated with trichoroethylene (TCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Responsible Party Remediation Element determined that the gas station is not the source of the TCE contamination and no other potentially responsible parties have been found. NJDEP's Remedial Response Element, the local health department and several residents subsequently conducted additional sampling that identified seven other private potable wells in the area that were contaminated with TCE and POET systems were also installed in these homes. The Remedial Response Element is using the sampling results to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Shorco North

131 Route 17 North — Mahwah Township — Bergen County

BLOCK: 26 **LOT:** 5

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 1.5 Acres

SURROUNDING LAND USE: Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Potable Water	Volatile Organic Compounds	Potential
Soil	Volatile Organic Compounds	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$19,000
Corporate Business Tax	$150,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Shorco North is an active retail gasoline and diesel filling station on Route 17. It is located across the highway from the Shorco South site, which is also being addressed by NJDEP. The Mahwah Township well field is approximately 2,500 feet hydraulically downgradient from the sites. Contamination was first identified at the area in 1985, when utility workers discovered a fuel discharge while excavating near Route 17. Subsequent investigations revealed the soil and ground water at both gas stations were contaminated with various petroleum-related volatile organic compounds, including benzene, toluene, ethyl benzene, xylene, methyl tertiary butyl ether (MTBE) and tertiary butyl alcohol (TBA). Potentially Responsible Parties for the Shorco North site conducted some investigative work and implemented several remedial actions under the supervision of NJDEP's Responsible Party Remediation Element, including removing leaking tanks and contaminated soil and installing a ground water remediation system. However, the Potentially Responsible Parties did not complete a Remedial Investigation for the site or remediate the soil or ground water to NJDEP's cleanup standards.

NJDEP's Remedial Response Element began addressing the gas stations in 2002 to prevent contaminated ground water from migrating to the nearby public supply wells. The Remedial Response Element is preparing to commission the ground water remediation system at the Shorco South site, which will also intercept contaminated ground water migrating from the Shorco North site. Recent sampling of monitor wells downgradient of the gas stations has shown the ground water plume has not reached the well field. Additional remedial actions beyond operation of the ground water remediation system will be required to fully address the contamination at the Shorco North site.

Shorco South

130 Route 17 North — Mahwah Township — Bergen County

BLOCK: 129 **LOT:** 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 2.2 Acres

SURROUNDING LAND USE: Commercial

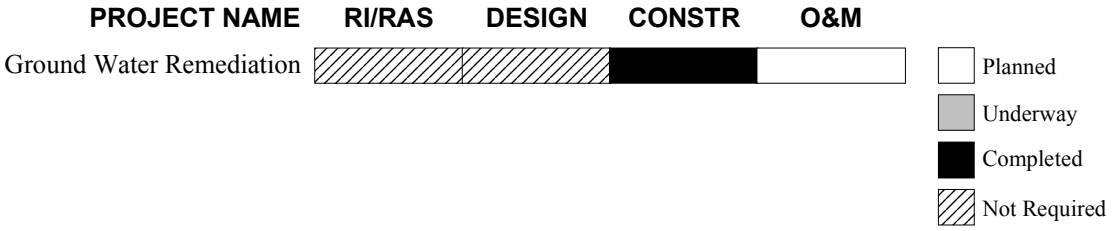
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Potential
Soil	Volatile Organic Compounds	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$46,000
Corporate Business Tax	$150,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Shorco South is an active retail gasoline and diesel filling station. It is located across the highway from the Shorco North site, which is also being addressed by NJDEP. The Mahwah Township well field is approximately 2,500 feet hydraulically downgradient from the sites. Contamination was first identified at the area in 1985, when utility workers discovered a fuel discharge while excavating near Route 17. Subsequent investigations revealed the soil and ground water at both gas stations were contaminated with various petroleum-related volatile organic compounds, including benzene, toluene, ethyl benzene, xylene, methyl tertiary butyl ether (MTBE) and tertiary butyl alcohol (TBA). Potentially Responsible Parties for the Shorco South site have conducted some investigative work and implemented several remedial actions under the supervision of NJDEP's Responsible Party Remediation Element, including removing leaking underground storage tanks and contaminated soil and installing a ground water remediation system. However, the Potentially Responsible Parties did not complete a Remedial Investigation for the site or remediate the soil or ground water to NJDEP's cleanup standards.

NJDEP's Remedial Response Element began addressing the gas stations with public funds in 2002 to prevent the contaminated ground water from migrating to the nearby public supply wells. The Remedial Response Element is preparing to commission the ground water remediation system at the Shorco South site, which will also intercept contaminated ground water migrating from the Shorco North site. Recent sampling of monitor wells located downgradient of the gas stations has shown the ground water plume has not reached the well field. Additional remedial actions beyond operation of the ground water remediation system will be required to fully address the contamination at the Shorco South site.



Stor Dynamics Corporation

99 Main Avenue Elmwood Park Borough Bergen County

BLOCK: 3 **LOT:** 93

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Metal Products Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.0 Acre

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Partially Removed/Delineating
Soil	Volatile Organic Compounds	Removed

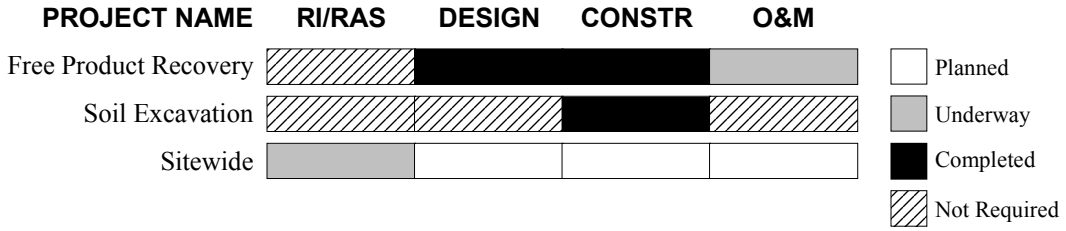
FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$283,000
1981 Bond Fund	$27,000
1986 Bond Fund	$623,000
Corporate Business Tax	$94,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Stor Dynamics manufactured industrial shelving units and conveyor systems at this site from 1965 to 1989. The facility is now vacant. It is approximately 1,000 feet from the Garfield Municipal Well Field, where a ground water treatment system is removing volatile organic contaminants from the supply wells. Stor Dynamics was identified as a Potentially Responsible Party for the contamination at the well field due to the presence of contaminated soil and ground water at the facility. LaPlace Chemical Company and Grant Industries, both located adjacent to Stor Dynamics, have also been identified as Potentially Responsible Parties for the well field contamination. The Responsible Parties for LaPlace Chemical Company are addressing their site under the supervision of NJDEP's Responsible Party Remediation Element.

Between 1985 and 1990, Stor Dynamics conducted several remedial measures to partially address the contamination at its property. These included excavating and disposing of a 2,000 gallon underground gasoline storage tank and some contaminated surface soils. However, Stor Dynamics declared bankruptcy in 1990 before the contamination at the site was fully addressed. In 1994, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination at the site, identify remedial alternatives and evaluate the facility's possible role in the contamination of the Garfield well field. A separate RI/RAS was conducted concurrently for the Grant Industries site. NJDEP determined based on the RI that the ground water at Stor Dynamics was contaminated with volatile organic compounds and the ground water plume extended beyond the boundaries of the property. NJDEP also determined that free product (non-dissolved) solvents were present in the aquifer underlying a portion of the site. In addition, the RI revealed that soil at Stor Dynamics was contaminated with volatile organic compounds. NJDEP implemented an Interim Remedial Measure (IRM) in 1999 to excavate and remove 760 tons of heavily contaminated soil from the site. Between 2001 and 2002, NJDEP implemented a ground water IRM that entailed extracting contaminated ground water from two recovery wells at the area of the Stor Dynamics property where the free product solvents were present and sending it off site for treatment and disposal.

In 2002, NJDEP completed the RI/RAS for the Stor Dynamics and Grant Industries sites and the Responsible Parties for LaPlace Chemical Company completed an RI/RAS for their facility. Additional rounds of ground water sampling are being conducted in preparation for selecting a final remedial action to address the contaminated ground water at all three sites. NJDEP plans to issue a Decision Document outlining the final remedial action to address the ground water in 2003.



Burlington County

BURLINGTON

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5 Devon Avenue

5 Devon Avenue Medford Township Burlington County

BLOCK: 5701 **LOT:** 1

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Private Residence
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 0.25 Acre

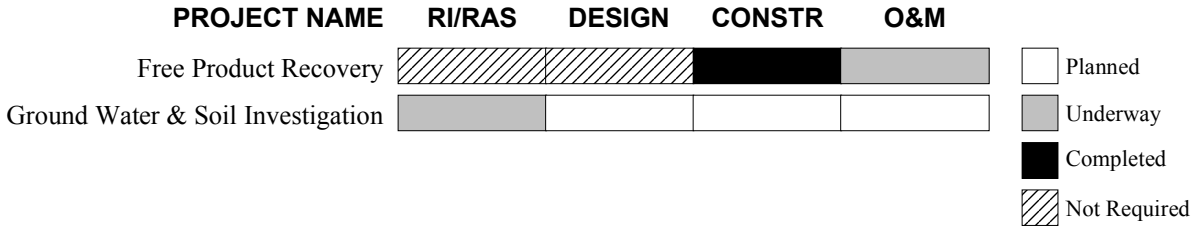
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Petroleum Hydrocarbons	Delineating/Removing
Soil	Petroleum Hydrocarbons	Delineating
Surface Water	Petroleum Hydrocarbons	Delineating
Sediments	Petroleum Hydrocarbons	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$100,000
1986 Bond Fund	$64,000
Corporate Business Tax	$689,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

A leaking underground fuel oil storage tank contaminated ground water and surface water at this home in a Pinelands residential community. The problem was discovered when residents observed fuel oil floating on nearby Taunton Lake. NJDEP's Remedial Response Element removed the leaking underground storage tank in 1993 and installed a recovery trench to capture fuel oil floating on the water table. The recovery trench has collected more than 600 gallons of fuel oil. The Remedial Response Element also installed a bio-venting system to enhance microbial degradation of the residual contamination in the soil. A Remedial Investigation (RI) is underway to delineate the contamination in the soil, ground water, surface water and sediments.



Big Hill (BEMS) Sanitary Landfill

Big Hill & Old Forge Roads

Southampton Township Burlington County

BLOCK: 2702 **LOTS:** 3, 4, 5, 7 & 8

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 113 Acres

SURROUNDING LAND USE: Residential/Undeveloped

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Inorganic Compounds Metals	Delineated
Surface Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Inorganic Compounds Metals	Monitoring
Sediments	Volatile Organic Compounds Semi-Volatile Organic Compounds Inorganic Compounds Metals	Delineating
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Inorganic Compounds Metals	Capped
Air	Methane Gas	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$1,804,000
1981 Bond Fund	$4,127,000
1986 Bond Fund	$13,906,000
General State Fund	$1,940,000
Corporate Business Tax	$463,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site was operated as a sanitary landfill between the late 1960s and 1982. Municipal wastes, septic sludges and some hazardous wastes were deposited in the landfill during this time. The waste fill occupies 40 acres of the 113-acre property. Two sides of the landfill closely border the LeisureTowne housing development, a large retirement community. Burlington Environmental Management Services Incorporated (BEMS, Inc.), which operated the landfill between the mid-1970s and 1982, installed a cap over the western half of the site in 1983 but it failed to perform properly. Precipitation continued to infiltrate the landfill, generating large quantities of leachate that contaminated the ground water and surface waters and caused foul odors. In addition, storm water runoff from the landfill occasionally caused nearby properties to flood, and methane gas generated by the decomposing waste migrated through the soil and into private yards. NJDEP directed BEMS, Inc. to investigate and remediate the site in 1985, but shortly thereafter the company declared bankruptcy.

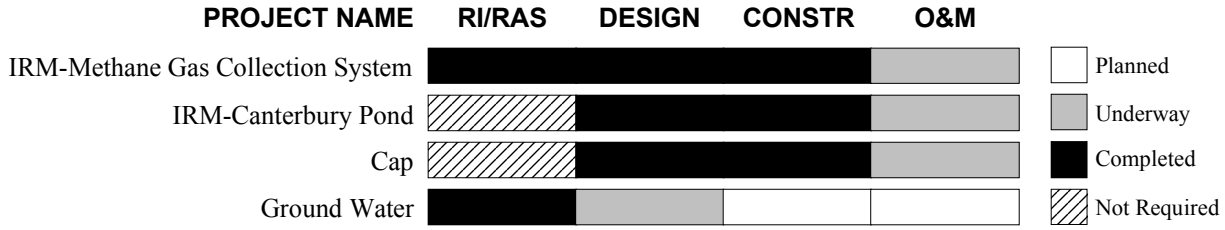
In 1987, NJDEP's Remedial Response Element began a Remedial Investigation/Remedial Action Selection (RI/RAS) to delineate the contamination at the site and evaluate cleanup alternatives. During the course of the RI/RAS, NJDEP implemented several Interim Remedial Measures (IRMs) to address the problems experienced by residents living adjacent to the landfill. The IRMs included installing a methane collection system and a flare to address off-site soil vapors, constructing an on-site storm water retention basin, improving surface water drainage and dredging sediments contaminated with landfill leachate from Canterbury Pond in LeisureTowne.

Big Hill (BEMS) Sanitary Landfill

(Continued from previous page)

In 1991, NJDEP signed a Decision Document that required capping of the landfill with a solid waste cap and installation of a site-wide methane gas collection/treatment system and leachate collection system. NJDEP completed construction of these remedial measures in 1999 and operation and maintenance (O&M) of the landfill cap and the methane and leachate controls are underway.

The RI/RAS revealed that ground water at the landfill is contaminated with organic and inorganic compounds at levels above New Jersey's ground water quality criteria. Landfill-related contaminants were also detected in several nearby surface water bodies but at levels that do not present an immediate threat to human health or the environment. Based on these findings, NJDEP issued a Decision Document in 1995 that required remediation of the ground water. The ground water remedial action will include re-dredging of Canterbury Pond and additional ground water monitoring. The Remedial Design for the ground water cleanup is underway and expected to be completed in late 2003.



Cosden Chemical Coatings Incorporated

Cherry Street — Beverly City — Burlington County

BLOCK: 10 **LOT:** 18

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 4 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineated
Soil	Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Metals	Partially Removed/Delineated

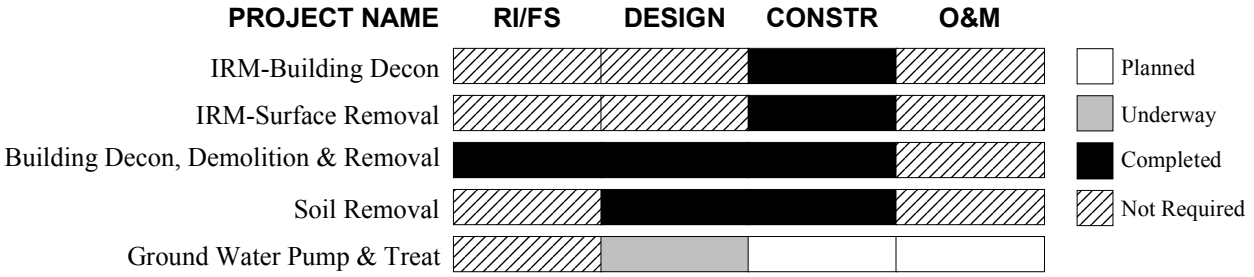
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$6,732,000
Spill Fund	$154,000
1986 Bond Fund	$310,000
General State Fund	$329,000
Corporate Business Tax	$212,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Cosden Chemical Coatings Incorporated manufactured industrial coating materials at this location under several names between the 1940s and 1989. Various volatile and nonvolatile solvents, pigments and polychlorinated biphenyls (PCBs) were used in the manufacturing process. Used solvents and other wastes were regularly transported off site for recycling prior to 1974; afterwards, the recycling ceased and drums of wastes accumulated on the property. During an inspection of the site in 1980 NJDEP found hundreds of unsecured drums, some of which were leaking onto the ground, as well as evidence of spillage due to careless operating procedures. NJDEP directed Cosden Chemical Coatings to remove the drums and clean up the spills, but the company did not comply. NJDEP completed Interim Remedial Measures (IRM) to dispose of the drummed materials, clean up surface spills and remove contaminated soil from the loading dock area in 1986.

USEPA added Cosden Chemical Coatings to the National Priorities List of Superfund sites (NPL) in 1987 and the following year began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination in the soil and ground water and evaluate cleanup alternatives. After operations at the facility ceased in 1989, USEPA installed a fence around areas of contaminated soil and disposed of containers of waste that remained inside the process building. A fire occurred at the site in 1990 that resulted in condemnation of the process building.

In 1992, after completing the RI/FS, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that required in-situ stabilization of the soils contaminated with metals and PCBs, installation of an on-site remediation system to extract and treat the contaminated ground water, and the decontamination and demolition of the condemned building with off-site disposal of the debris. USEPA completed the decontamination/demolition phase of the cleanup in 1995. During the Remedial Design for the soil treatment project USEPA determined that the contaminated soil was widely scattered throughout the site, making in-situ treatment impractical. Consequently, USEPA issued an Explanation of Significant Differences (ESD) in 1998 to modify the soil remedy in the ROD to excavation and off-site disposal. USEPA completed the soil remedial action in 2002, excavating and disposing of approximately 10,000 tons of contaminated soil. The Remedial Design for the ground water remediation system is scheduled to be completed in 2003.



Electronic Parts Specialty Company

Coles Avenue — Lumberton Township — Burlington County

BLOCK:	LOT:
17.01	2
18.01	2
19.55	4
19.55	5.02

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Metal Plating
OPERATION STATUS: Active

PROPERTY SIZE: 6 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Delineated
Soil	Volatile Organic Compounds Metals	Partially Removed/Delineating
Surface Water	Volatile Organic Compounds	Delineated

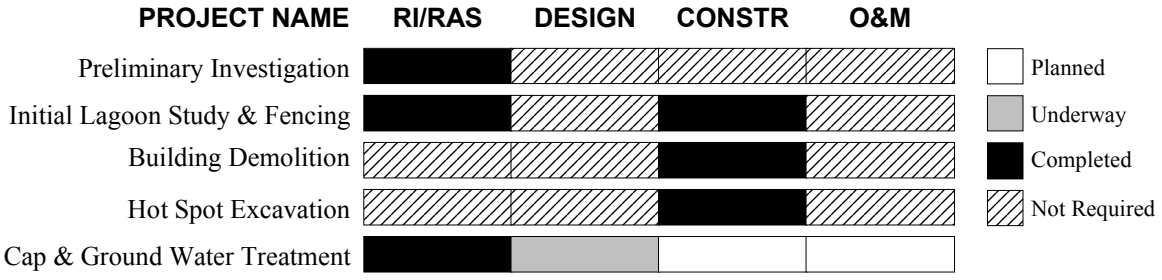
FUNDING SOURCES	AMOUNT AUTHORIZED
1981 Bond Fund	$720,000
Corporate Business Tax	$971,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Electronic Parts Specialty Company (EPSCO) plates metal components for the electronics industry. Primary operations have historically included caustic zinc plating, electroplating, bondarizing and anodizing. For approximately 40 years, the facility discharged plating waste water directly into an unlined lagoon at the rear of the property. NJDEP ordered EPSCO to discontinue the discharge in 1985. EPSCO fenced the lagoon in 1990 in response to a NJDEP directive.

Between 1993 and 1997, NJDEP's Remedial Response Element conducted a Remedial Investigation/Remedial Alternative Selection (RI/RAS) to delineate the contamination at the site and evaluate cleanup alternatives. The RI/RAS revealed contaminated soil was present in the lagoon, the lagoon overflow area, beneath the metals plating building and other areas. The RI/RAS also revealed that a plume of contaminated ground water has migrated off site and was impacting Bobby's Run Creek, located several hundred yards south of the EPSCO facility. A survey of nearby properties conducted during the RI/RAS revealed there were no potable or irrigation wells at risk of becoming contaminated due to the ground water plume.

In 1998, NJDEP issued a Decision Document that specified two remedial actions for the site: 1) excavation and off-site disposal of the highly contaminated soil "hot spots" from beneath the plating building, discharge lines and lagoon area, and installation of a cap over the areas with lower levels of contamination; and 2) installation of a ground water remediation system to extract and treat the contaminated ground water in the shallow aquifer. Between 1999 and 2000, NJDEP demolished the plating building and concrete foundation, excavated approximately 1,800 tons of highly contaminated soil from the former location of the plating building, discharge line area and lagoons, and delineated volatile organic contamination in the subsurface soil. The Remedial Design for the cap and the ground water treatment system is underway. NJDEP is conducting additional soil sampling as part of the Remedial Design.



Ellis Property

Sharp Road — Evesham Township — Burlington County

BLOCK: 14 **LOT:** 4

CATEGORY: Superfund
State Lead

TYPE OF FACILITY: Drum Cleaning and Storage
OPERATION STATUS: Inactive

PROPERTY SIZE: 36 Acres

SURROUNDING LAND USE: Agricultural

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Treating
Soil	Polychlorinated Biphenyls (PCBs) Semi-Volatile Organic Compounds Lead	Removed

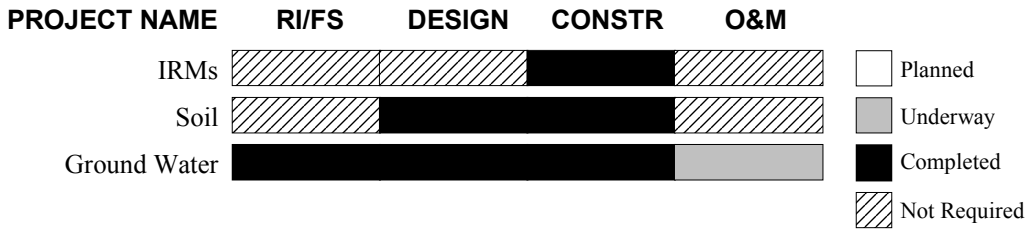
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$11,705,000
1981 Bond Fund	$26,000
1986 Bond Fund	$377,000
Corporate Business Tax	$1,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

A drum cleaning and storage facility occupied a four acre portion of this site during the 1970s. The facility ceased operations in 1978 after a fire damaged several of the buildings. A site inspection by NJDEP in 1980 revealed approximately 75 drums containing chemical wastes were being stored in the main building and storage sheds and additional drums and other containers were scattered throughout the property. The drums and containers were in various stages of deterioration and some had leaked onto the ground. NJDEP also found evidence of spillage due to past operations.

In 1983, USEPA added the Ellis Property to the National Priorities List of Superfund sites (NPL). NJDEP subsequently implemented an Interim Remedial Measure (IRM) to remove and dispose of grossly contaminated soil and approximately 100 drums of waste. The main building and sheds were also demolished because they were structurally unsafe. USEPA disposed of the remaining drums during a second removal action in 1990. In all, approximately 300 drums were removed from the site by NJDEP and USEPA.

Between 1985 and 1992, NJDEP's Remedial Response Element conducted a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination at the site and evaluate cleanup alternatives. The RI/FS revealed the surface soil was contaminated with polychlorinated biphenyls (PCBs), semi-volatile organic compounds and lead, and the ground water was contaminated with volatile organic compounds and metals. In 1992, NJDEP issued a Record of Decision (ROD) with USEPA concurrence that required excavation and off-site disposal of the remaining contaminated soil and installation of a remediation system to extract and treat the contaminated shallow ground water. NJDEP excavated and disposed of 1,400 cubic yards of contaminated soil and backfilled the excavated areas with clean soil in 1998. NJDEP completed construction of the ground water remediation system in 2000 and is overseeing operation of the system. The system is currently extracting and treating approximately 210,000 gallons of contaminated ground water each month. Operation and maintenance (O&M) activities will continue for up to 30 years, or until ground water quality criteria have been achieved.



Florence Land Recontouring Incorporated Landfill

Cedar Lane Extension Florence, Mansfield & Springfield Townships
Burlington County

BLOCKS:		**LOTS:**
Florence	173	1, 2, 3.02 & 3.03
Mansfield	44	7
	44A	8
Springfield	304	1,4

CATEGORY: Superfund
State Lead

TYPE OF FACILITY: Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 86 Acres

SURROUNDING LAND USE: Industrial/Agricultural

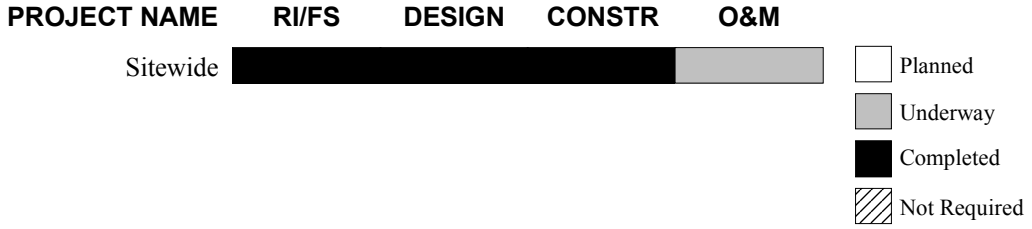
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Heavy Metals	Contained
Leachate	Polycyclic Aromatic Hydrocarbons Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Removing
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Heavy Metals	Capped

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$20,392,000
Spill Fund	$556,000
1986 Bond Fund	$388,000
Corporate Business Tax	$426,000
General State Fund	$2,436,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Florence Land Recontouring (FLR) Landfill operated as a municipal disposal facility from 1973 to 1981. The landfill was permitted to accept sanitary wastes, including sewage sludge and non-chemical industrial wastes; however, an investigation by NJDEP in 1975 found that hazardous wastes had been illegally disposed of at the site. The New Jersey Superior Court ordered the site closed in 1979 due to concerns that it was contaminating the ground water. The operator installed a clay cap over the landfill and leachate collection system in 1982. After the landfill was closed, leachate seeps were observed at the banks of a nearby creek and landfill gases were found to be emanating from on-site manholes and monitoring wells. USEPA added FLR Landfill to the National Priorities List of Superfund sites (NPL) in 1984.

Between 1985 and 1986, NJDEP conducted a Remedial Investigation and Feasibility Study (RI/FS) to determine the nature and extent of the contamination at the site and evaluate cleanup alternatives. The RI/FS revealed that contamination from the landfill had migrated into the underlying shallow aquifer but the deeper Magothy-Raritan Aquifer was not affected. The RI/FS also revealed that the shallow ground water contamination had not migrated laterally beyond the boundaries of the site. In 1986, USEPA signed a Record of Decision (ROD) with NJDEP concurrence that required installation of a multilayer landfill cap, a circumferential slurry wall, storm water controls, leachate and landfill gas collection systems and perimeter fencing. NJDEP completed construction of the remedial actions in 1994. Operation and maintenance (O&M) of the cap and engineering control systems are currently being implemented by Burlington County under the oversight of NJDEP.



Kauffman & Minteer Incorporated

Route 537 (Monmouth Road) Springfield Township Burlington County

BLOCK: 1601 **LOT:** 16

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Trucking
OPERATION STATUS: Inactive

PROPERTY SIZE: 5 Acres

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Inorganic Compounds	Delineated
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds	Partially Removed/Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$5,515,000
1986 Bond Fund	$134,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Kauffman & Minteer Inc. transported bulk liquids such as plasticizers, resins, vegetable oils, soaps, petroleum oils and alcohol in tanker trucks. Between 1960 and 1981, the company discharged contaminated wastewaters collected from washing the interiors of the trucks into a large unlined lagoon at the site. In 1978, NJDEP directed Kauffman & Minteer to remove the liquid from the lagoon and transport it to a waste processing center, but the company did not comply with the order. The dike surrounding the lagoon broke in 1984, causing wastewater to migrate onto a neighboring property and wetlands.

Between 1981 and 1989, USEPA and NJDEP conducted several inspections of the Kauffman & Minteer facility and collected wastewater, ground water, surface water and sediment samples. The primary concern was the lagoon, which was identified as a possible source of contamination to the ground water. Based on the findings of the preliminary investigation, USEPA added the Kauffman & Minteer facility to the National Priorities List of Superfund sites (NPL) in 1989. USEPA and Kauffman & Minteer entered into an Administrative Consent Order (ACO) in 1990 that required the company to close the lagoon and address the contaminated sediments, but the company failed to comply with the requirements of the ACO. USEPA fenced the site and implemented a removal action to drain the lagoon in 1991.

Between 1991 and 1996, USEPA conducted a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination at the site and evaluate cleanup alternatives. The RI/FS revealed that soil and sediments in the lagoon and drainage ditch were contaminated with volatile and semi-volatile organic compounds. The RI/FS also revealed the shallow ground water at the site was contaminated with volatile organic compounds but nearby residential wells had not been not affected. USEPA issued a Record of Decision (ROD) with NJDEP concurrence in 1996 that required removal and off-site disposal of the lagoon sediments and contaminated soils located in a drainage ditch and a wetlands area. In addition, the ROD required long-term monitoring of the shallow ground water, as well as controls to limit use of the shallow ground water. In 1997, USEPA excavated and disposed of approximately 14,000 tons of contaminated sediments and soil and backfilled the excavated areas with clean materials. In a separate action performed concurrently with USEPA's soil removal project, NJDEP's Remedial Response Element excavated and disposed of nine underground storage tanks and approximately 3,000 tons of contaminated soil.

During the soil remedial action, USEPA discovered additional contaminated soil and a plume of contaminated ground water at a separate area of the site. The primary contaminant was the volatile organic compound trichloroethylene (TCE). USEPA removed 3,500 tons of contaminated soil from this area in 1998 but could not remove the contaminated soil below the water table. USEPA completed a supplemental RI/FS for this area and issued a second ROD for the site in 2002. The ROD requires in-situ chemical treatment of the contaminated soil, followed by extraction and treatment of the contaminated ground water, if needed. USEPA is conducting a Remedial Design to develop the engineering specifications for this phase of the site cleanup.

Kauffman & Minteer Incorporated

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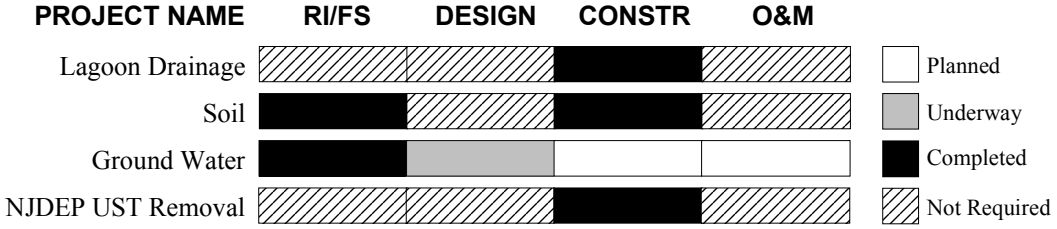


Lang Property

Whitesbog-Pasadena Road & City Line Road

Pemberton Township Burlington County

BLOCK: 907 **LOT:** 7, 8 & 9

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Illegal Dump
OPERATION STATUS: Inactive

PROPERTY SIZE: 40 Acres

SURROUNDING LAND USE: Agricultural

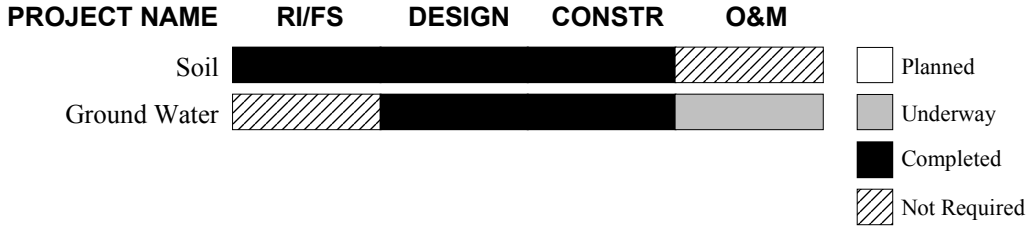
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Treating
Soil	Volatile Organic Compounds Metals	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$26,106,000
1981 Bond Fund	$800,000
1986 Bond Fund	$260,000
Hazardous Discharge Site Cleanup Fund	$460,000
Corporate Business Tax	$650,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is located in a blueberry and cranberry farming area of the Pinelands. In 1975, approximately 1,300 55-gallon drums containing various hazardous chemicals were dumped on a two-acre portion of the property. The property owners removed the drums in 1976 in response to legal action by NJDEP. However, sampling conducted by Burlington County and NJDEP indicated substantial contamination of the soil and ground water existed as a result of the dumping activities. USEPA added the Lang Property to the National Priorities List of Superfund sites (NPL) in 1983.

Between 1983 and 1986, USEPA conducted a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination at the site and evaluate cleanup alternatives. The RI/FS confirmed that the soil and ground water where the dumping had occurred were contaminated with volatile organic compounds and metals. USEPA issued a Record of Decision (ROD) with NJDEP concurrence in 1986 that required excavation and off-site disposal of the contaminated soil and installation of an on-site remediation system to extract and treat the contaminated ground water. USEPA excavated 13,000 tons of contaminated soil, backfilled the excavations with clean soil and fenced the site in 1988. USEPA completed construction of the ground water remediation system in 1996 and is performing operation and maintenance (O&M) of the system. To date, more than 255 million gallons of ground water have been treated and reinjected at the site. USEPA plans to add hydrogen peroxide to part of the shallow aquifer to enhance degradation of volatile organic contaminants. This work is scheduled to begin in 2003.



Noble Oil Company

30 Cramer Road Tabernacle Township Burlington County

BLOCK: 325 **LOT:** 1A & 2A

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Waste Oil Processing Facility
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.6 Acres

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Benzene	Levels Not of Concern/ Monitoring
Soil	Petroleum Hydrocarbons Volatile Organic Compounds	Removed

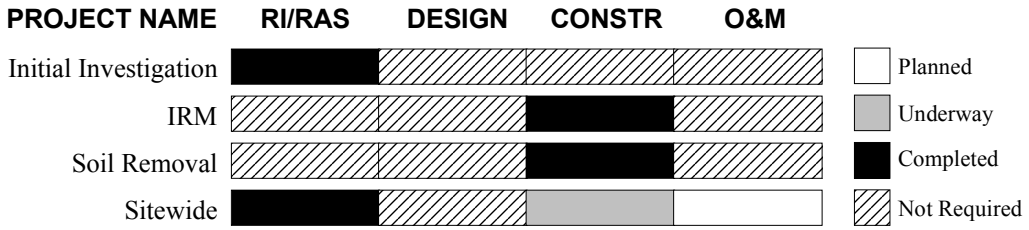
FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$1,176,000
Spill Fund	117,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Noble Oil Company operated a waste oil storage and treatment facility at this site from approximately 1950 until 1992. A state court ordered the facility closed in 1992 for numerous environmental violations, including discharging wastes directly onto the ground. The unpaved facility is located in a mixed residential/commercial area in the Pinelands Protection Area where residents and businesses rely on private potable wells. Approximately 50 private wells are located within a 1000-foot radius of the site. At the time operations ceased, the facility consisted of a one-story building, eight underground storage tanks that ranged in size from 250 to 20,000 gallons, 15 above ground storage tanks that ranged in size from 5,000 to 20,000 gallons, 22 tanker trailers and four heat exchange tanks.

Between 1989 and 1992, NJDEP's Remedial Response Element conducted a preliminary investigation that revealed that the soil and ground water at the site were contaminated with organic compounds but nearby private potable wells were not affected. NJDEP implemented an Interim Remedial Measure (IRM) in 1996 to remove approximately 500 tons of contaminated soil, 84,500 gallons of liquids/sludges and 167 drums of waste materials from the site. The underground storage tanks, above ground storage tanks and tanker trailers were also removed at this time.

Between 1997 and 2001, the Remedial Response Element conducted a Remedial Investigation/Remedial Alternative Selection (RI/RAS) to delineate the contamination in the soil and ground water at the site and evaluate cleanup alternatives. The RI revealed that the contaminated soil extended onto two adjacent residential properties. NJDEP excavated approximately 2,100 tons of contaminated soil from those properties and the Noble Oil site and backfilled the excavated areas with clean soil in 1998. RI and post-RI sampling results indicated that the concentrations of contaminants in the ground water had diminished to levels below New Jersey Drinking Water Standards. Based on the findings of the RI/RAS, NJDEP issued a Decision Document in 2001 that required excavation and removal of a small quantity of contaminated soil on the Noble Oil property and long-term monitoring of the ground water to ensure that the contaminant levels remain low. NJDEP removed 318 tons of contaminated soil in 2002, completing the soil cleanup at the site. Long-term monitoring of the ground water is scheduled to begin in 2003, after installation of a deep monitor well has been completed.



Roebling Steel Company

Hornberger & 2nd Avenues Florence Township Burlington County

BLOCK 126.01 **LOT:** 1
139 1, 2 & 3

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Steel Mill
OPERATION STATUS: Inactive

PROPERTY SIZE: 200 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Metals	Delineated
Surface Water	Metals	Delineated
Sediment	Metals	Delineated
Soil	Metals	Partially Removed/Delineated
Structures	Polychlorinated Biphenyls (PCBs) Asbestos Metals	Removing

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$49,787,000
1981 Bond Fund	$954,000
1986 Bond Fund	$25,000
Spill Fund	$8,000
Corporate Business Tax	$3,060,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site operated as a steel mill from 1906 until 1981, when the last operator, the John A. Roebling Steel Company, closed down and leased portions of the property to other businesses. There are approximately 70 buildings at the site. Potential sources of contamination included two sludge lagoons, an inactive landfill, storage tanks, pits and sumps containing hazardous materials, railroad cars containing fly ash, process buildings containing treatment baths, a network of underground piping containing liquids and sludges, and friable asbestos insulation covering pipes. In addition, slag residue from steel production was used to fill in a large portion of the property bordering the Delaware River shoreline. These conditions prompted USEPA to add the Roebling Steel Company to the National Priorities List of Superfund sites in 1982.

In 1985, USEPA began a Remedial Investigation/Feasibility Study (RI/FS) to determine the nature and extent of the contamination at the site and evaluate cleanup alternatives. Between 1987 and 1988, USEPA conducted two major Emergency Removal Actions to reduce the risk of fire and prevent injuries to trespassers. Approximately 3,000 55-gallon drums, 5,000 gallons of acids and more than 100 tons of hazardous solids and laboratory chemicals were transported off site during the Emergency Removal Actions. After the Emergency Removal Actions were completed USEPA established the following Operable Units (OU) for the site: the high hazard sources of contamination that were not addressed during the Emergency Removal Actions (OU1); the playground area bordering the southeast side of the site (OU2); the 34-acre slag disposal area adjacent to the Delaware River (OU3); the 70 on-site buildings and associated contamination (OU4); and the on-site soils, ground water, lagoons and other areas of concern (OU5).

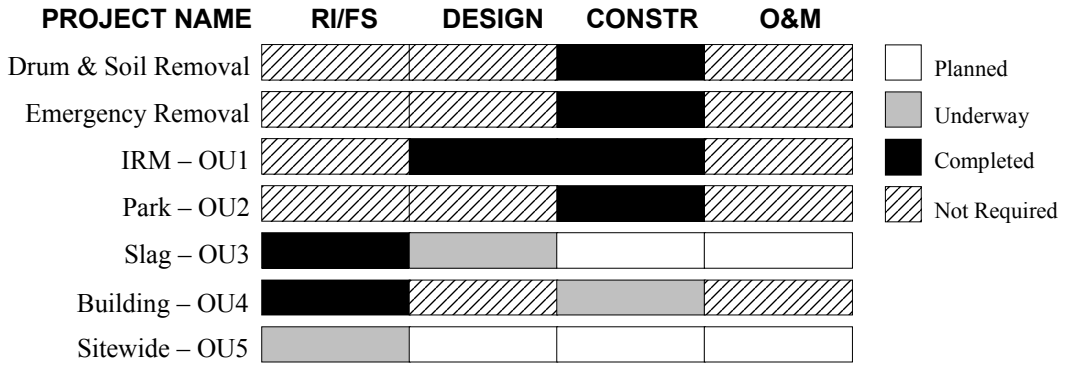
Between 1990 and 1995, USEPA issued three Record of Decisions (ROD) with NJDEP concurrence that established final remedial actions for OU1 through OU4. In 1991, USEPA implemented an Interim Remedial Measure (IRM) to satisfy the requirements of the OU1 ROD, which required the removal and off-site disposal of drums, transformers, tank contents, baghouse dust and chemical piles, tires and the contaminated surface soils under the Roebling Park water tower. Over 260 drums of waste, 45,000 gallons of transformer oil, 267,000 gallons of tank liquids, 1,300 tons of tank sludges, as well as smaller quantities of asbestos and contaminated soil were removed during the IRM. Remediation of OU2, which involved excavating approximately 160 cubic yards of contaminated soil from the playground, was completed in 1994 and the playground was subsequently reopened. The material excavated from the playground was determined to be nonhazardous, therefore it was disposed of in the slag area. For

Roebling Steel Company

(Continued from previous page)

OU3, USEPA plans to install a soil cover over the 34-acre slag area and vegetate the soil cover to prevent erosion. Remediation of OU4, which includes removal and disposal of the contents of underground tanks and piping, asbestos abatement, decontamination and demolition of the buildings, removal of scrap metal from building debris and equipment, and disposal of process dust and the contents of above ground tanks, pits and sumps, is underway.

In 2002, USEPA completed an RI/FS for the site-wide contamination (OU5). The RI/FS included sampling of the surface and subsurface soil across the site, an on-site landfill, two sludge lagoons, river and creek sediments and ground water. USEPA plans to issue a ROD outlining the final remedial actions for OU5 in 2003. The ROD for OU5 will include an amendment to modify the OU3 remedy.



Texaco Service Station Burlington City

Route 130 & Wood Street Burlington City Burlington County

BLOCK: 74 **LOTS:** 6, 7 & 25

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 1.0 Acre

SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Delineating
Soil	Volatile Organic Compounds	Delineating
Air	Volatile Organic Compounds	Potential

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$269,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

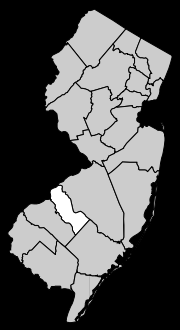
This site is also known as Param Petroleum and Burlington Gas and Diesel. It has operated as a service station since at least 1979. In 1994, explosive levels of gasoline vapors were detected in an adjacent sanitary sewer line, which were traced back to the Param Petroleum facility. The owner of the service station subsequently removed ten underground gasoline storage tanks and three diesel underground storage tanks from the property. The tanks were found to contain numerous holes and a five-inch layer of free-product was observed on the ground water in the tank excavations. The owner replaced the underground tanks and resumed operations but did not address the contaminated soil and ground water.

In 1996, gasoline vapors were again detected in the adjacent sanitary sewer line as well as in the floor drains of the nearby commercial establishment. NJDEP directed the Potentially Responsible Parties to investigate and remediate the contamination at the service station but they did not comply In 1999, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination at the site and evaluate cleanup alternatives. Sampling conducted during the RI/RAS has confirmed that the soil and ground water is contaminated with gasoline-related compounds. NJDEP expects to complete the RI/RAS and select final remedial actions to address the soil and ground water in 2003.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Camden County



CAMDEN

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23 Kerhart Avenue

23 Kerhart Avenue — Berlin Borough — Camden County

BLOCK: 3303 **LOT:** 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Oil Refinery
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.3 Acre

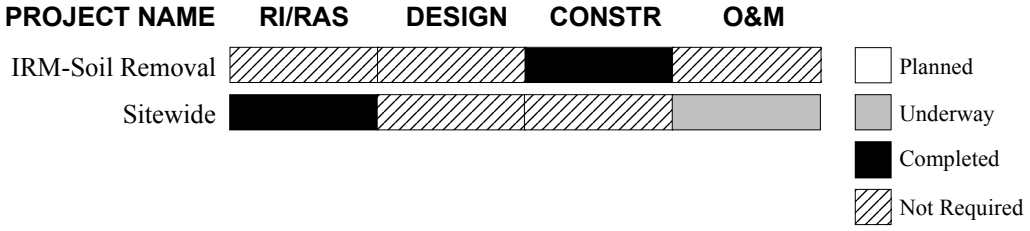
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds	Delineated/Further Monitoring Required
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$311,000
1986 Bond Fund	$8,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

An oil refinery operated at this site between the 1920s and 1940s. During this period, petroleum wastes from the refinery process were disposed of in pits. The refinery was later developed into residential properties. Environmental problems first surfaced in the 1980s, when a black tar-like substance began to seep through the soil at a residence. NJDEP's Remedial Response Element excavated and disposed of the contaminated soil in 1991 under an Interim Remedial Measure (IRM) and subsequently installed four ground water monitor wells around the perimeter of the former excavation to evaluate the ground water quality. Sampling of the monitor wells has revealed that very low levels of benzene are present in the ground water. Based on these findings, NJDEP established a conditional No Further Action designation and a Classification Exception Area/Well Restriction Advisory (CEA/WRA) for the property. NJDEP will re-sample the ground water in 2006 to determine whether the contaminant levels have decreased through natural attenuation and the CEA/WRA can be lifted.



Alfonso's Restaurant

407 Whitehorse Pike — Waterford Township — Camden County

BLOCK: 1601 **LOTS:** 32, 34, 35 & 35.01

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Fuel Oil Storage
OPERATION STATUS: Inactive

PROPERTY SIZE: 2.0 Acres

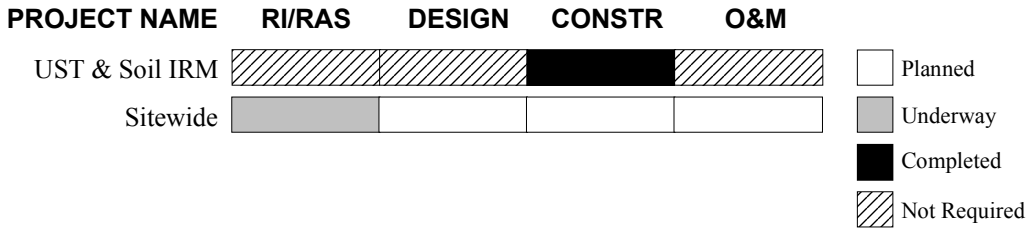
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Soil	Volatile Organic Compounds	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$300,000
Corporate Business Tax	$300,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

A fuel oil storage and distribution facility operated on this property before it was converted to a restaurant. The property is currently unused. A preliminary investigation conducted in 1996 indicated that the soil and ground water were contaminated with volatile organic compounds and that a number of underground fuel storage tanks remained on site. NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) in 1998 to delineate the contamination and evaluate cleanup alternatives. The initial findings of the RI/RAS confirmed the presence of ten underground storage tanks as well as subsurface soil contamination. NJDEP removed the underground storage tanks and 2,700 tons of contaminated soil under an Interim Remedial Measure (IRM) in 1999. Sampling of nearby private potable wells in 2000 did not reveal any contaminants at levels exceeding New Jersey Drinking Water Standards. NJDEP installed on-site and off-site monitor wells in 2001 and is evaluating sampling data from those wells to determine whether remedial actions are necessary to address the ground water. NJDEP expects to complete the RI/RAS in 2003.



Amoco Service Station Camden City

710 Broadway and Pine Street Camden City Camden County

BLOCK: 289 **LOT:** 12

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 0.5 Acre

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Partially Removed/Delineating
Air	Gasoline Vapors	Vented/Investigating

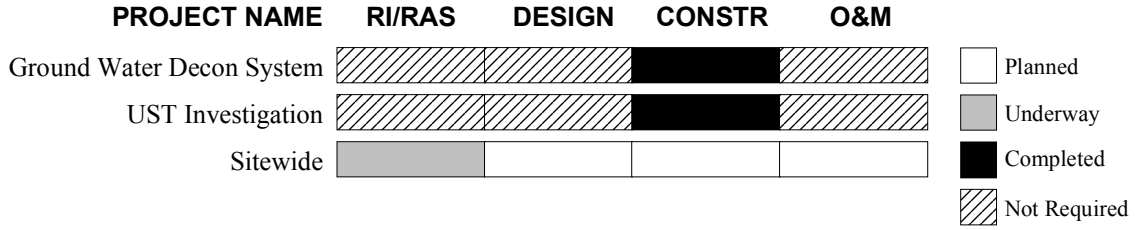
FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$457,000
Spill Fund	$74,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site has a history of contamination dating back to 1975, when gasoline leaking from the underground storage tank system caused gasoline vapors to enter the basement of an adjacent office building. A former owner of the service station installed a ventilation system in the basement of the office building to mitigate the gasoline vapors. In 1984, explosive levels of gasoline vapors were detected in the basement of a nearby tavern. NJDEP placed a ventilation fan in the tavern basement to reduce the risk of explosion and installed a free-product recovery system at the service station to remove gasoline product that was floating on the ground water table. Approximately 350 gallons of gasoline had been recovered when NJDEP shut down the free-product recovery system in 1985.

In 1993, due to recurrence of the vapor problem in the neighboring building, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water at the service station and to evaluate remedial alternatives. A soil gas survey conducted as part of the RI/RAS indicated that there were elevated levels of contamination in the soil but the investigation was impeded by the presence of construction debris that had been used as fill. Sampling of on-site monitor wells in 1995 revealed the presence of elevated levels of dissolved gasoline in the ground water but there was no gasoline product present on the water table. NJDEP has determined that there are no private or public potable wells in the area at risk of becoming contaminated due to this site.

In 1999, NJDEP investigated four unused underground storage tanks at the gas station property. The investigation confirmed that the tanks had been properly decommissioned in place by the gas station owner. No further actions are planned for the decommissioned tanks.



Atco Avenue Ground Water Contamination

Atco Avenue Waterford Township Camden County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

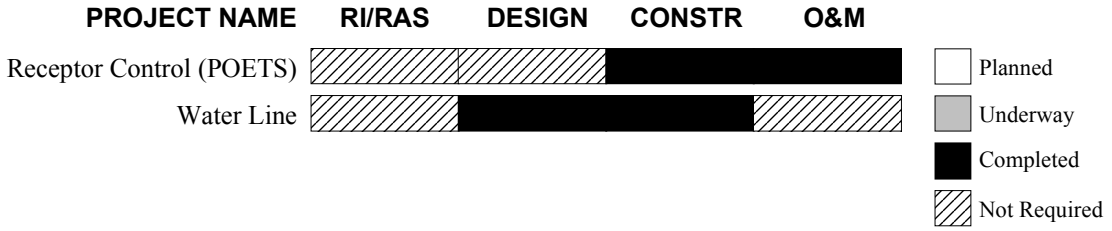
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$245,000
1986 Bond Fund	$1,927,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This private potable well contamination case is located in New Jersey's ecologically sensitive Pinelands area. Sampling conducted by the Camden County Health Department between 1990 and 1992 identified 63 private potable wells in the Atco area of Waterford Township that were contaminated with volatile organic compounds and/or mercury at levels exceeding New Jersey Drinking Water Standards. The primary volatile organic contaminants were trichloroethylene (TCE), tetrachloroethylene (also known as perchloroethylene, or PCE), dichloroethylene (DCE), trichloroethane (TCA) and benzene. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. In 1996, NJDEP's Remedial Response Element completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems in the affected homes; however, Waterford Township elected to extend public water lines to the area instead. NJDEP agreed to provide the Township with funds equal to the cost of monitoring and maintaining the POET systems for 20 years to help pay for the water line. Construction of the water lines and connection of the properties were completed in 1999. Approximately 185 properties with contaminated wells or wells at risk of becoming contaminated were connected to the water lines.

In 2001, NJDEP completed a source investigation for the site that identified a local fuel service facility as the likely source of the benzene contamination in private potable wells on Cooper Road and a dry cleaning establishment as the likely source of the TCE and PCE in wells in the Pamela Court area. No likely sources were identified for the other private wells due to the relatively low levels of contaminants detected and the widespread distribution of the contaminated wells. In addition, no source was identified for the mercury contamination that was detected in some of the wells. Due to the widely scattered locations of the mercury-contaminated wells and the historical land use in the area, NJDEP has concluded the mercury contamination may be attributable to one or more potential non-point sources.



Camden City Water Department Parkside Well Field Contamination

Vesper & Park Boulevards — Camden City — Camden County

BLOCK: 1279 **LOT:** 1A

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 0.5 Acre

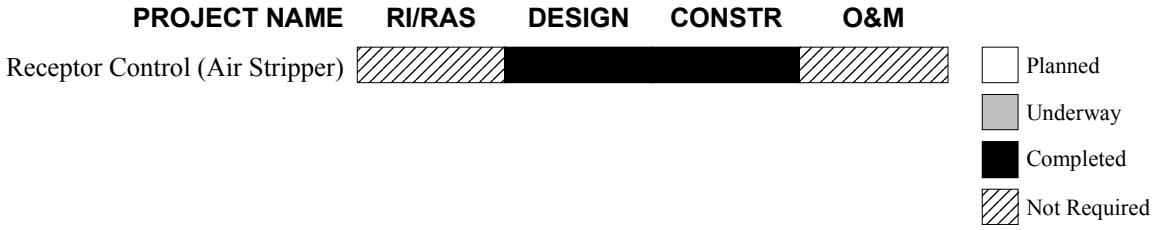
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$1,681,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Parkside Well Field supplies Camden City with 20% of its water supply during peak usage periods. In 1988, routine sampling revealed that the water from the three supply wells at the well field was contaminated with chlorinated volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. For several years the water was effectively treated at the well field using minor treatment technologies but in 1997 increasing levels of contamination forced the Camden City Water Department to shut the wells down. NJDEP's Remedial Response Element subsequently completed a water supply alternatives analysis that concluded the most cost-effective remedy was to install an air stripper at the well field to treat two of the supply wells and keep the third well out of service. The City of Camden completed construction of the air stripper in 1999 using funds provided by NJDEP and is operating and maintaining the system. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Christ Care United Missionary

242 Sicklerville Road Winslow Township Camden County

BLOCK: 2903 **LOT:** 1

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

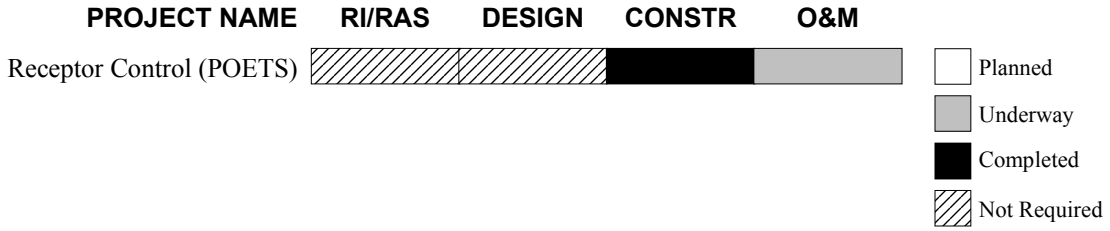
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Ethylene Dibromide	Confirmed
Potable Water	Ethylene Dibromide	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$1,000
Corporate Business Tax	$258,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling by NJDEP's Bureau of Safe Drinking Water in 2001 revealed the private potable well at the Christ Care United Missionary was contaminated with ethylene dibromide (EDB) at levels exceeding the New Jersey Drinking Water Standard for this pesticide. A Point-of-Entry Treatment (POET) system was installed on the well with funds provided by NJDEP to supply potable water for the occupants of the missionary. NJDEP's Remedial Response Element will sample other nearby wells during 2003 and will use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Collingswood Borough Water Department Well Field Contamination

Highland Avenue Collingswood Borough Camden County

BLOCK: 9-BA **LOT:** 1

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$16,000
1986 Bond Fund	$743,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site consists of four municipal wells that serve residents of Collingswood Borough, Haddon Township and Woodlynne Township. Routine testing conducted by the Borough of Collingswood in 1991 revealed the wells were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants are trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). In 1992, after completing a Remedial Action Selection (RAS), NJDEP's Remedial Response Element recommended installation of two packed tower air strippers at the well field to treat the water. The Borough of Collingswood installed the air strippers in 1995 using funds provided by NJDEP and is operating and maintaining the systems. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.

Fazzio Sanitary Landfill

204 Harding Avenue Bellmawr Borough Camden County

BLOCK: 79A **LOT:** 9A, 25

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Sanitary Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 70 Acres

SURROUNDING LAND USE: Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Pesticides Polychlorinated Biphenyls (PCBs) Metals	Confirmed
Soil	Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Pesticides Metals	Potential
Surface Water	Semi-Volatile Organic Compounds Metals	Potential
Sediments	Semi-Volatile Organic Compounds Metals	Potential
Air	Methane	Potential

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$32,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Fazzio Landfill is actually comprised of three adjacent waste fill deposit sites, known as the Bellmawr site, the Deptford site and the Dewey-Blanton site. These sites are bordered by Route 295, Route 42, the New Jersey Turnpike and Big Timber Creek. Originally separate waste disposal facilities, over time they became part of one contiguous operation. The Fazzio Bellmawr site is located in the Bellmawr Borough, Camden County and encompasses 70 acres. It was authorized to accept municipal wastes, but industrial wastes may have been disposed of there as well. The Fazzio Deptford site is located in Deptford Township, Gloucester County and encompasses 16 acres. It accepted municipal wastes along with confirmed deposits of waste oils, sludges and liquid chemical wastes. The Dewey-Blanton site is located in Bellmawr Borough and encompasses 21 acres. It also accepted municipal wastes and has operated as a composting facility since landfilling activities ceased in 1972. The Dewey-Blanton site is the only one of the three landfills that was closed pursuant to NJDEP solid waste requirements in place at the time. Sampling of on-site monitor wells in 1997 indicated that the ground water is contaminated with various organic compounds and metals at levels exceeding New Jersey Ground Water Quality Standards. Previous sampling of the soil at the landfill and the surface water and sediments of Big Timber Creek also indicated the presence of contaminants.

NJDEP's Remedial Response Element is implementing closure actions to prevent the release of methane, a greenhouse gas, from the waste fill and mitigate the impact of landfill leachate on the environment. NJDEP is currently reviewing the landfill's history and past sampling results to obtain preliminary information for the landfill closure project. NJDEP plans to conduct an Immediate Environmental Concern Assessment at the site in 2003 to identify conditions that could present immediate threats to human health or the environment.

Fazzio Sanitary Landfill

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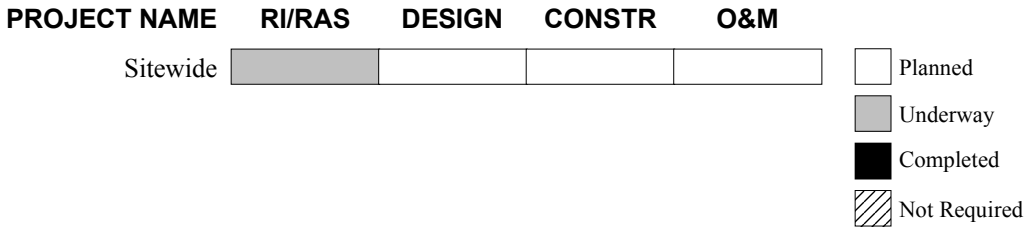


Martin Aaron Incorporated

1542 South Broadway — Camden City — Camden County

BLOCK: 637 **LOT:** 1

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Drum Reconditioning
OPERATION STATUS: Inactive

PROPERTY SIZE: 3.5 Acres

SURROUNDING LAND USE: Industrial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Delineating
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Partially Removed/Delineating

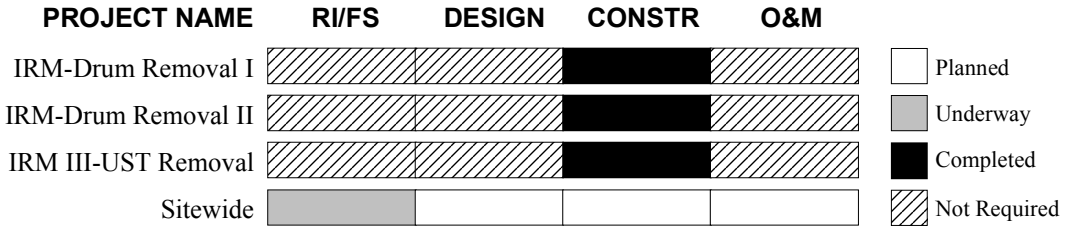
FUNDING SOURCES	AMOUNT AUTHORIZED
1981 Bond Fund	$6,000
1986 Bond Fund	$1,630,000
Corporate Business Tax	$895,000
Superfund	$1,500,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Martin Aaron, Inc. site is located in a densely populated section of Camden City. Several companies operated drum recycling businesses at the property for approximately 30 years, ending in the late 1990s. A site inspection by the New Jersey Department of Law and Public Safety in 1987 revealed hundreds of improperly stored drums of hazardous wastes, evidence of buried drums and soil contamination. State authorities served the owner and operator of the facility with a notice of civil penalty and directed them to perform a remedial investigation to determine the extent of the contamination at the site. However, the owner/operators failed to respond to the directive and eventually abandoned the facility and filed for bankruptcy. Rhodes Drum, Inc., a separate drum recycling facility, continued to operate on a small portion of the site until 1999.

Between 1995 and 1997, NJDEP's Remedial Response Element implemented two Interim Remedial Measures (IRM) to address the drums and other surface materials. Approximately 700 drums of chemical wastes, 10,000 empty drums and 33 dumpsters of mixed waste were removed during the IRMs. The City of Camden subsequently demolished and disposed of the building. NJDEP implemented a third IRM in 1999 to remove five underground storage tanks and almost 900 tons of contaminated soil from the property.

In 1999, USEPA added the Martin Aaron facility to the National Priorities List of Superfund sites (NPL). NJDEP completed a Remedial Investigation (RI) in 2000 that revealed the soil and ground water at the site is highly contaminated with organic compounds and metals. USEPA assumed the lead for the site in 2000 and is conducting supplementary RI work, which will be followed by a Feasibility Study (FS). USEPA will use the findings of the RI/FS to select the final remedial actions to address soil and ground water, which will be outlined in one or more Records of Decision (ROD) for the site.



North Third Street Ground Water Contamination

1542 South Broadway Winslow Township Camden County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

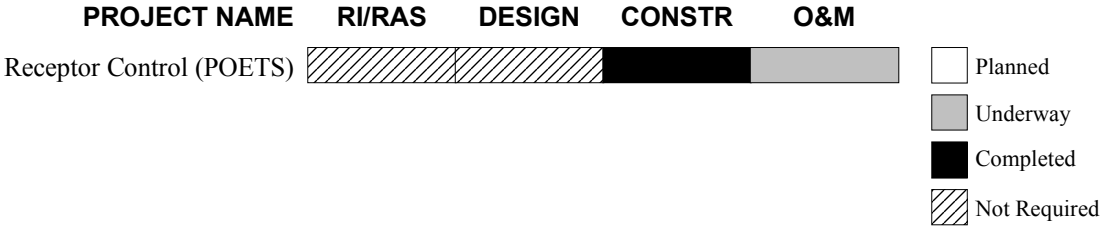
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Mercury	Confirmed
Potable Water	Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$10,000
Corporate Business Tax	$12,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by local property owners in 2001 identified five private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element sampled additional private potable wells in the area in 2002 and will use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area. NJDEP expects to complete the water supply alternatives analysis in 2003.



Puchack Well Field

River Road — Pennsauken Township — Camden County

BLOCK: 192, 196, 199, 200, 203 & 204 **LOT:** Various

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential/Commercial

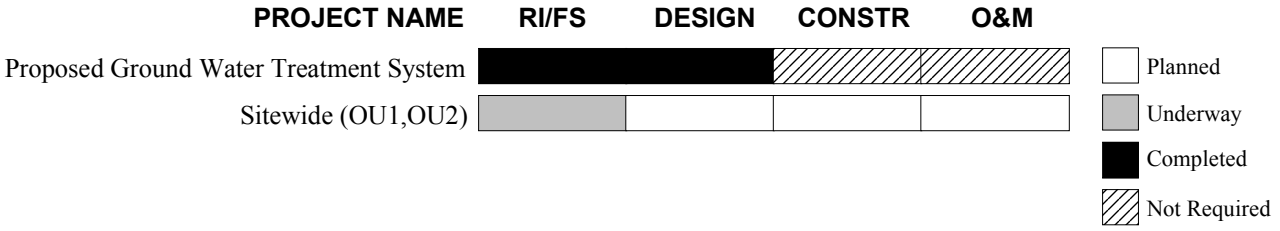
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury Chromium	Delineated
Potable Water	Volatile Organic Compounds Mercury Chromium	Taken Out of Service

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$6,000,000
1981 Bond Fund	$934,000
1986 Bond Fund	$710,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is also known as the Camden City Water Department Puchack Well Field Contamination case. It consists of six public supply wells that were taken out of service between 1975 and 1998 due to the presence of metals and chlorinated volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. NJDEP has identified numerous nearby industrial facilities as possible sources of the contamination. In 1991 and 1992, NJDEP directed 22 Potentially Responsible Parties to install a ground water treatment system at the well field but they did not comply. The City of Camden subsequently completed a Remedial Design for a ground water treatment system for the entire well field, but the proposed system was not implemented because it was deemed too costly to construct and operate.

In 1998, USEPA added Puchack Well Field to the National Priorities List of Superfund sites (NPL) and assumed the lead for the investigation and remediation of the site. To facilitate the remedial process, USEPA is addressing the site in two phases, or Operable Units (OU): investigation and cleanup of the ground water at the well field (OU1) and identification, investigation and cleanup of the source areas that are contributing to the ground water contamination (OU2). The Remedial Investigation and Feasibility Study (RI/FS) for OU1 is underway. USEPA has completed the field work portion of the RI, which entailed installing over 60 monitor wells and collecting ground water samples. The RI/FS for OU2 is scheduled to begin in 2003.



Stephen Drive & Linda Lane Ground Water Contamination

Stephen Drive, Linda Lane & Cheryl Court

Winslow Township **Camden County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

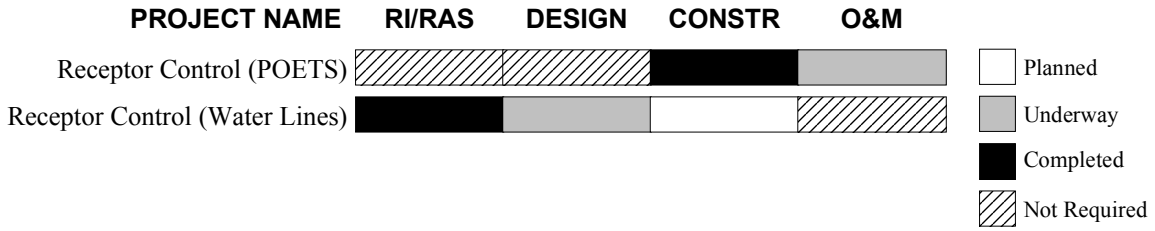
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$41,000
Corporate Business Tax	$1,422,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This case is also known as the Cedar Brook Estates Ground Water Contamination site. Sampling conducted by the Camden County Health Department in 1999 identified 22 private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants are trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. In 2001, NJDEP's Remedial Response Element delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the extension of public water lines to properties in the CKE. The Winslow Township Water and Sewer Authority will begin installing the water lines in 2003 using funds provided by NJDEP. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Supreme Petroleum Company Inc. of NJ

413 Route 30 & Garfield Avenue

Chesilhurst Borough **Camden County**

BLOCK: 903 **LOTS:** 3 and 4

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 2.0 Acres

SURROUNDING LAND USE: Commercial/Residential

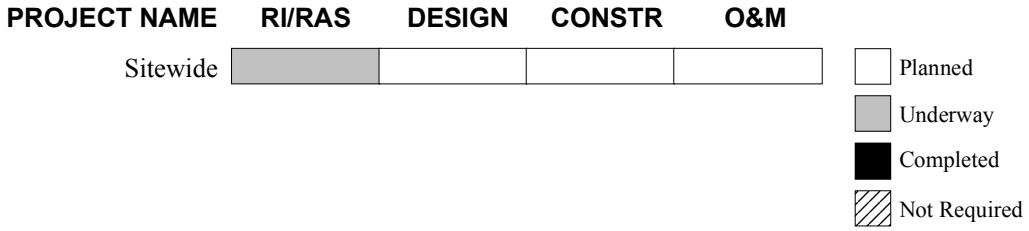
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Lead	Delineated
Soil	Volatile Organic Compounds Lead	Delineated
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$51,000
Corporate Business Tax	$504,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site has operated as a gasoline service station since at least the 1960s. It is located in a Pinelands Protection area where residents use private wells for potable water supplies. In the 1990s, NJDEP's Responsible Party Remediation Element was working with the operator of Supreme Petroleum to remove several leaking underground storage tanks and petroleum-contaminated soil at the service station. Sampling conducted after the tanks and soil were removed indicated that volatile organic contamination remained in the soil and ground water at the site. In 1997, the Camden County Health Department determined that a nearby residential well was contaminated with gasoline-related compounds and referred the case to NJDEP. NJDEP directed a group of Potentially Responsible Parties for the Supreme Petroleum site to fully delineate the soil and ground water contamination and address the contaminated well. A deeper replacement well was installed to provide potable water for the resident but the Potentially Responsible Parties did not comply with the other requirements of the directive.

In 1997, NJDEP's Remedial Response Element began a Remedial Investigation/Remedial Action Selection (RI/RAS) to delineate the contamination at the Supreme Petroleum site. Sampling of nearby private potable wells conducted as part of the RI did not reveal any additional wells that were contaminated above New Jersey Drinking Water Standards. The Remedial Response Element completed the RI phase in 2002. NJDEP is negotiating an agreement with the Responsible Parties that would obligate them to complete the remedial activities at the site.



The Decorators Well Contamination

294 Third Street Waterford Township Camden County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

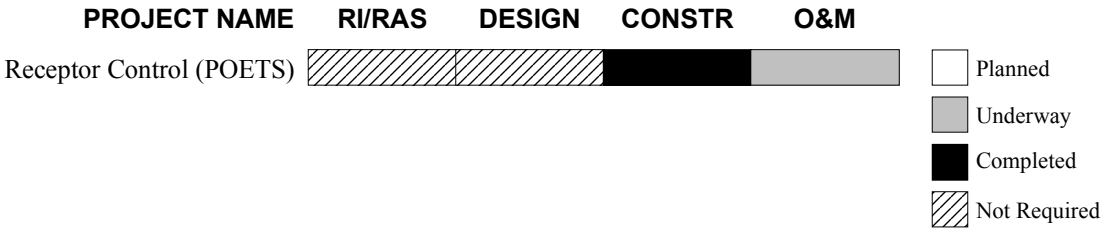
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Ethylene Dibromide 1,2,3 Trichloropropane	Confirmed
Potable Water	Ethylene Dibromide 1,2,3 Trichloropropane	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$3,000
1981 Bond Fund	$19,000
Corporate Business Tax	$50,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Routine sampling of non-public community supply wells by NJDEP's Bureau of Safe Drinking Water in 2001 revealed the private potable well at this former interior decorators office was contaminated with ethylene dibromide (EDB) at levels exceeding the New Jersey Drinking Water Standard for this pesticide. NJDEP's Remedial Response Element subsequently identified seven private potable wells at residences in the immediate area that were also contaminated with EDB at levels exceeding the Drinking Water Standard. The sampling also identified one private potable well that was contaminated with 1,2,3 trichloropropane at levels exceeding New Jersey's drinking water guideline for this compound. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the contaminated commercial and residential wells with funds provided by NJDEP as an interim measure to supply potable water for the occupants. The Remedial Response Element plans to sample additional nearby private potable wells during 2003 and will use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area. The water supply alternatives analysis is scheduled to be completed in 2003.



Welsbach/General Gas Mantle Sites (Camden Radiation)

Various Locations Camden and Gloucester Cities Camden County

BLOCK: Various **LOT:** Various

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: **Gas Mantles Manufacturing**
OPERATION STATUS: **Inactive**

PROPERTY SIZE: 1,124 Properties Surveyed

SURROUNDING LAND USE: Residential/Commercial/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Soil	Thorium, Radium, Uranium	Partially Removed/Delineating
Air	Radon/Thoron Progeny	Shielding/Venting

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$1,337,000
1981 Bond Fund	$4,612,000
1986 Bond Fund	$42,000
Corporate Business Tax	$7,923,000
Superfund	$41,472,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Welsbach/General Gas Mantle Superfund site is comprised of two former incandescent gas mantle manufacturing plants and numerous residential properties in Camden and Gloucester cities that were contaminated with radioactive wastes from the plants. Welsbach Company of Gloucester City and General Gas Mantle Company of Camden City manufactured incandescent gas mantles for home and street lighting between the 1890s and 1941. Both plants extracted thorium from ore for use as a coating material on the mesh covers of the gas lamps. The radioactive waste materials, or tailings, that remained after the extraction process were disposed of as fill near and/or under residential and commercial properties as well as on open lands. Various industries and commercial businesses have occupied the former Welsbach and the General Gas Mantle properties since the two companies ceased operations.

Between 1991 and 1994, NJDEP conducted radiological surveys at more than 1,100 properties in Gloucester City and Camden City to evaluate the extent of radioactive contamination. The surveys revealed that 81 properties -45 in Gloucester City and 36 in Camden City - had elevated radiation levels. NJDEP implemented Interim Remedial Measures (IRM) at 33 of these properties that exhibited radiation levels above NJDEP's interim exposure criteria to protect the health of the occupants until permanent cleanup measures could be implemented. The IRMs included placing shielding materials, such as concrete and lead sheeting, over contaminated soil, installing radon/thoron ventilation systems in buildings and establishing access restrictions. Radiation levels at 48 of the properties did not exceed NJDEP's interim exposure criteria, therefore no immediate measures were taken at these properties. In 1991, NJDEP purchased a private residence in Gloucester City and permanently relocated its owner due to elevated radiation inside the home, and relocated Ste-Lar Textiles, Inc. from the former General Gas Mantle Company site to protect the health of the employees. NJDEP removed the contents of the Ste-Lar Textiles building in 1992 to minimize potential risk to area residents should a fire occur at the facility.

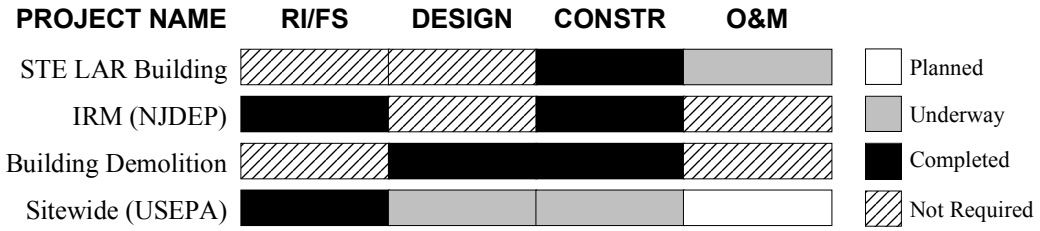
In 1996, USEPA added the Welsbach/General Gas Mantle sites to the National Priorities List of Superfund sites (NPL) and began a Remedial Investigation and Feasibility Study (RI/FS) at the former gas mantle plants and approximately 150 "Vicinity" properties in Gloucester City and Camden City to confirm NJDEP's findings from the radiological surveys and select permanent remedies. In 1998, while the RI/FS was underway, USEPA removed approximately 200 cubic yards of radiologically-contaminated soil from a public park in Gloucester City and replaced it with clean fill as an interim measure. The RI/FS revealed that significant quantities of radiologically contaminated soil were present at both the former Welsbach and General Gas Mantle plants and that there were elevated levels of radiation inside the former General Gas Mantle building. USEPA also concluded based on the comparison of USEPA's and NJDEP's data on the "Vicinity" properties that the soil at 54 of these properties was contaminated with radiological elements above cleanup levels. In addition, USEPA identified approximately 600 "Suspect" properties that were either adjacent to the known contaminated properties or had radiation exposure rates above background levels and therefore required additional investigation.

Welsbach/General Gas Mantle Sites (Camden Radiation)

(Continued from previous page)

In 1999, after completing the RI/FS, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that required excavation and off-site disposal of radiologically-contaminated soil from both the former Welsbach and General Gas Mantle sites, demolition and off-site disposal of the General Gas Mantle building, and excavation and off-site disposal of radiologically contaminated soil from the 54 Vicinity properties. USEPA demolished the General Gas Mantle building in 2000 and is conducting Remedial Designs for the soil cleanup actions at the plant sites and the Vicinity properties. During the Remedial Design phase, USEPA is investigating the 600 "Suspect" properties to determine the extent of the radiological contamination and is designing cleanup plans for those properties as necessary. USEPA began removing contaminated soil from some of these residential and commercial properties in 2002.

In addition to the above investigative work, Holt Hauling and Warehousing, Inc., owner of the only remaining building on the former Welsbach property, entered into an Administrative Order on Consent with USEPA in 1997 that obligated it to perform a RI/FS to determine the extent of the radiological contamination at the property. Holt Hauling and Warehousing completed the RI/FS at its building (also known as the Armstrong building) in 2000. USEPA will use the findings of the RI/FS to select a final remedy for the Armstrong building, which will be outlined in a second ROD for the site.



Winslow Township Sanitary Landfill

Piney Hollow Road — Winslow Township — Camden County

BLOCK: 9101 **LOT:** 2
9102 1
8802 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Sanitary Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 95 Acres

SURROUNDING LAND USE: Undeveloped

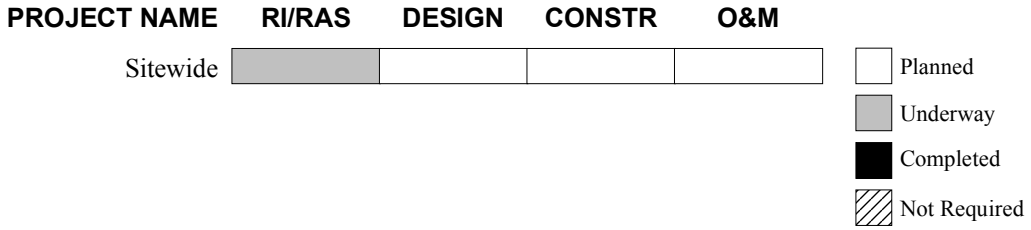
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Delineating
Air	Methane	Potential

FUNDING SOURCES	AMOUNT AUTHORIZED
Responsible Party Settlement Fund	$1,768,000

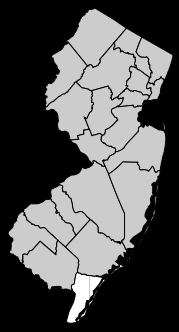
SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Winslow Township Landfill is a 95-acre inactive sanitary landfill that was formerly operated by Winslow Township. Waste disposal activities started at the northwest portion of the landfill in the 1950s before New Jersey solid waste regulations were in effect. In addition to municipal wastes, sludge-like materials were reportedly deposited in the landfill during the late 1960s and early 1970s. Landfilling of the southeast portion of the site began after the northwest portion of the landfill closed in 1974. Municipal wastes, vegetative wastes and animal and food processing wastes were disposed at the southeast portion of the landfill under a permit with the state until 1990, when the site reached capacity. Several closure plans proposing methods to cap the landfill have been prepared for the site on behalf of Winslow Township but none have been implemented. Sampling of on-site monitor wells has indicated that ground water contamination is present at the site.

NJDEP's Remedial Response Element is planning to implement closure actions to prevent the release of methane, a greenhouse gas, from the waste fill and mitigate the impact of landfill leachate on the environment. NJDEP has reviewed the landfill's history and past sampling results to obtain preliminary information for the landfill closure project. NJDEP expects to begin the engineering design for the landfill closure in 2003.



Cape May County



CAPE MAY

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Allendale Road Ground Water Contamination

Allendale Road — Upper Township — Cape May County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

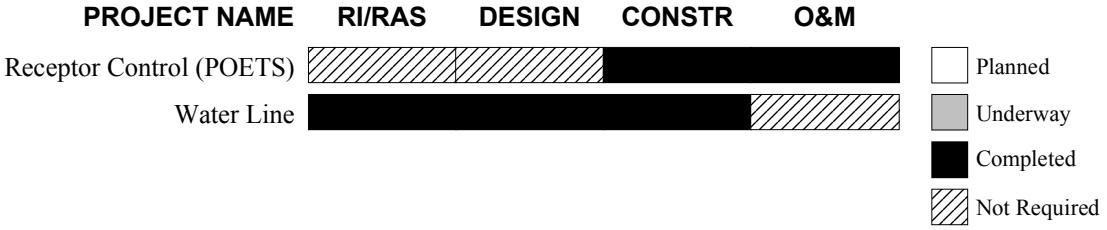
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$35,000
1986 Bond Fund	$681,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Cape May County Health Department between 1992 and 1994 under its Well Head Protection Program identified 12 private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Nine additional wells were found to have lower levels of the contaminants. The primary contaminants were tetrachloroethylene (also known as perchloroethylene, or PCE) and carbon tetrachloride. NJDEP installed Point-of-Entry Treatment (POET) systems on the wells that did not meet Drinking Water Standards as an interim measure to supply potable water for the residents. In 1996, NJDEP's Remedial Response Element delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was extension of public water lines to the properties in the CKE. The local water purveyor completed construction of the water lines and connection of the residences in 1999 using funds provided by NJDEP. Eighty four residences were connected to the water line and the wells at those properties sealed during the project. The Remedial Response Element is periodically sampling private potable wells around the perimeter of the CKE to monitor ground water quality. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Beesley's Point Ground Water Contamination

Maple Shade Lane & Grant Avenue

Upper Township Cape May County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

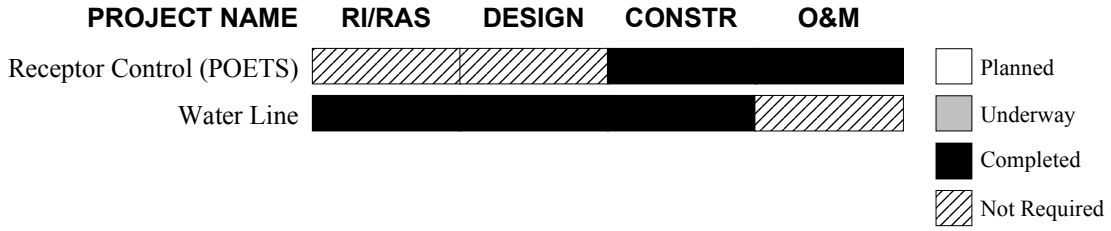
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$33,000
1986 Bond Fund	$592,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Cape May County Health Department between 1992 and 1994 under its Well Head Protection Program identified 16 private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Nine additional wells were found to have lower levels of the contaminants. The primary contaminants were trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). NJDEP installed Point-of-Entry Treatment (POET) systems on the wells that did not meet Drinking Water Standards as an interim measure to supply potable water for the residents. In 1996, NJDEP's Remedial Response Element delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was extension of public water lines to the properties in the CKE. The local water purveyor completed construction of the water lines and connection of the properties in 1999 using funds provided by NJDEP. Forty two residences were connected to the water lines and the wells at those properties sealed during the project. The Remedial Response Element is periodically sampling private potable wells around the perimeter of the CKE to monitor ground water quality. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Citgo Service Station Upper Township

20 South Shore & Pine Roads

Upper Township **Cape May County**

BLOCK: 653 **LOT:** 2, 3, 4, 5.01 & 6

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.63 Acres

SURROUNDING LAND USE: Residential/Commercial

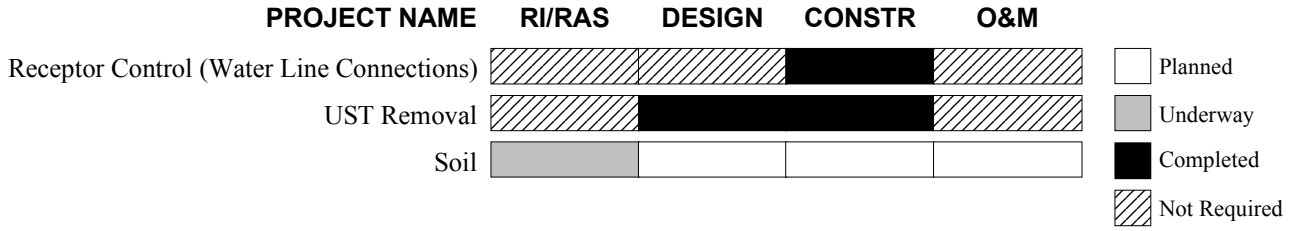
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$3,000
Corporate Business Tax	$142,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This abandoned service station is also known as Levari's Citgo. Sampling conducted in 1988 during an underground tank removal project indicated the subsurface soil was contaminated. The following year, a representative from the Cape May County Department of Health detected gasoline odors while observing the excavation of underground tank piping at the site. NJDEP notified the owner of his obligation to investigate the contamination pursuant to New Jersey's Underground Storage Tank regulations, but the owner did not comply. Sampling of the service station's potable well in 1996 showed high levels of benzene, a volatile organic chemical found in gasoline. Benzene and methyl tertiary-butyl ether (MTBE), a gasoline additive, were also detected at levels exceeding New Jersey Drinking Water Standards in a private potable well at a nearby store. The service station, an adjacent residence and the store were later connected to the public water line and the contaminated private wells sealed.

In 2000, NJDEP confirmed gasoline-contaminated ground water was migrating from Levari's Citgo service station and this was the likely source of the potable well contamination. Subsequent sampling of additional private potable wells in the immediate area did not identify any others that were contaminated above Drinking Water Standards. NJDEP's Remedial Response Element removed/decommissioned the five underground storage tanks in 2001 after the site owner failed to comply with an NJDEP directive to conduct the work. Due to the close proximity of the building to the road, it was not possible to excavate any of the contaminated soil during the tank removal/decommissioning project. The Remedial Response Element delineated the contaminated soil in 2002 and is evaluating alternatives to address it. The Remedial Response Element is also monitoring private potable wells in the immediate area to ensure they continue to meet Drinking Water Standards.



Domi Drive Ground Water Contamination

Domi Drive — Middle Township — Cape May County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Various

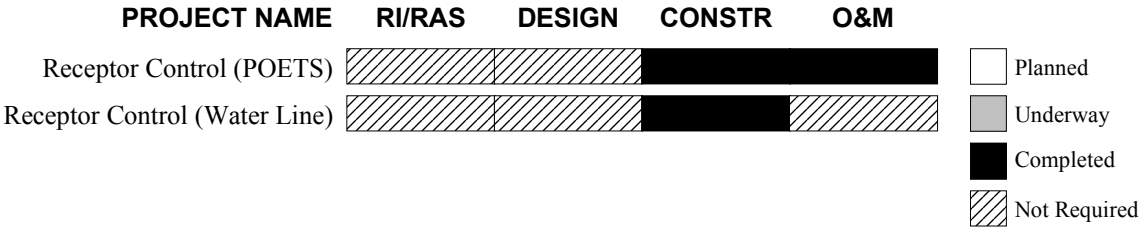
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$125,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Cape May County Health Department in 1994 identified six private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants are trichloroethane (TCA) and tetrachloroethylene (also known as perchloroethylene, or PCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Township subsequently extended a public water line to the affected residences using funds provided by NJDEP. NJDEP has approved a three-year monitoring program to evaluate ground water quality in the surrounding area for contaminant migration. NJDEP completed a source investigation for this site in 1996 but the results were inconclusive. It is believed that the contamination was the result of an isolated discharge with little or no potential for migration outside the currently impacted area.



Edgewood Village Mobile Home Park

2403 Route 9 (Shore Road) Middle Township Cape May County

BLOCK: 1064 **LOT:** 2

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Mobile Home Park
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 11 Acres

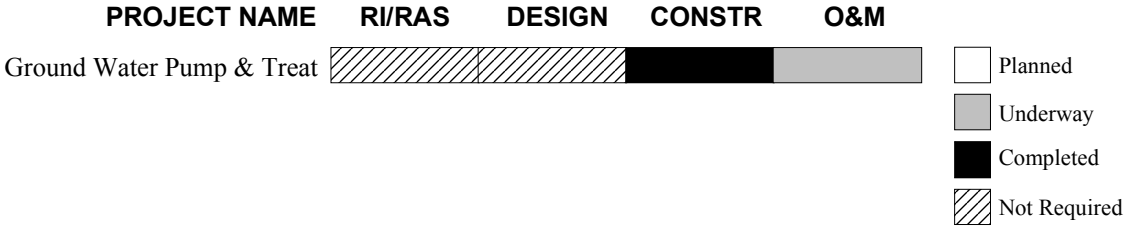
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds	Treated/Further Monitoring Required
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$429,000
1986 Bond Fund	$1,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This mobile home park used kerosene to heat the mobile homes. In 1989, approximately 5,400 gallons of kerosene spilled from an underground fuel distribution system, contaminating the soil and ground water. The Responsible Parties removed the contaminated soil and installed three monitor wells but were unable to continue remedial work due to lack of funds. NJDEP's Remedial Response Element subsequently installed additional monitor wells, a recovery well and a ground water extraction and treatment system at the mobile home park, and by June 1990 had recovered approximately 2,000 gallons of kerosene from the ground water. The ground water extraction and treatment system was demobilized in 1993 when little additional kerosene could be recovered. The Remedial Response Element is periodically sampling the ground water at the site to evaluate the effectiveness of the remedial action.



Foundations & Structures Landfill

Fidler Hill Road — Woodbine Borough — Cape May County

BLOCK: 117 **LOT:** 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Sanitary Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 95.5 acres

SURROUNDING LAND USE: Undeveloped

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Confirmed
Soil	Volatile Organic Compounds Metals	Potential
Air	Methane	Potential

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$253,000
Spill Fund	$420,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Foundations and Structures (F&S) Landfill operated a sanitary landfill at this site between 1971 and 1985 under a lease agreement with the Borough of Woodbine, which owns the property. Although the size of the landfilled area is unknown, it is estimated to encompass 30 to 50 acres of the 95-acre lot. The landfill is generally flat and level with the adjacent terrain. Parts of the site are covered with sand, while other portions support trees and other vegetation. The surrounding areas are largely undeveloped with the exception of the Woodbine Municipal Airport, which is located just southeast of the site. While the F&S Landfill was in operation, municipal solid waste, septic waste, sewage sludge, demolition debris and other wastes were buried in trenches that extended to just above the water table. F&S Landfill was scheduled to terminate disposal activities when the Cape May County Landfill, then a state-of-the-art regional landfill, opened in 1984; however, F&S continued to accept wastes until late 1985, when NJDEP ordered the facility shut down. The operators did not properly close the landfill after operations ceased. Sampling of on-site monitor wells conducted in 1999 indicated the ground water is contaminated with benzene, chlorobenzene and arsenic at levels exceeding New Jersey Ground Water Quality Standards.

NJDEP's Remedial Response Element is implementing closure actions at the landfill to prevent the release of methane, a greenhouse gas, from the waste fill and mitigate the impact of landfill leachate on the environment. NJDEP completed pre-design investigation activities in 2002 and is reviewing the findings of the investigation.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Gary's Gas & Go

200 South Route 47 — Middle Township — Cape May County

BLOCK: 167.01 **LOT:** 43.02

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station/Auto Repair
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.3 Acre

SURROUNDING LAND USE: Residential

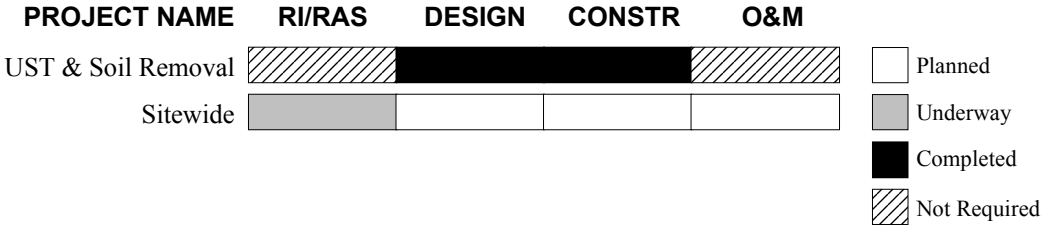
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Well Taken Out of Service
Soil	Volatile Organic Compounds	Partially Removed/Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$409,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site formerly operated as a gasoline service station and auto repair shop. In 1994, high levels of xylene, a volatile organic compound that is a component of gasoline, were detected in a private potable well at a neighboring property. This well was later taken out of service. The gas station owner performed a preliminary investigation that identified extensive gasoline contamination in the subsurface soil at the property. The gas station owner removed four of the eight underground gasoline storage tanks in 1995 but did not address the contaminated soil or ground water. Sampling of nearby private potable wells has not identified any additional wells that are contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards.

In 1998, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water and evaluate remedial alternatives. NJDEP implemented an Interim Remedial Measure (IRM) in 2000 to excavate the remaining four tanks and 1,500 tons of contaminated soil and backfill the excavations with clean soil. Sampling conducted after the IRM revealed that gasoline was still present in the subsurface soil and confirmed that the ground water at the site was highly contaminated with volatile organic compounds. NJDEP plans to start the ground water investigation phase of the RI/RAS in 2003.



Plaza Gas & Car Wash

1805 Bayshore Road Lower Township Cape May County

BLOCK: 282 **LOT:** 5, 6, 7 & 8

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Inactive

PROPERTY SIZE: Not Applicable

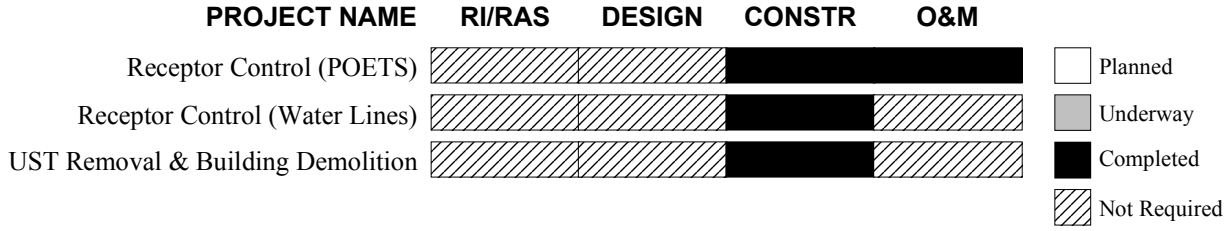
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Petroleum Hydrocarbons	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$68,000
Corporate Business Tax	$324,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is a former gasoline service station and car wash facility. It is now a vacant lot. Sampling conducted by the Cape May County Health Department and NJDEP between 1999 and 2000 identified eight private potable wells in the area that were contaminated with benzene, a component of gasoline, at levels exceeding the New Jersey Drinking Water Standard for this compound. NJDEP installed Point-of-Entry Treatment (POET) systems on the contaminated wells as an interim measure and Lower Township connected the residences to the public water lines as a final remedy. A preliminary investigation of the Plaza Gas and Car Wash site revealed six underground gasoline storage tanks containing gasoline were present at the property and that several of the tanks had leaked. In 2000, NJDEP's Remedial Response Element removed the underground storage tanks and 1,100 tons of petroleum hydrocarbon-contaminated soil and demolished the building. The Remedial Response Element is evaluating the well sampling results and will use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination.



Route 50 Ground Water Contamination

Route 50 Upper Township Cape May County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

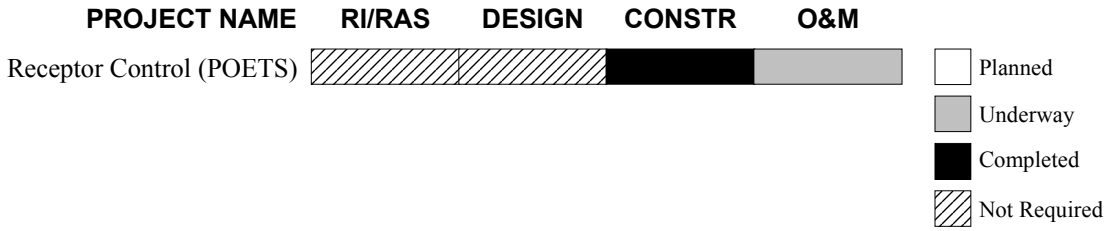
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$24,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Cape May County Health Department between 1997 and 1999 identified seven private potable wells in the area of Route 50 and Tuckahoe Road that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. NJDEP's Remedial Response Element subsequently conducted additional potable well sampling in the immediate area but did not identify any other wells that were contaminated at levels exceeding Drinking Water Standards.

The source of the potable well contamination is believed to be a former service station located at the intersection of Route 50 and New Jersey Avenue. The Responsible Party for the gas station is investigating and remediating the site under the supervision of NJDEP's Responsible Party Remediation Element. Underground gasoline storage tanks and contaminated soil were removed from the site by the Responsible Party in 2000. In addition, the Responsible Party identified two additional private potable wells that were contaminated with volatile organic compounds at levels exceeding Drinking Water Standards and POETS were installed on these wells. All future remedial actions at this site will be conducted by the Responsible Party under the supervision of the Responsible Party Remediation Element.



Villas Ground Water Contamination

Delaware Parkway & Bayshore Road

Lower Township Cape May County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

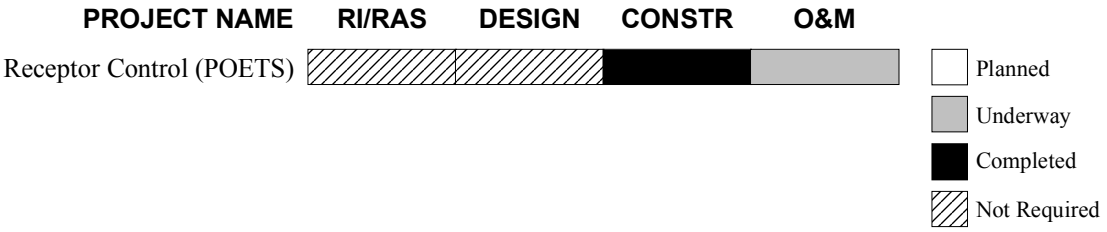
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$8,000
Corporate Business Tax	$10,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Cape May County Health Department and NJDEP between 1999 and 2002 identified 11 private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were trichloroethylene (TCE), tetrachloroethylene (also known as perchloroethylene, or PCE), methyl tertiary butyl ether (MTBE) and styrene. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element plans to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area in 2003.



Williams Property

Siegtown Road — Middle Township — Cape May County

BLOCK: 99.02 **LOT:** 3

CATEGORY: Superfund
State Lead

TYPE OF FACILITY: Illegal Dump
OPERATION STATUS: Inactive

PROPERTY SIZE: 5.6 Acres

SURROUNDING LAND USE: Residential/Agricultural

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Removed

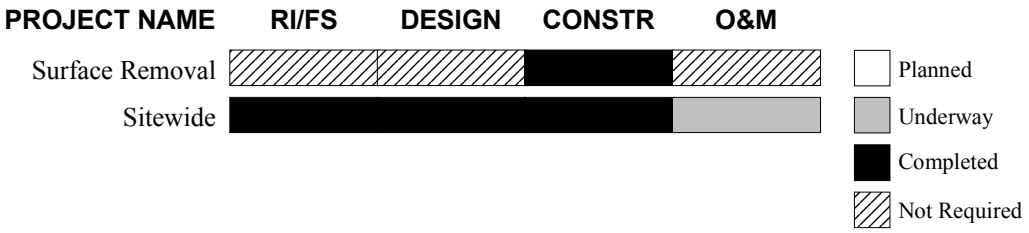
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$8,567,000
Spill Fund	$470,000
1986 Bond Fund	$552,000
General State Funds	$73,000
Corporate Business Tax	$717,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

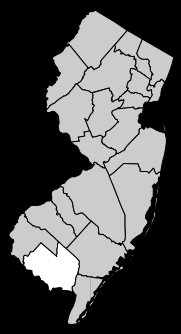
The Willliams Property is a wooded lot situated in a mixed residential/rural area. It is located less than three miles southeast of the Timber Beaver Swamp Fish and Wildlife Management Area, a major aquifer recharge zone, and is bordered by prime wetlands habitats. An NJDEP inspection in 1979 revealed that 200 to 300 drums of hazardous materials had been drained onto the soil and evidence that tank trailers had discharged liquid wastes at the site. The contamination posed a threat to the underlying Holly Beach Aquifer and deeper Cohansey Aquifer, both of which are used as potable water supplies. NJDEP excavated and disposed of 1,200 cubic yards of sludge and contaminated soil and removed surface debris in 1980. USEPA added the Williams Property to the National Priorities List of Superfund sites (NPL) in 1983.

Between 1985 and 1987, NJDEP conducted a Remedial Investigation/Feasibility Study (RI/FS) to determine the nature and extent of the contamination in the soil and ground water and evaluate cleanup alternatives. The RI/FS revealed that contaminated soil still remained at the property and a plume of contaminated ground water was migrating off site. USEPA issued a Record of Decision (ROD) with NJDEP concurrence in 1987 that required removal of the contaminated soil, installation of a remediation system to extract and treat the contaminated ground water, and extension of public water lines to nearby residences with private potable wells. Middle Township extended public water lines to nearby residences using funds provided by NJDEP. USEPA excavated and disposed of approximately 960 cubic yards of contaminated soil, backfilled the excavation and revegetated the site between 1990 and 1991.

NJDEP completed construction of the ground water remediation system in 1995. More than 210 million gallons of contaminated ground water have been extracted, treated and reinjected on site since the system was installed. Recent sampling has shown that contaminants in the ground water have decreased to levels close to New Jersey Drinking Water Standards. In September 2002, USEPA agreed to a temporary treatment termination plan proposed by NJDEP. Under this plan, treatment will be terminated for four months and the ground water monitored. If contamination levels rebound, the ground water treatment system will be restarted.



Cumberland County



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Bridgeton Avenue Ground Water Contamination

Bridgeton, Morton & Landis Avenues

Deerfield Township Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

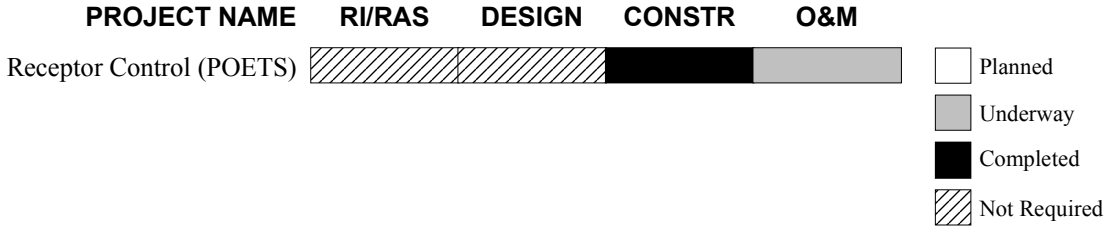
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	1,2,3-Trichloropropane Mercury	Confirmed
Potable Water	1,2,3-Trichloropropane Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$33,000
1981 Bond Fund	$31,000
Corporate Business Tax	$175,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This ground water contamination site is centered near the intersection of Landis Avenue and Morton Avenue in Deerfield Township, but extends into Pittsgrove Township in Salem County. Sampling of noncommunity public water systems by NJDEP's Bureau of Safe Drinking Water in 2000 revealed the potable wells at two commercial establishments in this area were contaminated with 1,2,3-trichloropropane at levels exceeding New Jersey's drinking water guideline for this compound. In 2001, NJDEP's Remedial Response Element identified 29 additional private potable wells at residential and commercial properties in the area that exceeded the drinking water guideline for 1,2,3-trichloropropane and three private potable wells that exceeded the New Jersey Drinking Water Standard for mercury. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the occupants. The Remedial Response Element plans to sample additional nearby private potable wells during 2003 and will use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area.



Bridgeton City Water Department Well Field Contamination

Burlington Road Bridgeton City Cumberland County

BLOCK: 9 **LOT:** 10

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

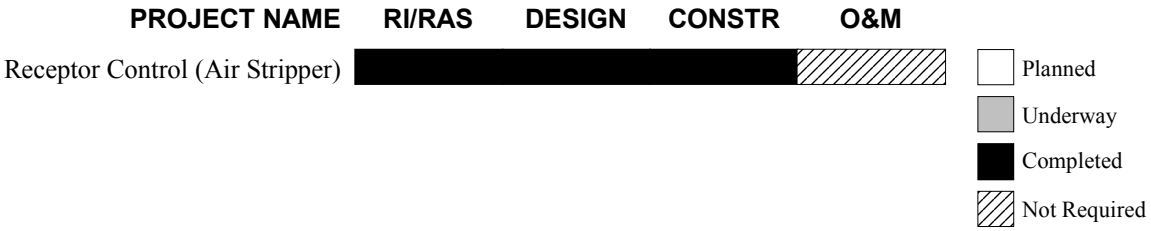
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Trichloroethylene	Confirmed
Potable Water	Trichloroethylene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$610,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Routine sampling conducted by the Bridgeton City Water Department in 1994 revealed that two of their municipal supply wells were contaminated with trichloroethylene (TCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. As an interim measure, water from the affected wells was blended with water from another source to reduce the TCE contamination to levels below the Drinking Water Standard. In 1997, NJDEP's Remedial Response Element completed a Remedial Action Selection (RAS) that concluded the most cost-effective remedy was installation of an air stripper on each of the wells to remove the volatile organic contamination. Bridgeton City completed construction of the air strippers in 1999 using funds provided by NJDEP and is operating and maintaining the systems. An investigation is planned to identify possible sources of the ground water contamination at this site.



Deerfield Township Ground Water Contamination

Kenyon Avenue Deerfield Township Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

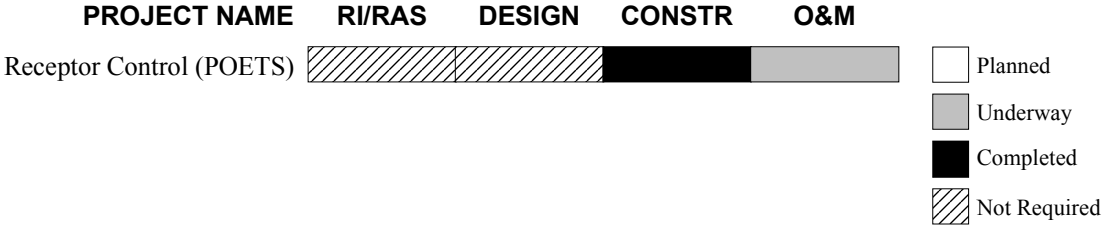
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Mercury	Confirmed
Potable Water	Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$12,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Cumberland County Health Department in 1993 identified 12 private potable wells in this area that were contaminated with mercury at levels exceeding New Jersey Drinking Water Standards. Additional sampling has sporadically revealed mercury compounds in the ground water throughout Deerfield Township. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. NJDEP completed a source investigation in 1997 that concluded the mercury contamination was the result of historical agricultural practices combined with relatively shallow private wells. NJDEP will conduct additional private potable well sampling in the area to ensure drinking water supplies are protected.



Elmer Road East Ground Water Contamination

Elmer Road East — Vineland City — Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

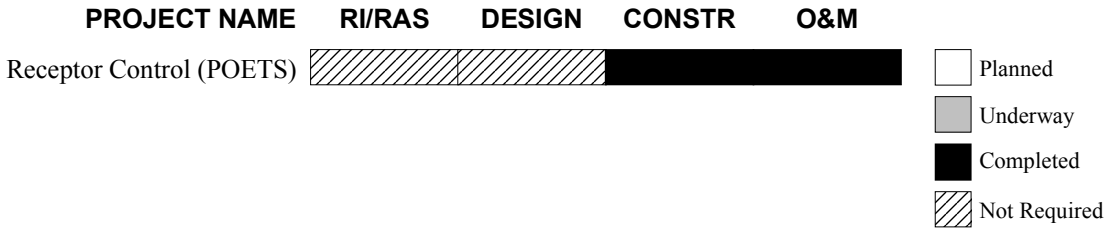
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Mercury	Confirmed
Potable Water	Mercury	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$47,000
Corporate Business Tax	$10,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Vineland City Health Department in early 2001 identified six private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. The source of the contamination is unknown. The City of Vineland extended public water lines to these properties in 2001 to provide potable water for the residents. NJDEP's Remedial Response Element subsequently identified four additional wells in the area that were contaminated with mercury at levels exceeding the Drinking Water Standard. NJDEP installed Point-of-Entry Treatment (POET) systems were installed on the wells as an interim measure and Vineland City extended water lines to the homes in 2002. Approximately twelve other homes within the Currently Known Extent (CKE) of the mercury contamination that currently do not have elevated levels of mercury in their potable wells are also eligible for connection to the public water lines under the Spill Fund program.



Fairfield Adult Medical Day Care

238 New England Cross Road

Fairfield Township **Cumberland County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

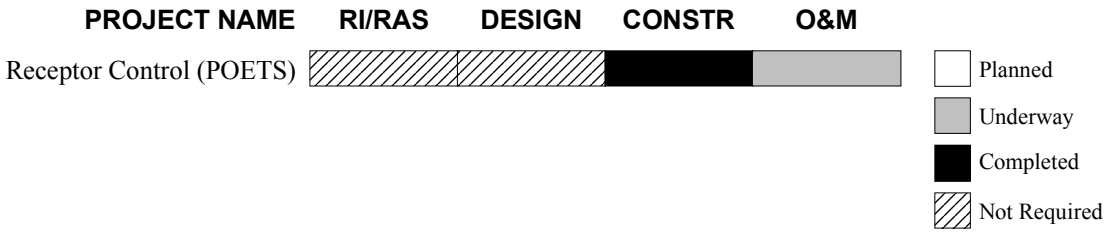
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	1,2,3-Trichloropropane 1,2-Dichloropropane Benzene	Confirmed
Potable Water	1,2,3-Trichloropropane 1,2-Dichloropropane Benzene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$9,000
1981 Bond Fund	$15,000
Corporate Business Tax	$50,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling of noncommunity public water systems by NJDEP's Bureau of Safe Drinking Water in 2000 revealed the private potable well at the Fairfield Adult Medical Day Care facility was contaminated with 1,2,3-trichloropropane, 1,2-dichloropropane and/or benzene at levels exceeding New Jersey Drinking Water Standards and guidelines. NJDEP's Remedial Response Element conducted sampling in 2001 that identified eight additional private potable wells in the area that were contaminated with 1,2,3-trichloropropane at levels exceeding the drinking water guidelines. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the Fairfield Adult Medical Day Care well and private wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element plans to sample additional nearby private potable wells during 2003 and will use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area. NJDEP expects to complete the water supply alternatives analysis in 2003.



Gagliardi Demolition

267 North Mill Road Vineland Township Cumberland County

BLOCK: 401 **LOT:** 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Former Junk Yard
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.5 Acres

SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Metals	Levels Not of Concern
Soil	Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Metals	Delineated
Air	Radiation	Levels Not of Concern

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$240,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site operated as a junk yard from 1958 to 1992. The debris has since been removed and the property is currently a vacant lot. The site is fenced to prevent trespassing. The findings of preliminary investigation performed by NJDEP in 1997 indicated that the soil and ground water at the site was contaminated with hazardous substances, including polychlorinated biphenyls (PCBs). Between 1999 and 2002, NJDEP's Remedial Response Element conducted a Remedial Investigation and Remedial Action Selection (RI/RAS) that revealed the surface soil over approximately 70% of the site was contaminated with polychlorinated biphenyls (PCBs) and metals at levels exceeding NJDEP's soil cleanup criteria. Radiological analysis of soil samples indicated low levels of radiation but these levels were determined not to present a health threat. In addition, the RI/RAS revealed that the ground water at the site was not significantly contaminated. NJDEP plans to issue a Proposed Decision Document recommending final remedial actions for the soil in 2003. This site has been designated as a potential Brownfields Redevelopment site by NJDEP and the City of Vineland.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Iceland Coin Laundry & Dry Cleaning

1888 Delsea Drive South Vineland City Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential/Commercial

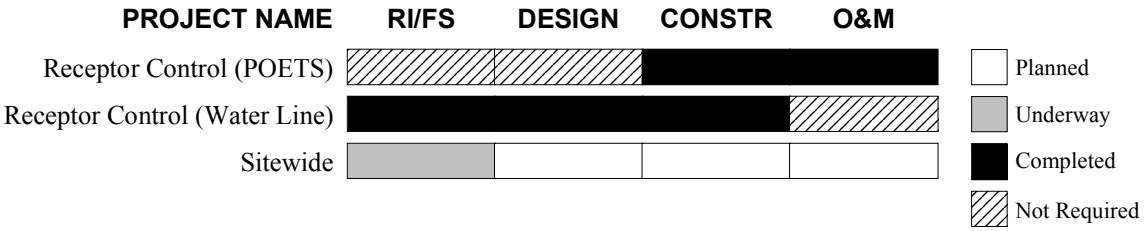
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Delineating
Potable Water	Volatile Organic Compounds Mercury	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$1,700,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is also known as the Iceland Coin Laundry Area Ground Water Plume. Sampling conducted by the Vineland City Health Department in 1991 identified 16 private potable wells in the area that were contaminated with volatile organic compounds and/or mercury at levels exceeding New Jersey Drinking Water Standards. The primary volatile organic contaminants are tetrachloroethylene (also known as perchloroethylene, or PCE), trichloroethylene (TCE) and dichloroethylene (DCE). The contaminated ground water plume extends from South Delsea Drive, Dirk Drive, Garrison Road, Lois Lane, South Orchard Road, West Elmer Road and West Korff Drive. NJDEP installed Point-of-Entry Treatment (POET) systems on the contaminated wells as an interim measure to provide potable water for the residents and Vineland City extended public water lines to the area in 1994.

NJDEP completed a preliminary assessment and site investigation in 1998 that identified Iceland Coin Laundry & Dry Cleaning, an inactive establishment formerly located on Delsea Drive, as a Potentially Responsible Party for the volatile organic contamination in the ground water. However, the sampling data indicated there may be at least one additional source of volatile organic contamination in the area. USEPA added Iceland Coin Laundry & Dry Cleaning to the National Priorities List of Superfund sites (NPL) in 1999 and began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination and evaluate cleanup alternatives. The ground water sampling phase of the RI/FS is underway.



Nascolite Corporation

Doris Avenue — Millville City — Cumberland County

BLOCK: 234 **LOT:** 60

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Plastics Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 17.4 Acres

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds	Treating
Soil	Lead	Delineated
Structures	Asbestos	Demolition/Asbestos Abatement Completed

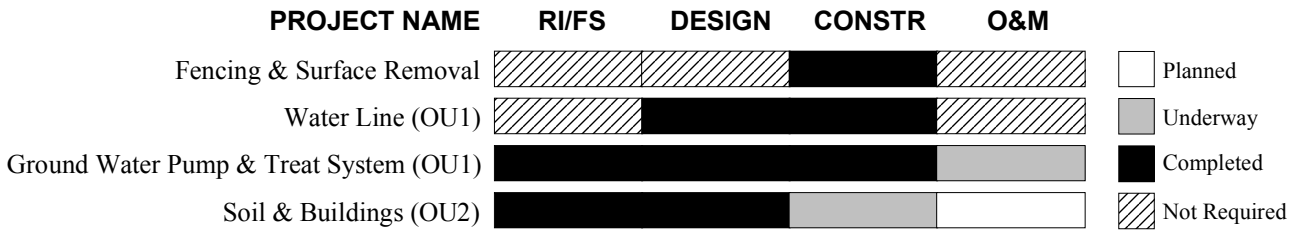
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$19,943,000
1986 Bond Fund	$1,700,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Nascolite Corporation reclaimed scrap acrylic material and manufactured Plexiglas sheets at this site between 1953 and 1980. Liquid wastes from the distillation of scrap acrylic were stored in several underground storage tanks at the plant. Shortly after operations at the site ceased, NJDEP conducted a preliminary investigation that revealed at least one of the underground storage tanks had leaked. Sampling conducted during the preliminary investigation confirmed that there was significant contamination in the soil and ground water. Based on these findings, USEPA added Nascolite Corporation to the National Priorities List of Superfund sites (NPL) in 1984. NJDEP began a Remedial Investigation and Feasibility Study (RI/FS) in 1985 to delineate the contamination at the site and evaluate cleanup alternatives. The RI/FS activities included sampling of the soil, ground water, waste materials and nearby private potable wells. Between 1987 and 1988, USEPA disposed of 100 55-gallon drums, removed the underground tanks and installed a fence around the site.

After the initial RI/FS was completed, USEPA divided the investigation and cleanup of the site into two Operable Units (OU): contaminated ground water (OU1) and contaminated soils and buildings (OU2). In 1988, USEPA signed a Record of Decision (ROD) with NJDEP concurrence for OU1 that required extension of a public water line to six nearby residences with potable wells that were at risk of becoming contaminated and installation of an on-site remediation system to extract and treat the contaminated ground water. The ROD also required a supplemental RI/FS to further evaluate the extent of the contamination in the soil and buildings. Responsible Parties for the site extended the water line in 1989 and completed construction of the OU1 ground water remediation system in 1996. Operation and maintenance (O&M) of the ground water remediation system are being conducted by the Responsible Parties under the supervision of USEPA.

In 1991, after completing the supplemental RI/FS, USEPA signed a ROD with NJDEP concurrence for OU2. The ROD required demolition of the site structures, excavation and solidification/stabilization of contaminated soil and wetland sediments with replacement of the solidified soil on site, and restoration of the affected wetlands. USEPA completed the Remedial Design for OU2 in 1995; however, federal budget constraints delayed implementation of the remedial action for several years. The first phase of the OU2 remedial action, demolition and removal of the site structures and asbestos abatement, was completed in 2000. USEPA began excavating the contaminated soil and wetland sediments in late 2002.



Southeast Boulevard Ground Water Contamination

Southeast Boulevard Vineland City Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

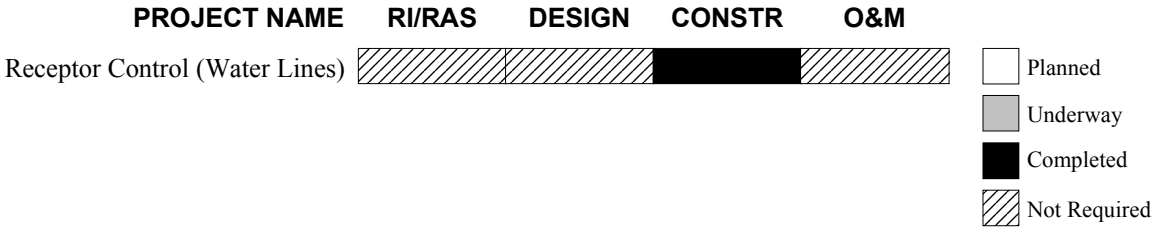
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$91,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Vineland City Health Department in 2001 identified five private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were dichloroethylene (DCE), trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). NJDEP's Remedial Response Element delineated the Currently Known Extent (CKE) of the potable well contamination and Vineland City extended public water lines to the residences in the CKE using funds provided by NJDEP. Six residences were connected to the public water supply and the potable wells at these properties sealed during the water line installation project, which was completed in 2001. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Vineland Chemical Company Incorporated

1611 West Wheat Road Vineland City Cumberland County

BLOCK: 173 **LOT:** 1

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 20 Acres

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Metals Trichloroethylene (TCE)	Treating
Surface Water	Metals	Delineated
Soil	Metals	Delineated
Sediment	Metals	Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$88,300,000
1986 Bond Fund	$2,750,000
Corporate Business Tax	$6,794,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Vineland Chemical Company manufactured arsenic-based herbicides at this facility between 1950 and 1994. The site is adjacent to the Blackwater Branch, a tributary of the Maurice River. The Maurice River joins Union Lake about eight miles downstream of the site. The Vineland Chemical facility consisted of manufacturing and storage buildings, a laboratory, several lagoons and former chicken coops. Prior to 1977, the company stored wastes containing high levels of arsenic in the unlined lagoons and chicken coops. Preliminary sampling conducted in the early 1980s indicated that the on-site ground water and sediments in the Maurice River were contaminated with arsenic. USEPA added Vineland Chemical Company to the National Priorities List of Superfund sites (NPL) in 1984.

In 1985, USEPA began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination at the on-site and off-site areas and evaluate cleanup alternatives. USEPA determined based on the RI/FS that the soil at the Vineland Chemical plant was substantially contaminated with arsenic in localized areas, and the shallow ground water was contaminated with arsenic and to a lesser degree with cadmium and trichlorethylene (TCE). USEPA also confirmed that sediments and surface water in the Blackwater Branch, Maurice River and Union Lake contained elevated levels of arsenic due to the Vineland Chemical Company site.

In 1989, after completing the RI/FS, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that outlined the final remedial actions for the four Operable Units (OU) that had been established at the site. The ROD required the following: consolidation and treatment, by in-situ flushing, of the on-site contaminated soils (OU1); installation of an on-site ground water remediation system to extract and treat the contaminated ground water (OU2); the excavation and treatment, by flushing, of the arsenic-contaminated sediments in the Blackwater Branch and Maurice River (OU3); and the excavation and treatment, by flushing, of arsenic-contaminated sediments in Union Lake (OU4). The ROD also specified that the treated sediments from the rivers and lake be redeposited in the floodplain.

USEPA completed construction of the OU2 ground water treatment system in 2000 and the system is currently treating about one million gallons of water per day. The system is also preventing contamination from migrating off site through hydraulic control of the ground water. Construction of the OU1 soil flushing plant is underway and expected to be completed in 2003. The Remedial Design for the OU3 remedy will follow implementation of the OU1 remedy. Funds for the Remedial Design of OU4 have been authorized; however, the ROD calls for a three-year waiting period after remediation of OU1 and OU3 before initiation of the Remedial Design to allow for natural flushing of the river system after the source of the contamination has been removed.

Vineland Chemical Company Incorporated

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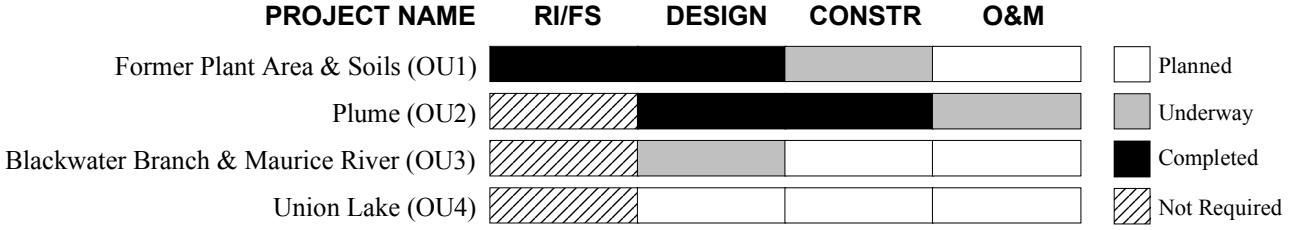
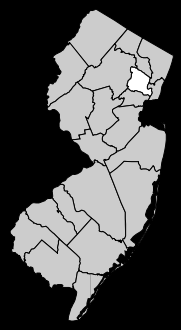


Essex County



ESSEX

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Essex Fells Borough Water Department Well 13

Dodd Road West Caldwell Borough Essex County

BLOCK: 901 **LOT:** 20

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 0.3 Acre

SURROUNDING LAND USE: Residential/Recreational

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tetrachloroethylene	Confirmed
Potable Water	Tetrachloroethylene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
1981 Bond Fund	$265,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Essex Fells Borough Water Department Well 13 is one of 16 municipal supply wells used to supply potable water to approximately 21,000 residents of Essex Fells, Caldwell, Roseland and North Caldwell. The well was removed from service in 1991 after sampling revealed it was contaminated with tetrachloroethylene (also known as perchloroethylene, or PCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. Sampling of the well while it was out of service continued to show elevated levels of PCE. In 1997, the case was referred to NJDEP's Remedial Response Element for remedial action after NJDEP's Bureau of Safe Drinking Water confirmed that the well was necessary for the Borough to maintain adequate water supply. NJDEP subsequently completed a water supply alternatives analysis that concluded the most cost-effective remedy was installation of an air stripper on the well. Essex Fells Borough completed construction of the air stripper in 2000 using funds provided by NJDEP and is operating and maintaining the system. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.

Glen Ridge Radium Sites

Various Locations — Glen Ridge Borough — Essex County

BLOCK: Various **LOT:** Various

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Radium, Uranium, Thorium	Delineating
Soil	Radium, Uranium, Thorium	Delineating/Removing
Air	Radon Progeny	Venting

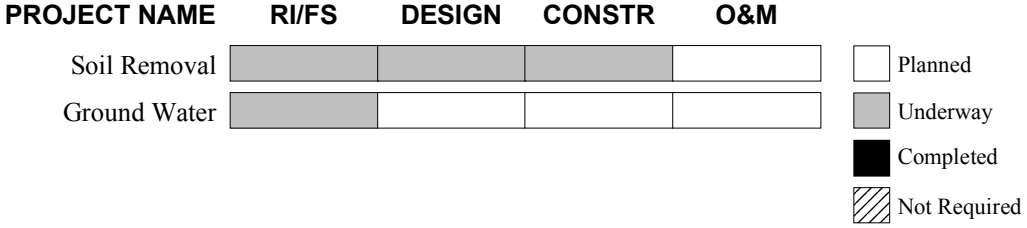
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$137,165,000
Spill Fund	$2,004,000
1981 Bond Fund	$2,380,000
1986 Bond Fund	$2,224,000
Corporate Business Tax	$6,700,000
Hazardous Discharge Site Cleanup Fund	$220,000
General State Fund	$8,779,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site encompasses approximately 300 suburban residential properties in Glen Ridge Borough that were contaminated with radioactive soil. The contamination is believed to have originated from a former radium processing facility in the nearby City of Orange during the early 1900s. Radioactive soil generated at the facility was used as fill in low lying areas and mixed with cement for sidewalks and foundations. In 1983, NJDEP detected elevated levels of gamma radiation and radon gas emanating from soil adjacent to and beneath the housing structures at various properties. Similar contamination was also detected at properties in nearby Montclair and West Orange townships that had received radioactive soil from the same source. USEPA added the Glen Ridge Radium sites to the National Priorities List of Superfund sites (NPL) in 1985.

In 1989 and 1990, after completing a Remedial Investigation and Feasibility Study (RI/FS), USEPA issued two Records of Decision (ROD) with NJDEP concurrence that required the excavation and off-site disposal of radiologically-contaminated soil from all affected properties, followed by restoration of the properties. During this process, USEPA prepared Remedial Designs for affected properties in groups that related to their locations in the Borough. After USEPA completed the design work for each group it conducted remedial actions at these properties. Remedial and restoration activities at Barrows Field recreational park were completed and the park reopened in 1999. Remediation of the approximately 300 residential properties was completed in 2000. USEPA finished removing radium-contaminated soil from beneath the streets in 2001.

Since 1997, USEPA has also completed an investigation of more than 40 properties in neighboring Bloomfield Township where radiological contamination was found along former stream channels. The investigation revealed that 17 of these properties required soil removal. The soil cleanup work began in 2000 and is still underway, along with investigations at 80 additional properties where radiological contamination is suspected. USEPA is also conducting a Remedial Investigation to determine whether contaminants from the soil have entered the ground water.



John L. Armitage and Company

245 Thomas Street — Newark City — Essex County

BLOCK: 1162 **LOT:** 1.02, 23

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Paint Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.2 Acre

SURROUNDING LAND USE: Industrial/Residential

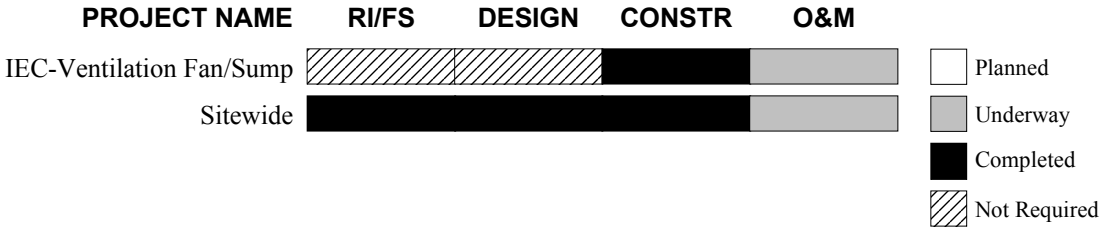
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$25,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The John L. Armitage and Company site is a former paint manufacturing facility that used underground tanks to store chemicals. One of the tanks leaked and contaminated the underlying aquifer with toluene, a volatile organic chemical. The owner of the facility removed the underground tanks, including the toluene storage tank, in 1990 during a remedial action under NJDEP's Environmental Cleanup Responsibility Act (now known as the Industrial Site Recovery Act), but did not complete the cleanup due to lack of funds. In 1994, toluene vapors were detected in the basement of an adjacent building. NJDEP's Remedial Response Element installed a ventilation fan and sump pumps in the basement during an emergency action to alleviate the toluene vapors. No other properties were affected and there are no potable wells in the area.

In 1997, the Remedial Response Element completed a Remedial Investigation and Remedial Action Selection (RI/RAS) that confirmed the ground water at the site was highly contaminated with toluene. Between 1998 and 2000, the Remedial Response Element removed approximately 100 cubic yards of contaminated soil from the area where the underground toluene tank was located and installed a ground water treatment system at the site. Operation and maintenance (O&M) of the ground water treatment system are ongoing. Remediation of the site is largely being funded by a $74,000 Letter of Credit from the Responsible Party.



Joseph Roller Leather Company

500 Chancellor Avenue — Irvington Town — Essex County

BLOCK: 188 **LOT:** 6

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Leather Finishing
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.2 Acres

SURROUNDING LAND USE: Industrial/Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground water	Volatile Organic Compounds Metals	Delineated/Further Monitoring Required
Soil	Petroleum Hydrocarbons Volatile Organic Compounds Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Metals	Capped

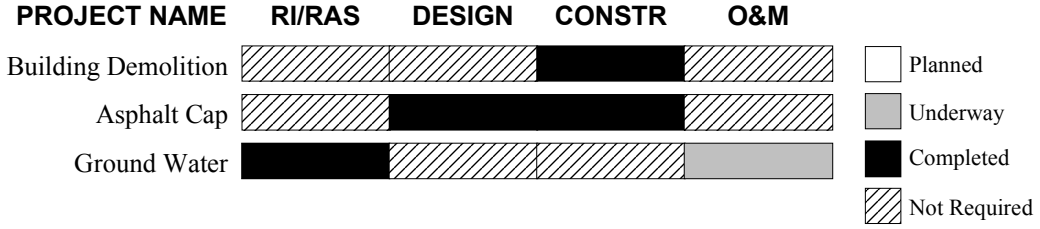
FUNDING SOURCES	AMOUNT AUTHORIZED
1981 Bond Fund	$2,000
1986 Bond Fund	$323,000
Corporate Business Tax	$222,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Joseph Roller Leather Company operated a leather finishing plant at this site between 1958 and 1986. Activities at the plant involved using various chemicals, including lacquers, tannins, plasticizers and solvents. In 1986, the Responsible Party began an investigation of the site pursuant to New Jersey's Environmental Cleanup Responsibility Act (now known as the Industrial Site Recovery Act) but eventually halted the investigation due to lack of funds. Areas of concern at the property included waste mounds, storage tanks and an 8,000 square-foot burned down building.

In 1996, NJDEP's Remedial Response Element began a Remedial Investigation/Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water and evaluate cleanup alternatives. Initial sampling indicated that the soil and ground water were contaminated with a variety of compounds and metals. In 1998, after demolishing the building, NJDEP conducted additional sampling to horizontally and vertically delineate the soil contamination and confirm the initial ground water findings. Based on the soil sampling results, NJDEP concluded the appropriate remedy to address the contaminated soil was to install an asphalt cap over the entire site. Installation of the asphalt cap was completed in 1999.

NJDEP completed the ground water phase of the RI/RAS in 2002. NJDEP concluded the ground water was contaminated with metals and volatile organic compounds, but the contaminants do not present a significant risk to human health or the environment. NJDEP has established a ground water Classification Exception Area/Well Restriction Advisory (CEA/WRA) for the site. Long-term ground water monitoring will be conducted pursuant to the requirements of the CEA. No further remedial actions are planned for this site.



Livingston Township Water Department Well 11

Livingston Avenue Livingston Township Essex County

BLOCK: 6101 **LOTS:** 47 & 51

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 45 Acres

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tetrachloroethylene	Confirmed
Potable Water	Tetrachloroethylene	Taken Out of Service

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$979,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Livingston Township Well # 11 is one of 12 municipal supply wells in the Livingston Township Water Department. The well was taken out of service in 1994 after it was determined to be contaminated with tetrachloroethylene (also known as perchloroethylene, or PCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. NJDEP's Remedial Response Element completed a Remedial Action Selection (RAS) in 1999 that concluded the most cost-effective remedy was installation of an air stripper on the supply well. Livingston Township installed the air stripper in 2002 using funds provided by NJDEP and is operating and maintaining the system. NJDEP plans to conduct additional investigative work to identify possible sources of the ground water contamination at this site.

Matt Drive Ground Water Contamination

Matt Drive — Fairfield Township — Essex County

BLOCK: 0601 **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 3 Acres

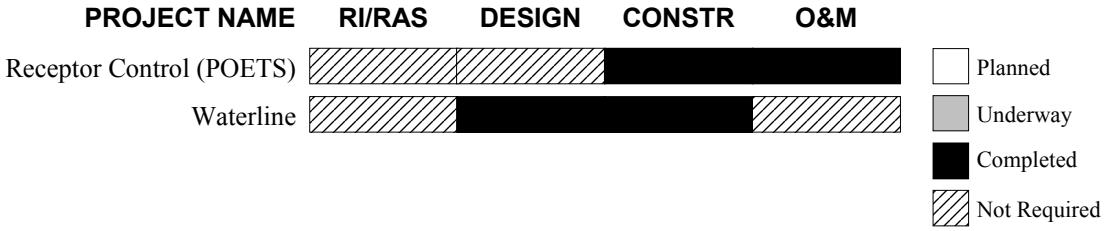
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$43,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Fairfield Township Health Department in 1994 identified eight private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). Point-of Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP subsequently provided the Township with funds to extend public water lines to the affected residences. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Montclair/West Orange Radium Contamination

Various Locations Montclair & West Orange Townships

Essex County

BLOCK: Various **LOT:** Various

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

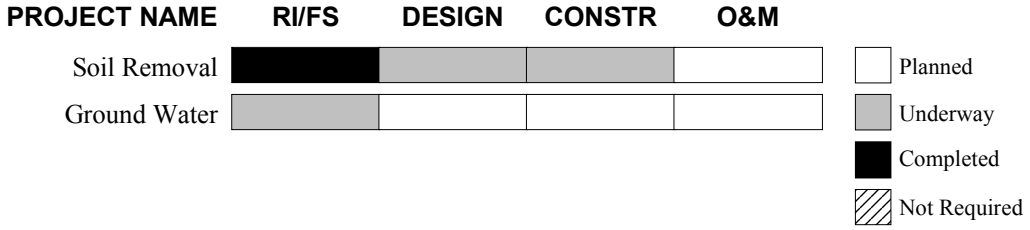
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Radium, Uranium, Thorium	Delineating
Soil	Radium, Uranium, Thorium	Removed
Air	Radon Progeny	Vented

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$105,267,000
Spill Fund	$4,103,000
1981 Bond Fund	$10,569,000
Hazardous Discharge Site Cleanup Fund	$1,580,000
General State Fund	$18,360,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The site encompasses more than 460 suburban residential properties in Montclair and West Orange that were contaminated with radioactive waste materials. The contamination is believed to have originated from a former radium processing facility in the nearby City of Orange during the early 1900s. Process waste soil generated at the facility was used as fill at the properties before the residences were constructed. In 1983, NJDEP detected elevated levels of gamma radiation and radon gas emanating from soil adjacent to and beneath the housing structures at various properties. Similar contamination was detected at properties in nearby Glen Ridge Borough that had received radioactive soil from the same source. USEPA added the Montclair/West Orange sites to the National Priorities List of Superfund sites (NPL) in 1985.

In 1989 and 1990, after completing a Remedial Investigation and Feasibility Study (RI/FS), USEPA issued two Records of Decision (ROD) with NJDEP concurrence that required removal and off-site disposal of radiologically-contaminated soil from all affected properties. During this process, USEPA prepared Remedial Designs for affected properties in groups that related to their location in the two townships. After USEPA completed the necessary design work for each group it began remedial actions at these properties. In 1997, the 441 properties that were initially identified as contaminated had been remediated; however, USEPA subsequently discovered additional properties that required remediation. USEPA removed the radium-contaminated soil from beneath the streets between 1999 and 2002. The final phase of soil removal at residential properties will begin in 2003 and is scheduled to be completed in 2005. USEPA is conducting a Remedial Investigation to determine whether contaminants from the soil have entered the ground water.



Research Organics Inorganics

507 Main Street — Belleville Township — Essex County

BLOCK: 38 **LOT:** 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.0 Acre

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Semi-Volatile Organic Compounds	Monitoring
Soil	Semi-Volatile Organic Compounds Lead	Removed
Structures	Polychlorinated Biphenyls (PCBs)	Decontaminated

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$2,886,000
General State Fund	$8,000
1981 Bond Fund	$83,000
1986 Bond Fund	$45,000
Corporate Business Tax	$25,000

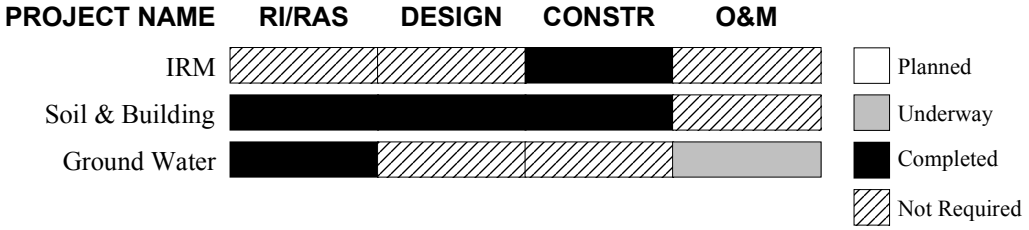
SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Research Organics Inorganics manufactured and supplied specialty chemicals between 1972 and 1983. Belleville Township and NJDEP closed the facility in 1983 after an inspection revealed chemicals were being improperly stored and discharged at the site. The Township and NJDEP removed more than 1,000 drums and 12,000 containers of reactive materials and 230 pounds of radioactive materials between 1983 and 1987 under an Interim Remedial Measure (IRM).

In 1986, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water and evaluate cleanup alternatives. Based on the initial findings, NJDEP issued a Decision Document in 1989 that required excavation of contaminated soil, decommissioning of the underground storage tanks and decontamination of the building. NJDEP removed approximately 700 tons of contaminated soil and 35 tons of PCB-contaminated materials from the site during the remedial action, which was completed in 1992.

NJDEP completed investigation of the ground water in 1995. The RI/RAS revealed that although the ground water at the site was contaminated with organic compounds and metals, the contamination was confined to a limited area and was not migrating. The RI/RAS also showed that the contaminant levels in the ground water were decreasing over time. Based on these findings and the fact that ground water in the area is not used for potable water supplies, NJDEP issued a second Decision Document in 1995 that selected natural attenuation as the final remedy to address the ground water contamination, with quarterly monitoring of the ground water for a minimum of two years. The Decision Document also required establishment of a ground water Classification Exception Area (CEA) at the site. Two years of ground water monitoring showed that the levels of contaminants in the ground water diminished but did not disappear as expected.

The property was sold at public auction in 2000 and a commercial facility opened at the site in 2001. The $495,000 generated by the sale was used to compensate NJDEP and Belleville Township for part of their cleanup costs. NJDEP continues to monitor the ground water pursuant to the requirements of the CEA, and plans to install two additional monitor wells at the site in 2003 to further evaluate ground water contamination at the rear of the property.



US Radium Corporation

High and Alden Streets — Orange City — Essex County

BLOCK: 22A (Main Plant); Various Locations **LOT:** 38 (Main Plant); Various Locations

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Radium Processing
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.0 Acre (Main Plant); Various Lot Sizes

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Radium, Uranium, Thorium	Investigating
Soil	Radium, Uranium, Thorium	Delineated/Removing/Shielding
Air	Radon Progeny	Venting

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$7,500,000
Superfund	$119,739,000
Corporate Business Tax	$3,300,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site consists of the former U.S. Radium Corporation plant and numerous noncontiguous commercial and residential properties throughout the municipalities of Orange, West Orange and South Orange. U.S. Radium extracted and purified radium from ore at the above facility between 1915 and 1926, processing approximately one-half ton of ore daily. The radioactive waste materials, or tailings, were disposed of at the plant property and used as fill at off-site locations that were later developed. The U.S. Radium property was subsequently divided into two parcels, one comprised of a commercial property with seven buildings and another containing three vacant lots. In 1979 and 1980, high levels of radon gas and radon progeny were found to pose a risk to people working at the commercial site. Off-site readings were higher than normal but not significant. The perimeter of the main site was fenced to prevent trespassers from coming in contact with the contaminated materials.

In 1983, USEPA added the U.S. Radium facility on the National Priorities List of Superfund sites (NPL) and began a Remedial Investigation and Feasibility Study (RI/FS) to determine the extent of the radium contamination at the on-site and off-site properties. The investigation of the site was conducted under two Operable Units (OU): delineation of the contamination at the numerous off-site properties (OU1), and delineation of the contamination at the former U.S. Radium plant, several adjacent properties and four nonresidential, nonadjacent properties not addressed under the other Operable Unit (OU2). In 1993 and 1995, after completing the RI/FS, USEPA issued Records of Decision (RODs) with NJDEP concurrence for OU1 and OU2 that required excavation and off-site disposal of radium-contaminated soil and other materials from the U.S. Radium plant and the affected residential and commercial properties. USEPA installed radon mitigation systems and gamma radiation shielding at 10 properties as interim measures to reduce the radiation to acceptable levels prior to implementation of the final remedial actions.

The OU1 and OU2 cleanup actions are being implemented in seven phases to facilitate the remedial process. USEPA completed the remedial actions for Phase 1 and Phase 2 (75 properties) in 1998, removing approximately 25,000 cubic yards of radium-contaminated soil and other materials. The remedial action for Phase 3 (67 properties) was completed in 1999 and resulted in the removal of approximately 9,000 cubic yards of radium-contaminated materials. The remedial action for Phase 4, which includes the former U.S. Radium facility and 19 other properties, is underway. The original facility buildings were removed in 1999 as part of the remedial action. The remedial action for Phase 5 (37 properties) was completed in 2001 and resulted in the removal of 8,800 cubic yards of contaminated soil. USEPA began the remedial action for Phase 6 (32 properties) in 2001. USEPA also plans to begin the Phase 7 cleanup (10 properties) in 2003. A Remedial Investigation was initiated in 2002 to determine whether the U.S. Radium site has caused contamination of the ground water.

US Radium Corporation
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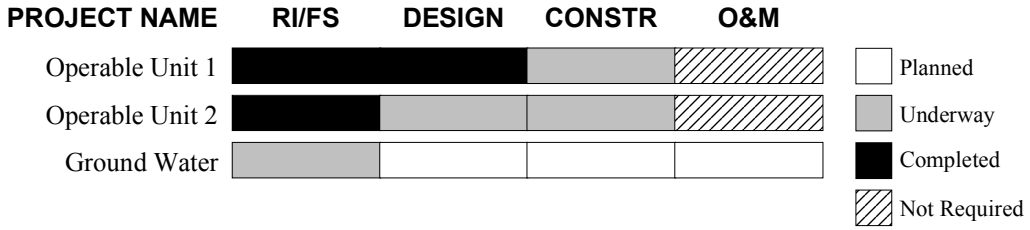


V Ottilio and Sons

18-60 Blanchard Street — Newark City — Essex County

BLOCK: 5001 **LOT:** 10, 12, 16, 18, 80 & 90

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 5 Acres

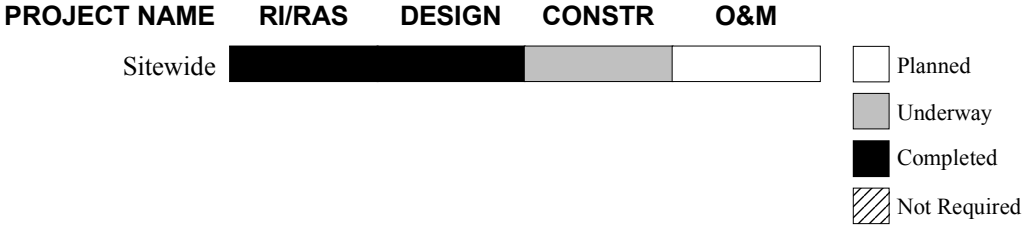
SURROUNDING LAND USE: Commercial/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Monitoring
Soil	Semi-Volatile Organic Compounds Petroleum Hydrocarbons Metals Pesticides	Confirmed/Capping
Surface Water	Semi-Volatile Organic Compounds Petroleum Hydrocarbons Metals Pesticides	Monitoring
Sediments	Semi-Volatile Organic Compounds Petroleum Hydrocarbons Metals Pesticides	Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
1981 Bond Fund	$981,000
1986 Bond Fund	$449,000
General State Fund	$253,000
Corporate Business Tax	$6,252,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site has a history of landfilling activities dating back to 1951. The most recent operator, V. Ottilio & Sons, conducted landfilling under a state permit between 1975 and 1979. Materials disposed of in the landfill consisted mainly of construction debris; however, illegal dumping is suspected to have occurred prior to and throughout the Ottilio operation. Oil has been observed in drainage ditches and ponds at the site and an unknown number of chemical drums were disposed of at the property. NJDEP's Remedial Response Element conducted a Remedial Investigation/Remedial Action Selection (RI/RAS) that revealed the ground water, surface water, subsurface soil and sediments at the site were contaminated with organic and inorganic compounds. Based on these findings, NJDEP issued a Decision Document in 1996 that required installation of a landfill cap, a landfill gas collection/venting system and leachate collection system, as well as excavation of contaminated drainage ditch sediments and long-term monitoring of the ground water. NJDEP completed the Remedial Design for the landfill cap, landfill gas collection/venting system and leachate collection system in 2002 and construction of the remedial measures is underway. Construction activities are expected to be completed in 2004.



White Chemical Corporation

660 Frelinghuysen Avenue — Newark City — Essex County

BLOCK: 3782 **LOT:** 109

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 4.4 Acres

SURROUNDING LAND USE: Industrial/Residential

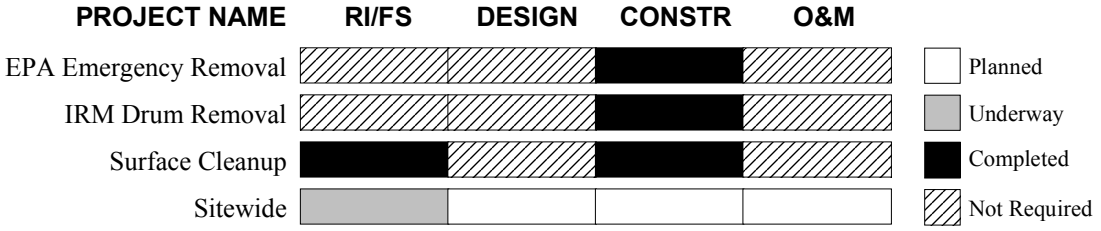
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals Cyanide	Delineating
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Delineating
Building Interiors	Semi-Volatile Organic Compounds Pesticides Polychlorinated Biphenyls (PCBs) Lead Asbestos	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$22,600,000
Spill Fund	$3,000
1981 Bond Fund	$831,000

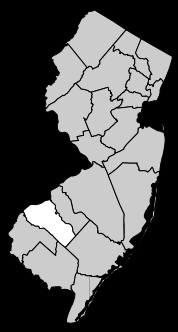
SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

White Chemical Company manufactured acid chlorides and flame retardant compounds at this facility between 1983 and 1990. The site is located in a heavily populated and industrialized area of Newark. More than 9,000 55-gallon drums, approximately two hundred tanks and vats, and two laboratories containing thousands of laboratory materials were stored at the facility while it was in operation. The drums and other containers of chemicals were in various stages of deterioration, fuming and leaking onto the soil. NJDEP issued a Spill Act Directive to White Chemical in 1990 that required the company to conduct remedial activities at the site, but the company did not respond. NJDEP conducted an Interim Remedial Measure later that year to remove more than 1,000 drums containing flammable compounds. USEPA subsequently conducted an Emergency Removal Action to dispose of drums and other hazardous materials that remained at the site. USEPA added the White Chemical facility to the National Priorities List of Superfund sites (NPL) in 1991.

In 1991, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that required removal of the remaining surface materials, including tanks, vats, laboratory containers and other vessels. A group of Potentially Responsible Parties for the site completed the actions required in the ROD in 1993 under a Unilateral Administrative Order with USEPA. Approximately 7,800 drums of waste, 4,500 empty drums, the contents of 190 tanks and vessels and almost 15,000 laboratory containers were taken from the site and properly disposed of during three removal actions performed by NJDEP, USEPA and the Potentially Responsible Parties between 1990 and 1993. USEPA began a Remedial Investigation and Feasibility Study (RI/FS) in 1998 to delineate the contamination in the soil, ground water and building interiors and evaluate cleanup alternatives. USEPA will outline the final remedial actions for these media in a second ROD for the site.



Gloucester County



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Blue Bell Estates Ground Water Contamination

Whitehall Road, Salem Road and Teal Court

Franklin Township Gloucester County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

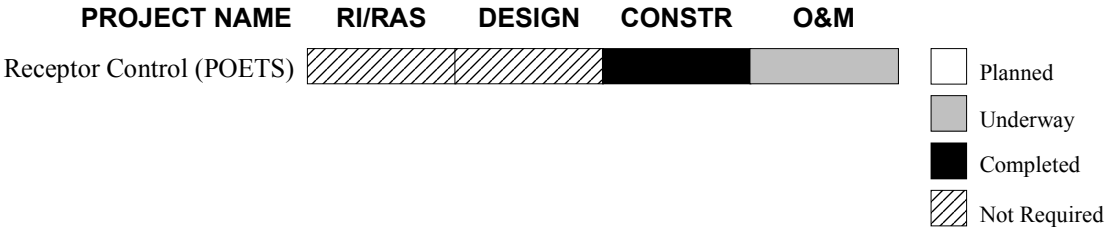
SURROUNDING LAND USE: Residential/Agricultural

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Mercury	Monitoring
Potable Water	Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$4,000
1981 Bond Fund	$4,000
Corporate Business Tax	$6,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Gloucester County Health Department between 1998 and 1999 identified five private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. NJDEP's Remedial Response Element sampled 65 additional potable wells in the area in 1999 but did not identify any others that were contaminated with mercury above the Drinking Water Standard. The Remedial Response Element subsequently delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes. The Remedial Response Element is periodically sampling private potable wells inside and outside of the CKE to monitor ground water quality in the area.



Delsea Drive & Hall Avenue Ground Water Contamination

Delsea Drive & Hall Avenue

Franklin Township **Gloucester County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

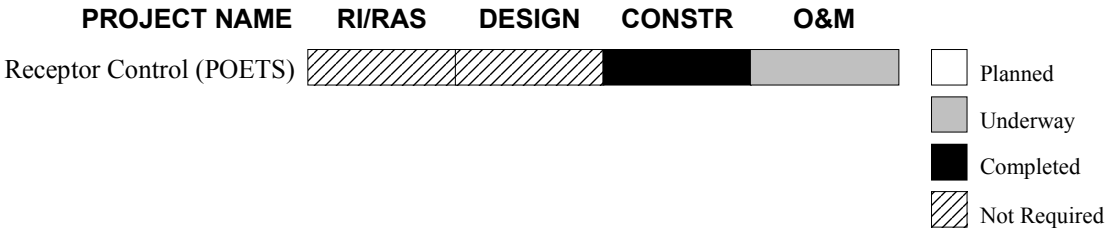
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Mercury	Confirmed
Potable Water	Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$14,000
Corporate Business Tax	$20,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Gloucester County Health Department and NJDEP's Remedial Response Element between 1999 and 2002 identified 18 private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element is using the potable well sampling results to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area. NJDEP expects to complete the CKE and water supply alternatives analysis in 2003.



Eastwoods Development Ground Water Contamination

Buckhorn & Madrone Avenues

Monroe Township **Gloucester County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

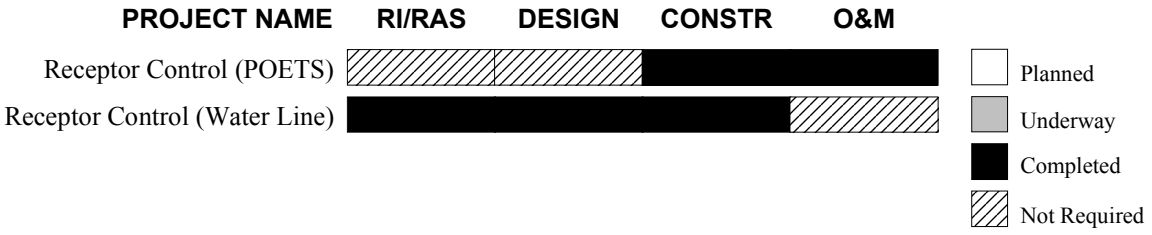
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$10,000
Corporate Business Tax	$1,094,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Gloucester County Health Department and NJDEP's Remedial Response Element between 1998 and 2000 identified 29 private potable wells in this development that were contaminated with mercury or chlorinated volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element subsequently delineated separate Currently Known Extents (CKEs) for the mercury and volatile organic contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was extension of public water lines to the residences in the CKEs. The Monroe Township Municipal Utilities Authority completed the water line installation project in 2002 using funds provided by NJDEP. The Remedial Response Element is periodically sampling private potable wells outside the CKEs to monitor ground water quality. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Elk Township Municipal Building Ground Water Contamination

Whig Lane Road — Elk Township — Gloucester County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

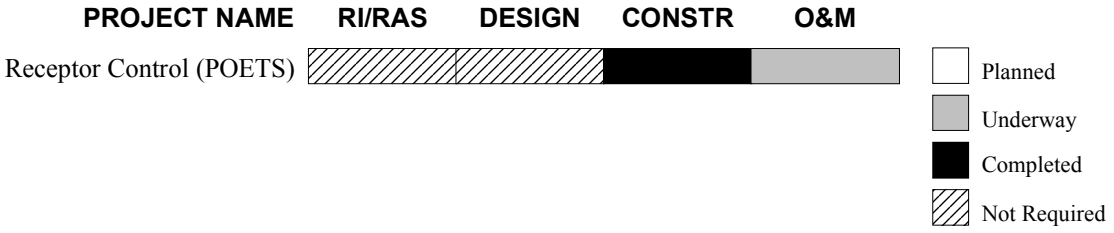
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	1,2,3-Trichloropropane	Confirmed
Potable Water	1,2,3-Trichloropropane	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$4,000
1981 Bond Fund	$12,000
Corporate Business Tax	$50,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Routine sampling of public noncommunity supply wells by NJDEP's Bureau of Safe Drinking Water in 2000 revealed the potable well at the Elk Township Municipal Building was contaminated with 1,2,3-trichloropropane at levels exceeding New Jersey's drinking water guideline for this compound. The source of the contamination is unknown. NJDEP's Remedial Response Element conducted sampling during 2002 that identified 15 additional private potable wells in the area that were contaminated with 1,2,3-trichloropropane at levels exceeding the drinking water guideline. Point-of-Entry Treatment (POET) systems were installed on the municipal building well and private potable wells with funds provided by NJDEP to supply potable water for the occupants. Due to the scattered locations of the contaminated wells, NJDEP will continue to provide POET systems to residents as needed and monitor selected wells to evaluate contaminant migration.



Franklin Burn Sites (1-7)

Various Locations Franklin Township Gloucester County

BLOCK: Various **LOT:** Various

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Metals Recovery
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

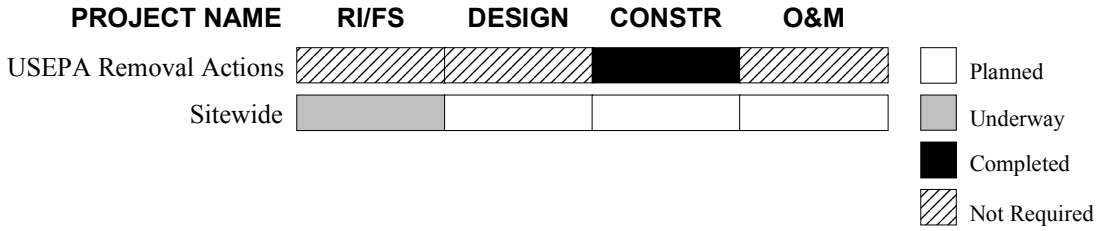
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Metals	Delineating
Soil	Polychlorinated Biphenyls (PCBs) Pesticides Metals	Partially Removed/Delineating
Sediments	Semi-Volatile Organic Compounds Pesticides Metals	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$4,500,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site consists of seven separate parcels of land, or subsites, located within a one square mile area. Prior to 1988, insulated wires and other electrical items were burned at these locations to remove the plastic coatings and recover the copper components. The burning operations generated piles of ash contaminated with hazardous substances. Between 1989 and 1992, USEPA consolidated and covered the contaminated material with impermeable liners, fenced the sites to prevent trespassing and disposed of 3,600 cubic yards of contaminated ash and soil from four of the seven subsites. USEPA added the Franklin Burn sites to the National Priorities List of Superfund sites (NPL) in 1996 and the following year excavated and disposed of almost 6,000 cubic yards of contaminated ash and soil from the three remaining subsites.

USEPA has conducted a Remedial Investigation (RI) at the sites that included sampling of the soil, ground water and the sediments of Hayes Branch and the wetland areas. Based on the sampling, USEPA is preparing to issue a Record of Decision (ROD) specifying no further action for all of the subsites. NJDEP and USEPA are discussing whether the ROD should require deed notices for the subsites.



Jack's Auto Service Station

Sicklerville Road & Route 42 Monroe Township Gloucester County

BLOCK: 1901 **LOT:** 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Auto Sales & Repair
OPERATION STATUS: Active

PROPERTY SIZE: 1.0 Acre

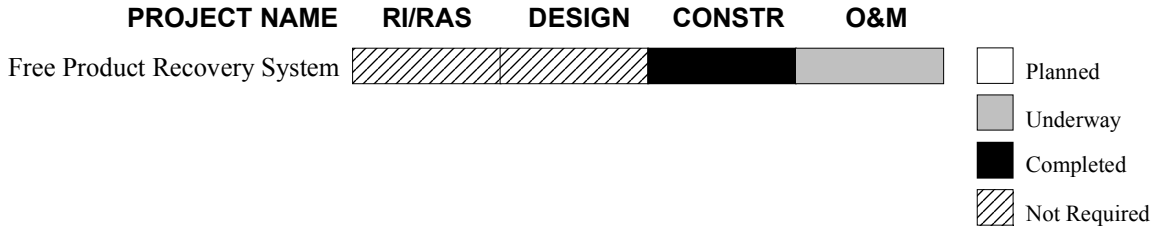
SURROUNDING LAND USE: Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Petroleum Hydrocarbons	Removing/Further Delineation Required
Soil	Volatile Organic Compounds Petroleum Hydrocarbons	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$5,000
1981 Bond Fund	$338,000
Corporate Business Tax	$60,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Leaking underground storage tanks contaminated the soil and ground water at this former gasoline service station. In 1990, the underground tanks and contaminated soil were removed and ground water monitor wells were installed at the site. Sampling of the monitor wells revealed that free-product gasoline was present on the water table. In 1993, NJDEP's Remedial Response Element installed a free-product recovery/ground water remediation system to remove the floating gasoline product and prevent off-site migration of the highly contaminated ground water. Past ground water sampling showed free-product was not present on the water table and the levels of dissolved contaminants had decreased; however, free-product gasoline was again observed in ground water monitor wells at the site in 2001 and 2002. A nearby abandoned gasoline station has been identified as a possible source of the free-product gasoline in the ground water. Additional work is planned to evaluate the extent of the free-product contamination and investigate the possible source. Operation and maintenance (O&M) of the free-product recovery/ground water remediation system are ongoing.



Lipari Landfill

Route 322 Mantua Township Gloucester County

BLOCK: 261 **LOT:** 7

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 16 Acres

SURROUNDING LAND USE: Residential/Agricultural

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Treating
Surface Water	Metals	Treated
Soil	Volatile Organic Compounds Metals	Capped
Sediment	Volatile Organic Compounds Metals	Treated/Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$61,500,000
Spill Fund	$451,000
1981 Bond Fund	$7,967,000
Hazardous Discharge Site Cleanup Fund	$1,963,000
Natural Resources Damage Claims	$166,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Lipari Landfill is a former sand and gravel pit that was operated as a solid waste disposal facility between 1958 and 1971. The landfill occupies approximately six acres of the 15-acre property. Thousands of drums and several hundred thousand gallons of hazardous chemical wastes, including solvents, paints and paint thinners, formaldehyde and resins, were reportedly deposited at the site while it was in operation. Leachate from the landfill contaminated the underlying Cohansey Aquifer, the adjacent marshlands, Chestnut Branch stream, Rabbit Run stream and Alcyon Lake, which was closed for recreational use due to health concerns. USEPA added Lipari Landfill to the National Priorities List of Superfund sites (NPL) in 1983 and subsequently conducted a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination and evaluate remedial alternatives.

To facilitate the remedial process, USEPA addressed the landfill and off-site areas in three phases, or Operable Units (OU): capping and containing the landfill and the landfill leachate (OU1), remediation of the contaminated ground water and landfill leachate (OU2), and remediation of the contaminated sediments in the marsh, streams and Alcyon Lake (OU3). In 1982, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that required installation of a landfill cap and an underground containment wall , also known as a “slurry wall,” around the site. These remedial measures were completed in 1984. In 1985, USEPA issued a ROD with NJDEP concurrence for OU2 that required installation of a system to flush the landfill with water to remove the contaminants, followed by extraction and on-site treatment of the generated leachate. USEPA completed construction of the landfill flushing system in 1992 and is operating and maintaining the landfill cap and landfill flushing system. More than 150 million gallons of landfill leachate, as well as 150 million gallons of contaminated ground water from off-site areas, have been captured and treated to date.

In 1988, USEPA issued a ROD with NJDEP concurrence for OU3 that required capturing and treating the off-site contaminated ground water, dredging contaminated sediments from the streams, marsh and Alcyon Lake, thermally treating the stream and marsh sediments on-site and disposing of the treated sediments and the slightly contaminated sediments from Alcyon Lake at an off-site location. A Responsible Party for the site implemented the work required by the third ROD, excavating and treating approximately 128,000 tons of contaminated soil from the marsh area and backfilling the excavated areas with clean soil, and removing more than 85,000 tons of sediments from Alcyon Lake. Alcyon Lake was returned to public use in 1995, and the OU3 remedial actions were determined to be complete by USEPA in 2000. The Responsible Party has spent $122,000,000 on remedial activities at this site in addition to the funds expended by NJDEP and USEPA.

Lipari Landfill

(Continued from previous page)

Manchester Machinery & Salvage Company

4 Crown Point Road West Deptford Township Gloucester County

BLOCK: 350 **LOT:** 19,20,21,22, 25 & 26

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Welding, Scrap Metal Recovery & Chemical Transport

OPERATION STATUS: Inactive

PROPERTY SIZE: 80 Acres

SURROUNDING LAND USE: Commercial/Agricultural

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Pesticides	Investigating
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Pesticides	Investigating
Sediments	Polychlorinated Biphenyls (PCBs)	Investigating

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$50,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Manchester Machinery & Salvage Company site encompasses approximately 80 acres on six lots. The main industrial facilities are located on two lots (25 and 26) that are bordered by commercial offices to the north, by farmland to the east and expansive wetlands along Mantua Creek to the south. Three contiguous lots (19, 20 and 21) that are currently vacant are located southwest of the main industrial facilities. Shell Oil Company owned lot 22 between 1961 and 1995 and leased this lot to Manchester Machinery for agricultural purposes between 1961 and 1975. Manchester Machinery violated the terms of its lease with Shell Oil and conducted operations on this parcel that resulted in soil contamination. Shell Oil cleaned up the contamination in 1994 under a Memorandum of Agreement with NJDEP. Dana Transport Inc., a chemical transport business, purchased lots 25 and 26 from Manchester Machinery in 1987 and lot 22 from Shell Oil in 1995. Dana Transport currently operates its central trucking hub at the site.

Between the 1960s and mid-1980s, Manchester Machinery & Salvage conducted a variety of industrial activities at the site that may have contaminated the soil, ground water and adjacent wetlands. Possible sources of contamination during this time include discharges of petroleum product from scrap metal recycling and steam cleaning of tanker trucks, discharges of polychlorinated biphenyls (PCBs) from scrap metal salvage of transformers, and leaks of petroleum product from above ground and underground storage tanks. The following areas of concern have been identified by NJDEP: a former waste oil and diesel tank storage area, discolored subsurface soil, the tank wash pad, a sludge pit area, Mantua Creek sediments and the adjacent wetlands and site-wide ground water. The owner/operator of Manchester Machinery declined to conduct an investigation and cleanup under the supervision of NJDEP's Responsible Party Remediation Element, therefore the Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) in 2001 to delineate the contamination and evaluate remedial alternatives.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Matteo Iron & Metal

1708 Route 130 West Deptford Township Gloucester County

BLOCK: 128 **LOT:** 2
325 2

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Scrap Metal Reclamation
OPERATION STATUS: Active

PROPERTY SIZE: 80 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Soil	Petroleum Hydrocarbons Polychlorinated Biphenyls (PCBs) Arsenic Lead	Delineating
Ground Water	Petroleum Hydrocarbons Lead	Delineating
Sediments	Petroleum Hydrocarbons Polychlorinated Biphenyls (PCBs) Lead	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$87,000
Corporate Business Tax	$1,115,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

A scrap metal recycling facility currently operates at the northeast portion of this site. Prior to its purchase by Matteo & Sons, the property was a farm. A branch of Hessian Run flows through the site. NJDEP has conducted numerous inspections of the site dating back to the early 1970s. During these inspections it was noted that portions of the property had been used to landfill domestic and industrial waste. In addition, it has been reported that at one time the current operator recycled vehicle batteries and landfilled the battery casings near Hessian Run. Reviews of historical aerial photographs have confirmed that significant disturbances occurred at this area during the past. A site inspection conducted in 1991 revealed partially crushed 55-gallon drums containing various materials that appeared to be waste petroleum product. Preliminary sampling confirmed that the soil and ground water at the site and the sediments in Hessian Run are contaminated with organic compounds and lead.

In 2000, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination at the site and evaluate cleanup alternatives. NJDEP plans to conduct an aquatic biota study in 2003 to determine whether cleanup of Hessian Run is warranted as part of the remediation of the site.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Nicholas Drive Ground Water Contamination

Nicholas Drive Franklin Township Gloucester County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

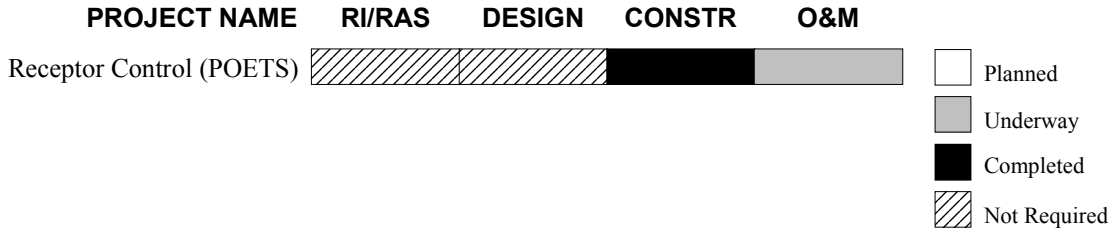
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$8,000
Corporate Business Tax	$168,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Gloucester County Health Department and NJDEP's Remedial Response Element between 1999 and 2001 identified seven private potable wells in this area that were contaminated with volatile organic compounds and mercury at levels exceeding New Jersey Drinking Water Standards. The primary volatile organic contaminants were benzene and methyl tertiary butyl ether (MTBE), both of which are components of gasoline. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. The Remedial Response Element subsequently delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



North Main Street Ground Water Contamination

Various Locations Monroe Township Gloucester County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

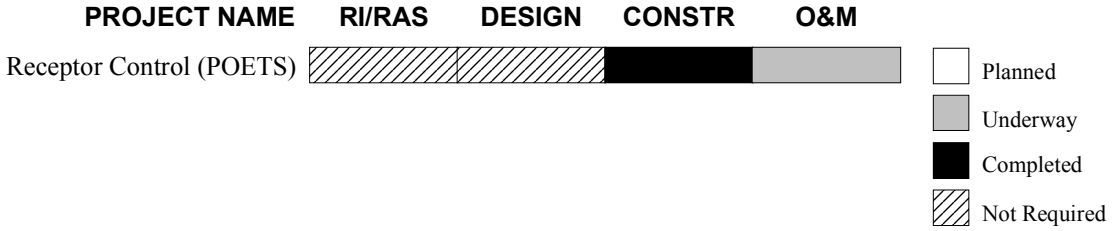
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$9,000
1981 Bond Fund	$37,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by USEPA, the Gloucester County Health Department and NJDEP's Remedial Response Element between 1999 and 2001 identified 11 private potable wells in this area that were contaminated with volatile organic compounds and/or mercury at levels exceeding New Jersey Drinking Water Standards. The primary volatile organic contaminant was tetrachloroethylene (also known as perchloroethylene, or PCE). The sources of the contamination are unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. In 2002, the Remedial Response Element delineated the Currently Known Extent (CKE) of the contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes. The Remedial Response Element is periodically sampling private potable wells inside and outside of the CKE to monitor ground water quality.



Rex Avenue Ground Water Contamination

Rex Avenue, Radix Road & Orchard Drive

Monroe Township **Gloucester County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

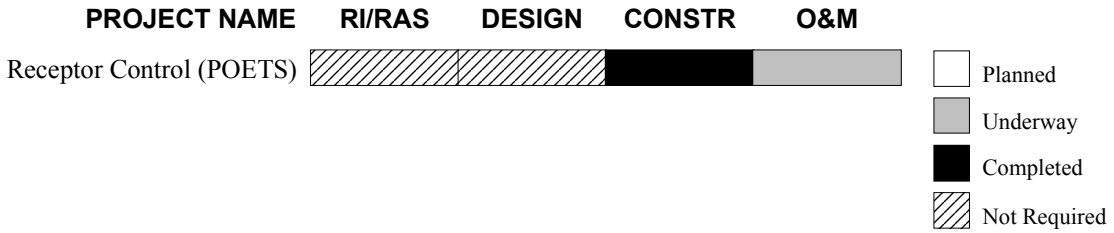
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Mercury	Confirmed
Potable Water	Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$7,000
Corporate Business Tax	$10,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Gloucester County Health Department between 1998 and 2001 identified six private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element sampled additional nearby wells and delineated the Currently Known Extent (CKE) of the potable well contamination in 2002 and is currently evaluating long-term water supply alternatives for the area. NJDEP expects to complete the water supply alternatives analysis in 2003.



South Black Horse Pike Ground Water Contamination

South Black Horse Pike Monroe Township Gloucester County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

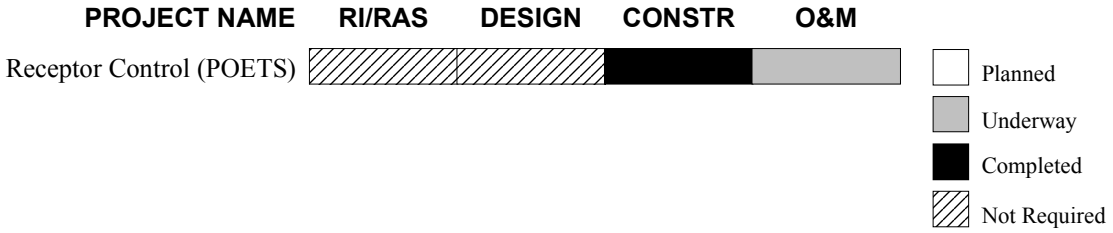
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$1,000
Corporate Business Tax	$120,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Gloucester County Health Department, USEPA and NJDEP's Remedial Response Element between 1998 and 2000 identified 24 private potable wells on South Black Horse Pike between Whitehall Road and Coles Mill Road that were contaminated with volatile organic compounds and/or mercury at levels exceeding New Jersey Drinking Water Standards. Tetrachloroethylene (also known as perchloroethylene, or PCE) was the primary volatile organic contaminant found in the wells. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. The Remedial Response Element subsequently delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes. Additional investigative work is underway to identify possible sources of the volatile organic contamination in the ground water.



Struthers Dunn Incorporated

568 Lambs Road Pitman Borough Gloucester County

BLOCK: 254 **LOT:** 24, 30 & 31

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Electronics Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 12 Acres

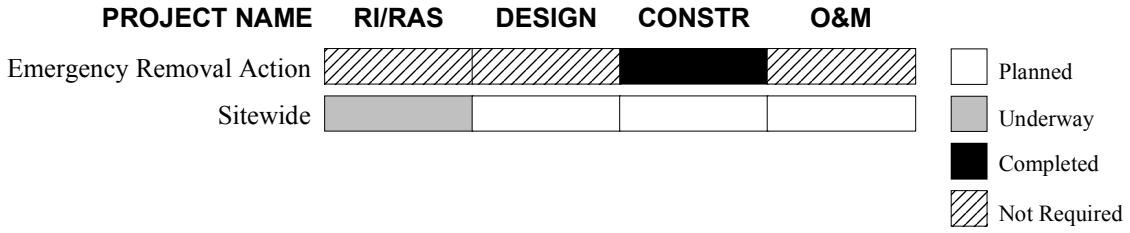
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Soil	Volatile Organic Compounds Metals	Delineating
Surface Water	Volatile Organic Compounds	Delineating
Sediments	Volatile Organic Compounds Metals	Delineating
Building Interior	Asbestos	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Hazardous Site Discharge Cleanup Fund	$41,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Struthers Dunn Incorporated (SDI) manufactured electrical relays at this site between 1954 and 1994. Operations involved electroplating, molding, machining and assembling. In 1986, SDI became subject to New Jersey's Environmental Cleanup Responsibility Act (now known as the Industrial Site Recovery Act) due to a sale of the company's stock. Under ECRA, NJDEP and SDI entered into an Administrative Consent Order (ACO) that obligated the company to investigate the environmental conditions at the site and conduct appropriate remedial measures. The initial findings of the investigation revealed there was significant contamination in the ground water and soil at the site, as well as in the sediments and surface water of a stream that flows through the property. In 1995, after operations at the plant terminated, SDI ceased to comply with the terms of the ACO. NJDEP and USEPA subsequently conducted an emergency removal action to dispose of drums of hazardous chemicals that remained at the facility. In 2000, the SDI site was transferred to NJDEP's Remedial Response Element for additional work using public funds. The Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) in 2001 to delineate the contamination at the facility and evaluate remedial alternatives. Part of the work is being funded with a $500,000 Letter of Credit that was posted by SDI pursuant to the 1986 ACO.



Veronica Lane & Lillian Drive Ground Water Contamination

Veronica Lane & Lillian Drive

Monroe Township **Gloucester County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

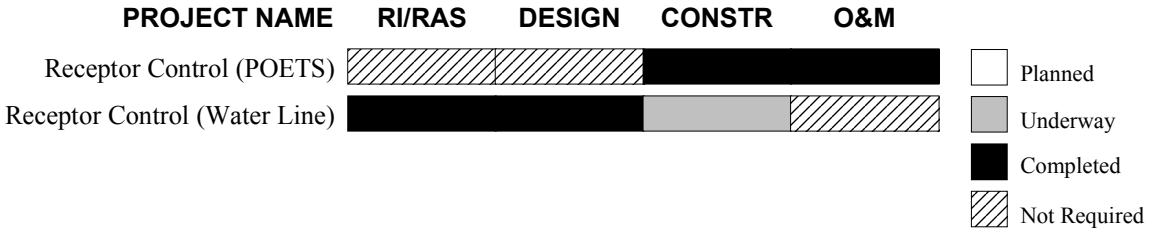
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$33,000
Corporate Business Tax	$2,334,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is also known as the Crystal Lake Ground Water Contamination case. Sampling conducted by the Gloucester County Health Department, NJDEP's Remedial Response Element and the U.S. Geological Survey between 1998 and 1999 identified 11 and 15 private potable wells in this area that exceeded New Jersey Drinking Water Standards for mercury and volatile organic compounds, respectively. The primary volatile organic contaminants are tetrachloroethylene (also known as perchloroethylene, or PCE) and trichloroethylene (TCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element subsequently delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was to extend water lines to the homes within the CKE. By the end of 2001, the Monroe Township Municipal Utilities Authority completed construction of the water lines and connected approximately 200 homes using funds provided by NJDEP. The water line installation project is scheduled to be completed in 2003, when all of the private potable wells within the CKE have been sealed. The Remedial Response Element and Gloucester County Health Department are periodically sampling private potable wells outside the CKE to monitor ground water quality. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Washington Township Well 18

Fries Mill Road Washington Township Gloucester County

BLOCK: 86 **LOT:** 7

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 1.0 Acre

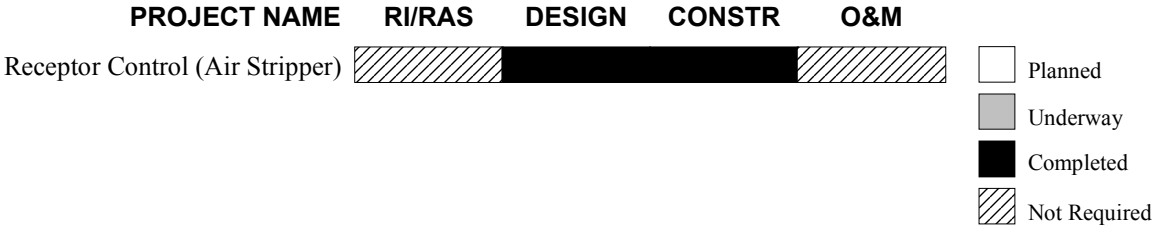
SURROUNDING LAND USE: Residential/Rural

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tetrachloroethylene	Confirmed
Potable Water	Tetrachloroethylene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$440,000
Corporate Business Tax	$100,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

To reduce demand on the Potomac-Raritan-Magothy Aquifer, a listed critical aquifer, the Washington Township Municipal Utilities Authority (MUA) constructed Well 18 in 1996. Although aquifer testing prior to construction did not indicate any contamination, samples collected from the well after it was completed revealed the presence of tetrachloroethylene (also known as perchloroethylene, or PCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. NJDEP's Remedial Response Element completed a water supply alternatives analysis that concluded installation of an air stripper on the well was the most cost-effective method to remove the contaminants. Washington Township completed construction of the air stripper in 1999 using funds provided by NJDEP and is operating and maintaining the unit. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Winslow Road Ground Water Contamination

Winslow Road Monroe Township Gloucester County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

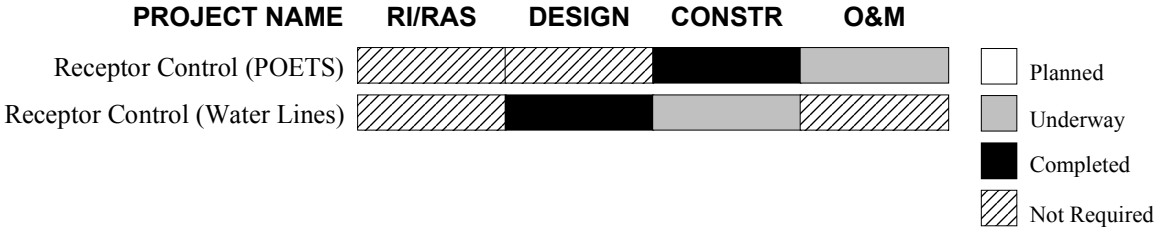
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

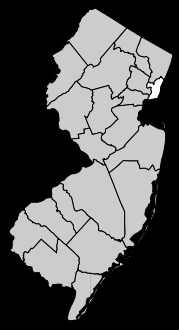
FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$9,000
Corporate Business Tax	$366,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Gloucester County Health Department in 1999 identified five private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants are tetrachloroethylene (also known as perchloroethylene, or PCE) and benzene. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP and USEPA as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element subsequently delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the extension of public water lines to residences in the CKE. The Monroe Township Municipal Utilities Authority began installing the water lines in 2002 using funds provided by NJDEP. The water line installation project is scheduled to be completed in 2003. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Hudson County



Hudson County Index of Sites

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Amoco Service Station Union City

2600 John F. Kennedy Boulevard Union City Hudson County

BLOCK: 146 **LOT:** 6

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 0.25 Acre

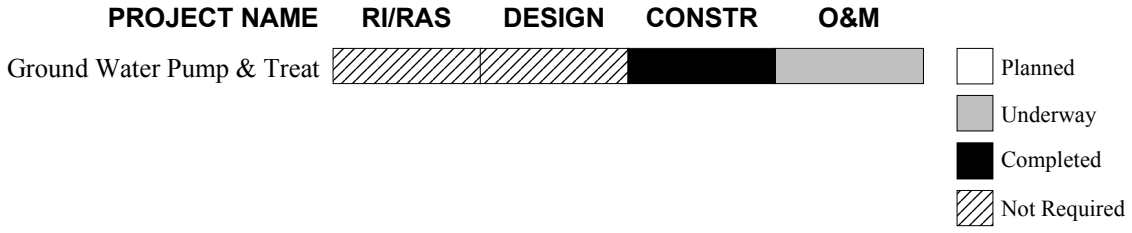
SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Removed/Further Monitoring Required
Soil	Volatile Organic Compounds	Remediated

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$420,000
1986 Bond Fund	$1,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Soil and ground water at this site became contaminated with volatile organic compounds due to leaking underground storage tanks. In 1987, NJDEP's Remedial Response Element installed a remediation system to treat the contaminated ground water at the site and a soil vapor extraction (SVE) system to abate potentially explosive gasoline vapors in the basement of an adjacent apartment building. Operation of the SVE continued until 1993, when the system was shut down because significant amounts of vapor were no longer being collected. Treatment of the ground water was also discontinued that year after sampling revealed the levels of contaminants in the ground water had decreased to acceptable levels. A Classification Exception Area (CEA) has been established for the ground water at the site. The Remedial Response Element is periodically sampling ground water monitor wells at the site pursuant to the requirements of the CEA.



Grand Street Mercury

720-732 Grand Street Hoboken City Hudson County

BLOCK: 85 **LOT:** 14

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Mercury Vapor Lamp Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.3 Acre

SURROUNDING LAND USE: Residential/Commercial/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Structure	Mercury	Delineated
Air	Mercury	Confirmed
Soil	Mercury	Delineated
Ground Water	Volatile Organic Compounds	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$1,073,000
Superfund	$13,000,000
Corporate Business Tax	$357,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is a former industrial facility that was converted into residential and studio properties. It is comprised of two multistory buildings and a parking area. Various industries operated at the site between 1910 and 1988. For several decades, mercury connector switches, mercury vapor lamps and other lighting products were manufactured at the facility by different companies. Quality Tool & Die Company, the last industrial occupant, manufactured precision tools between 1955 and 1988. In 1990, the owner of Quality Tool & Die filed an application for cessation of operations under New Jersey's Environmental Cleanup Responsibility Act (now known as the Industrial Site Recovery Act) and a cleanup was conducted under that program that entailed placing an asphalt cap over a parking lot contaminated with petroleum hydrocarbons.

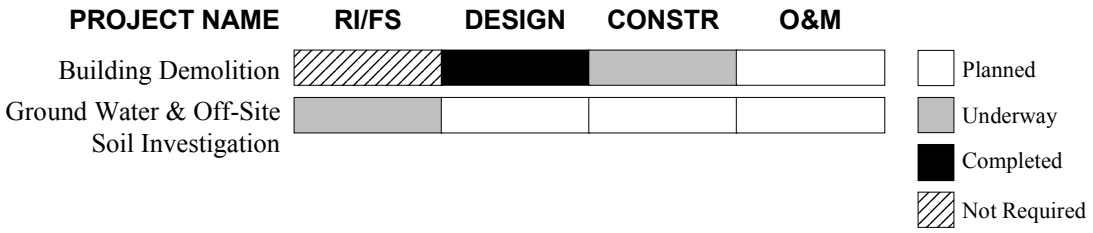
In 1993, the Grand Street Artists Partnership (GSAP) purchased the building and began converting it into residential condominiums. Tenants gradually moved into the building in 1994 as the individual units were completed. Shortly after the tenants began moving in, puddles of mercury were discovered under the flooring of units that were being renovated. An air survey conducted by GSAP indicated mercury vapors were present in various parts of the building. GSAP removed mercury-contaminated flooring and conducted other remedial activities in the building throughout 1995. In 1996, on the advice of the New Jersey Department of Health, the Hoboken Health Department ordered the 34 residents to vacate the premises. USEPA began a Superfund removal action that included providing temporary relocation assistance for the residents, securing and maintaining the building, screening the personal belongings of the residents for mercury and delineating the mercury contamination. A Focused Feasibility Study and Risk Assessment subsequently conducted by USEPA revealed mercury was present in the structural components of the building and in the soil beneath the parking lot.

In 1997, based on the findings of the Focused Feasibility Study and Risk Assessment, USEPA added the site to the National Priorities List of Superfund sites (NPL) and issued a Record of Decision (ROD) with NJDEP concurrence. The ROD required the permanent relocation of the residents, removal and disposal of the flooring and other contaminated materials and demolition of the building, additional sampling to delineate the mercury in the soil around the site, and excavation and off-site disposal of the soil contaminated with mercury above cleanup guidelines. The ROD also required an off-site soil investigation and ground water sampling to determine whether the mercury at the property has contaminated the underlying aquifer.

A Potentially Responsible Party for the site completed Remedial Designs for the building demolition and soil remedial action in 2001. Demolition of the buildings began in 2002 and is scheduled to be completed in 2003. Removal of the mercury-contaminated soil will begin in 2003, after the building demolition has been completed. The Potentially Responsible Party has determined that the levels of mercury in the ground water at this site are below the New Jersey Drinking Water Standard for this metal; however, USEPA is investigating volatile organic contamination identified in the ground water. All investigation, design and cleanup work conducted by the Potentially Responsible Party is being supervised by USEPA.

Grand Street Mercury

(Continued from previous page)



Hudson County Chromate – Publicly Funded Sites

Various Locations

Jersey & Bayonne Cities
Essex & Hudson Counties

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Various

SURROUNDING LAND USE: Industrial/Commercial/Residential

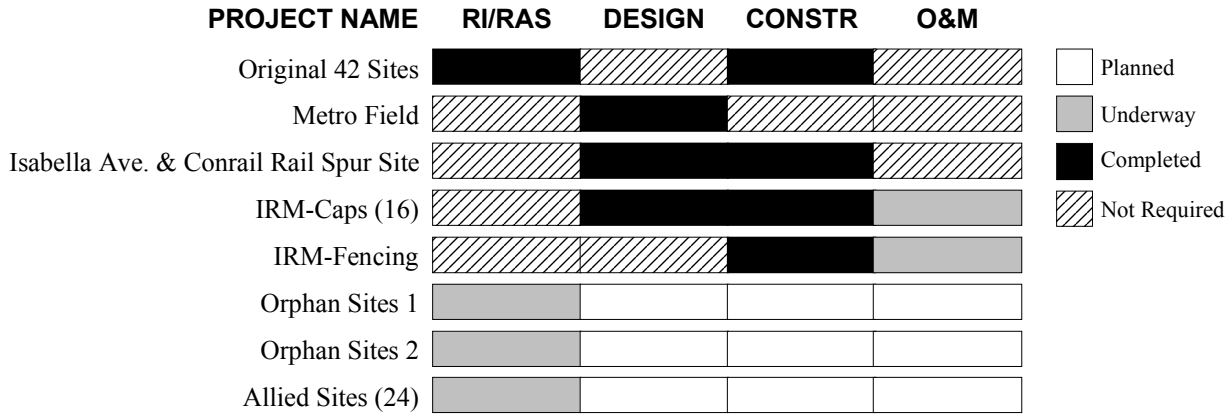
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Chromium	Suspected
Surface Water	Chromium	Suspected
Sediment	Chromium	Suspected
Soil	Chromium	Suspected/Delineating/Capped
Structures	Chromium	Suspected
Air	Chromium	Suspected

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$7,181,000
1981 Bond Fund	$6,328,000
1986 Bond Fund	$9,860,000
Corporate Business Tax	$7,107,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

NJDEP has identified approximately 180 sites in Hudson and Essex Counties that were contaminated with chromite ore processing residue, also known as chromate waste. The waste resulted from extracting chromium from chromite ore at three chromium processing facilities in Hudson County. The facilities, which are no longer in operation, used the waste as fill at residential, commercial and industrial properties. It is estimated that two million tons of chromate waste were disposed of in this manner. The Potentially Responsible Parties have completely remediated 36 residences by excavating the chromium-contaminated soil and disposing of it at a hazardous waste landfill. The Potentially Responsible Parties have also completed cleanups at 21 nonresidential sites and are in the process of addressing contamination at 71 other nonresidential sites.

NJDEP's Remedial Response Element is conducting Remedial Investigations and Remedial Action Selections (RI/RAS) at the remaining 53 properties to delineate the chromium contamination and evaluate cleanup alternatives. These include 29 sites for which no responsible parties have been identified, known as the Orphan sites, and 24 sites known as Allied Directive sites that NJDEP believes are the responsibility of AlliedSignal Inc. The company has denied responsibility for these sites. Various Interim Remedial Measures (IRMs) have been conducted at these sites by NJDEP, including capping 16 sites and fencing nine others. NJDEP began the RI work on the Allied Directive sites in 1994 and on the Orphan sites in 1997. The RI work consists of soil, sediment, surface water, ground water, biota and building sampling and analysis. NJDEP will use the findings of the RI/RAS to select final remedial actions for the sites.



Hudson County Chromate – Publicly Funded Sites
as of December 31, 2002

Zone Codes: Res. = Residential, Ind. = Industrial, P.L. = Public Lands, Com. = Commercial
Type: A.D. = Allied Directive, O.G.1 = Orphan Group 1, O.G.2 = Orphan Group 2

Site Name	Location	Also Known As	City	Zone	Type
Hudson Co. Chromate 7	NJTP & Communipaw Avenue	CR007-NJTP & Communipaw	Jersey City	P.L.	A.D.
Hudson Co. Chromate 15	East of Env. Interpret. Center	Liberty State Park	Jersey City	P.L.	A.D.
Hudson Co. Chromate 17	Newark Ave & Howell Street	Newark Ave Exxon	Jersey City	Com.	O.G.1
Hudson Co. Chromate 19	Phillip St Junction	CR019 Phillip Street	Jersey City	P.L.	A.D.
Hudson Co. Chromate 20	Below NJTP Exit 14B	NJTP Bayview	Jersey City	P.L.	O.G.1
Hudson Co. Chromate 21	NJTP at Piers 20 & 21	NJTP Greenville	Jersey City	P.L.	O.G.1
Hudson Co. Chromate 67	Chapel & Linden Avenues	CR067 Chapel Avenue	Jersey City	Ind.	A.D.
Hudson Co. Chromate 68	Foot of Clendenny Avenue	Clendenny Outfall	Jersey City	P.L.	A.D.
Hudson Co. Chromate 69	Clendenny Avenue	Rear of Bradleys Store	Jersey City	P.L.	A.D.
Hudson Co. Chromate 70	Communipaw Avenue	Colony Restaurant & Diner	Jersey City	Com.	A.D.
Hudson Co. Chromate 77	383 8th Street	Eighth Street #2	Jersey City	Com.	O.G.1
Hudson Co. Chromate 86	123 Duffield Avenue	Nicholas/Hamilton Trucking	Jersey City	Ind.	O.G.1
Hudson Co. Chromate 91	NJTP & Johnston Avenue	NE Interceptor 1	Jersey City	P.L.	A.D.
Hudson Co. Chromate 92	NJTP & Ash Street	E Interceptor 2	Jersey City	P.L.	A.D.
Hudson Co. Chromate 93	Communipaw Ave & Phillip St	NE Interceptor 3	Jersey City	P.L.	A.D.
Hudson Co. Chromate 94	18th St & Jersey Avenue	18th Street Sewer	Jersey City	Com.	A.D.
Hudson Co. Chromate 97	Near Secaucus Road	NW Interceptor 1	Jersey City	P.L.	A.D.
Hudson Co. Chromate 98	Co. Rd Extension	NW Interceptor 2	Jersey City	P.L.	A.D.
Hudson Co. Chromate 99	375 Routes 1 & 9	Recycling Specialty	Jersey City	Ind.	A.D.
Hudson Co. Chromate 100	Richard Street	Richard St Interceptor	Jersey City	P.L.	A.D.
Hudson Co. Chromate 101	Routes 1 & 9 & Stockton Ave	CR101 Stockton Avenue	Jersey City	P.L.	A.D.
Hudson Co. Chromate 119	Kellogg Street	Droyers Point	Jersey City	Res.	A.D.
Hudson Co. Chromate 130	Communipaw Avenue	Communipaw 5 (CR104 & CR105)	Jersey City	Com.	A.D.
Hudson Co. Chromate 138	Foot of Oak Street	Bayonne Sewage Treatment Plant	Bayonne City	Ind.	O.G.1
Hudson Co. Chromate 139	Foot of East 22nd Street	IMTT (Bayonne Industries)	Bayonne City	Ind.	O.G.1
Hudson Co. Chromate 150	Foot of 5th Street East	Coastal Oil (aka Belcher Co. of NY)	Bayonne City	Ind.	O.G.1
Hudson Co. Chromate 152	140 East 22nd Street	Kenrich Chemical	Bayonne City	Ind.	O.G.1
Hudson Co. Chromate 162	Oak & 5th Streets	Conrail Rail Spur	Bayonne City	P.L.	O.G.1
Hudson Co. Chromate 165	Foot of Jersey Ave & Aetna St	Tempesta & Sons	Jersey City	Ind.	A.D.
Hudson Co. Chromate 172	Warren Street	CR172 Warren Street	Jersey City	P.L.	A.D.
Hudson Co. Chromate 174	1st Street	Dennis P. Collins Park	Bayonne City	P.L.	O.G.1
Hudson Co. Chromate 175	Grand Street	Former Morris Canal Site 2	Jersey City	Ind.	A.D.
Hudson Co. Chromate 177	Hook Road	Bayonne Municipal Lot	Bayonne City	P.L.	O.G.1
Hudson Co. Chromate 178	Burma Road & T. Conrad Dr.	Cabana Club	Jersey City	P.L.	A.D.
Hudson Co. Chromate 180	Howell Street	Eastern Oil	Jersey City	Com.	O.G.1
Hudson Co. Chromate 183	Randolph St. & Arlington Ave.	Sludge Line 1	Jersey City	P.L.	A.D.
Hudson Co. Chromate 185	Jersey Avenue	Allied Stockpile	Jersey City	Ind.	A.D.
Hudson Co. Chromate 186	947 Garfield Avenue	Garfield Avenue #1	Jersey City	Ind.	O.G.1
Hudson Co. Chromate 187	Rte 440, Danforth & Carbon Pl.	Rte. 440 Median Strip	Jersey City	P.L.	O.G.2
Hudson Co. Chromate 188	Sussex Street	Sussex Street #1	Jersey City	P.L.	O.G.2
Hudson Co. Chromate 189	Henderson & 2nd Streets	Henderson Street #1	Jersey City	P.L.	O.G.2
Hudson Co. Chromate 192	Eastern Spur-Piers 10S & 11S	NJTP-Newark #1	Newark City	P.L.	O.G.2
Hudson Co. Chromate 196	CRRNJ Freight Yard at LSP	POTW Outfall Line	Jersey City	P.L.	O.G.2
Hudson Co. Chromate 197	Grand, Washington & Warren Sts	Grand Street	Jersey City	P.L.	O.G.2
Hudson Co. Chromate 198	Caven Point Road	Hartz Mountain #1	Jersey City	P.L.	O.G.2
Hudson Co. Chromate 199	Randolph Ave & Halladay St	Sludge Line 2	Jersey City	P.L.	O.G.2
Hudson Co. Chromate 200	Arlington Ave & MLK Dr	Sludge Line 3	Jersey City	P.L.	O.G.2
Hudson Co. Chromate 202	Pacific St. & NJTP Exit 14C	Caven Point Realty	Jersey City	Ind.	O.G.2
Hudson Co. Chromate 203	NJ Transit & West Side Ave.	346 Claremont Associates	Jersey City	Ind.	O.G.2
Hudson Co. Chromate 204	NJTP & Monitor St.	Conrail Edgewater Branch	Jersey City	Ind.	O.G.2
Hudson Co. Chromate 205	1st St. and Washington St.	Urban Redevelopment Partnership	Jersey City	Ind.	O.G.2
Hudson Co. Chromate 206	200 Theodore Conrad Drive	Polarome International	Jersey City	Ind.	O.G.2
Hudson Co. Chromate 207	942, 944 & 946 Garfield Ave.	Garfield Avenue #2	Jersey City	Com.	O.G.2

Total Publicly Funded Chromium Sites as of December 31, 2002 **53**
24 Allied Directive, 29 Orphan Sites (14 in Group 1 and 15 in Group 2)

NJTP = New Jersey Turnpike

Ideal Cooperage Inc.

3-25, 29 New York Avenue Jersey City Hudson County

BLOCK: 712 **LOTS:** A-10, A-11

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Drum Reconditioning
OPERATION STATUS: Inactive

PROPERTY SIZE: 4.5 Acres

SURROUNDING LAND USE: Commercial

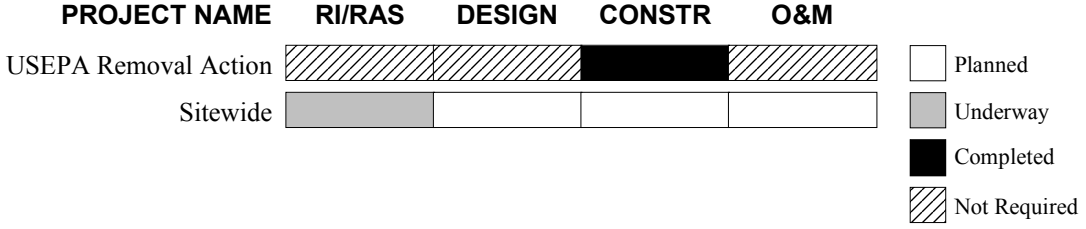
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Delineating
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals Polychlorinated Biphenyls (PCBs)	Delineating
Sediments	Semi-Volatile Organic Compounds Metals Polychlorinated Biphenyls (PCBs)	Potential
Surface Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Potential

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$30,000
Corporate Business Tax	$940,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Ideal Cooperage, Inc. reconditioned drums at this site between 1952 and 1981, when the company filed for bankruptcy. A portion of the property was then sold and redeveloped as a trucking terminal. The remainder of the property, approximately 1.3 acres, was abandoned with approximately 2,000 drums on site. A drainage ditch flows through the site to a nearby river.

In 1991, USEPA implemented a removal action at the site to dispose of 200 drums containing wastes and 1,200 empty drums. Samples collected from test pits after the removal action was completed indicated the soil was contaminated with various organic compounds and metals, including polychlorinated biphenyls (PCBs), petroleum products and mercury. Contaminants were also detected in surface water samples collected from the drainage ditch. NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Alternatives Selection (RI/RAS) in 1999 to delineate the contamination at the site. The RI phase has included sampling of the soil and ground water, as well as the surface water and sediments in the drainage ditch. The initial findings of the RI have confirmed the soil and ground water at the site are contaminated. The impacts to the surface water and sediments in the drainage ditch are still being evaluated. Additional sampling is scheduled for 2003.



Liberty State Park

Morris Pesin Drive & Freedom Way Jersey City Hudson County

BLOCK: 2154 **LOT:** 22K

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Landfill/Rail Yard
OPERATION STATUS: Inactive

PROPERTY SIZE: 1,156 Acres

SURROUNDING LAND USE: Recreational/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Metals	Levels Not of Concern
Surface Water	Metals Pesticides	Levels Not of Concern
Soil	Metals Base/Neutral Extractable Compounds Petroleum Hydrocarbons	Delineating/Capping
Sediments	Metals Polycyclic Aromatic Hydrocarbons Petroleum Hydrocarbons Pesticides	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$43,000
1981 Bond Fund	$73,000
General State Fund	$1,638,000
Hazardous Discharge Site Cleanup Fund	$460,000
1992 Green Acres Bond Fund	$694,000
Parks Capital Fund	$25,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The land on which Liberty State Park is situated was created by filling in a marsh with New York City garbage and dredge materials from the Hudson River Basin. Between the mid-1800s and the 1960s, the property was used extensively for railroad activities and for several small business operations. Various areas of the park have undergone development in recent years. Due to the previous operations and the historic use of fill material at the site, NJDEP conducted Remedial Investigations (RI) as development progressed to determine whether remedial measures were needed to protect human health and the environment.

Between 1988 and 1995, NJDEP's Remedial Response Element conducted RIs for the Dog Show Field, the Liberty Science Center, the Terminal Parking Lot, Liberty Walk, the Freight Yard (which includes the Dredge Spoils Area), the Northern Marina and the McAllister Tug and Barge Area (which includes Middle Cove). At the Dog Show Field, heavy metals and tar residues were detected that render the site unsuitable for use as a football field but do not pose a health risk for passive recreation. Therefore, no remedial action is planned for this area at this time. The Liberty Science Center, Terminal Parking Lot, Liberty Walk and Northern Marina exhibited soil contamination consistent with historic fill. These areas have been developed utilizing a minimum of one foot of clean fill cover and/or asphalt cover to eliminate the exposure pathways of inhalation and direct contact. Soil at Millennium Park, located near the intersection of Audrey Zapp Drive and Freedom Way, has also been covered with one foot of clean fill to prevent contact with contaminants identified during the RI.

In 1993, NJDEP implemented an Interim Remedial Measure (IRM) that entailed excavating the eight-foot high earthen berms that formed the impoundment for the Dredge Spoils Area and placing the soil over the dredged materials to prevent it from being spread by the wind. Upon development of the Freight Yard area a minimum of one foot of clean fill will be placed as cover in accordance with New Jersey remediation regulations for historic fill sites.

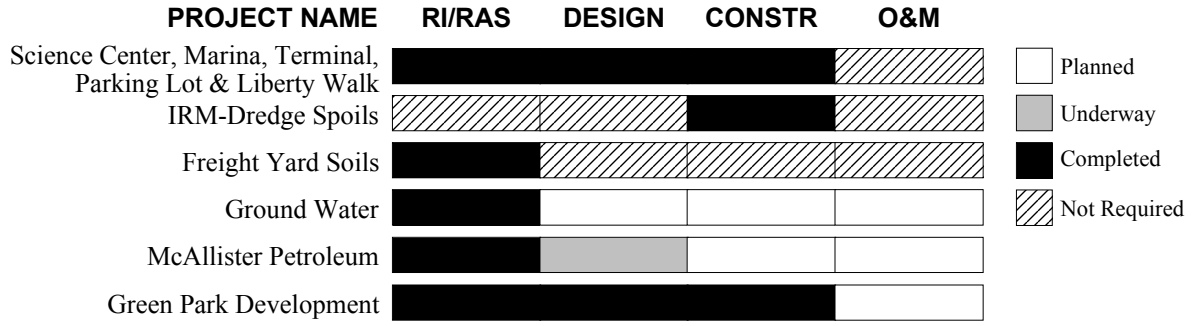
Surface water and sediments collected from the Northern Marina during the RI indicated the presence of inorganic and organic contamination. These contaminants pose no threat to human health under current uses, except in the case of ingestion of marine life. NJDEP has posted signs advising the public that fishing is prohibited at the Marina.

Liberty State Park

(Continued from previous page)

NJDEP's Division of Parks and Forestry has received $10 million in bond funds to develop the McAllister Tug and Barge Area (which is bordered by North Cove, Liberty Walk, the Interpretive Center and Freedom Way) as a passive recreation Green Park area. NJDEP completed an RI for this area in 1999 that revealed the presence of subsurface free product from McAllister's former operations as well as surface soil contamination consistent with historic fill. The Green Park area was capped with one foot of clean soil and opened to the public as a recreational area in 1999. Between 2000 and 2001, NJDEP attempted to remove free product from the ground water by periodically hand baling it from on-site wells, but concluded that this method of free product removal was of limited effectiveness. Other more active measures are currently being designed to address the free product in the ground water in the Green Park area. The ground water at the park is not used for potable purposes and therefore does not present a risk to human health from ingestion.

Three additional areas of the park are under investigation to determine whether chromate waste had been used as fill material at these sites. At two of the areas, Caven Point Pier and Sewer Line Area of the Freight Yard, the presence of chromate waste has been confirmed and further investigations are necessary. No chromate waste has been detected in the soil at the third area, the Cabana Club, but additional sampling is being performed to complete the site characterization.



Municipal Sanitary Landfill Authority

1500 Harrison Avenue — Kearny Town — Hudson County

BLOCK: 285 **LOT:** 2

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 94 Acres

SURROUNDING LAND USE: Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Confirmed
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals Pesticides Polychlorinated Biphenyls (PCBs)	Confirmed
Surface Water	Polycyclic Aromatic Hydrocarbons Pesticides Inorganic Compounds	Confirmed
Sediments	Polycyclic Aromatic Hydrocarbons Pesticides Inorganic Compounds	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$1,818,000
Sanitary Landfill Contingency Fund	$605,000
General State Funds	$4,000,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site, also known as the MSLA 1-D Landfill, is located in a wetlands area near the Passaic River and Exit 15W of the New Jersey Turnpike. The Municipal Sanitary Landfill Authority (MSLA) operated the landfill during the late 1970s and early 1980s. Records indicate that in addition to municipal waste, approximately 1.5 million gallons of waste oil were deposited there. Various industrial wastes were also reportedly disposed of in the landfill, including pharmaceuticals, sewage sludges, asphalt sludges and insecticides. NJDEP ordered the landfill to cease operations in 1982 because it reached maximum allowable height and MSLA had failed to maintain the leachate collection system. A soil cover was placed over the landfill at the time of closure but the site was never properly capped or maintained. Since disposal operations ceased, large volumes of leachate have routinely discharged from the landfill into the surrounding wetlands and the Passaic River. A private company installed a landfill gas recovery system at the site in 1989 to capture the methane gas being generated by the waste fill for use as an energy source. USEPA conducted a limited remedial investigation at the site in 1990 that revealed the soil, ground water, surface water and sediments at and near the landfill were contaminated with a variety of organic and inorganic compounds and metals.

NJDEP's Remedial Response Element plans to implement closure actions at this site to prevent the release of methane from the waste fill and mitigate the impact of landfill leachate on the environment. NJDEP is conducting a Remedial Design for the following landfill closure measures: 1) installation of a subsurface containment wall and leachate collection system to prevent leachate-contaminated ground water from discharging to the surrounding areas; and 2) installation of a solid waste-type impermeable cap to prevent infiltration of precipitation and thereby minimize the generation of additional leachate. NJDEP expects to complete the Remedial Design for the landfill closure measures in 2003. NJDEP has also provided funding for the Kearny Municipal Utilities Authority to design a pump station and force main to convey leachate from the landfill to a sewage treatment plant for disposal.

Municipal Sanitary Landfill Authority

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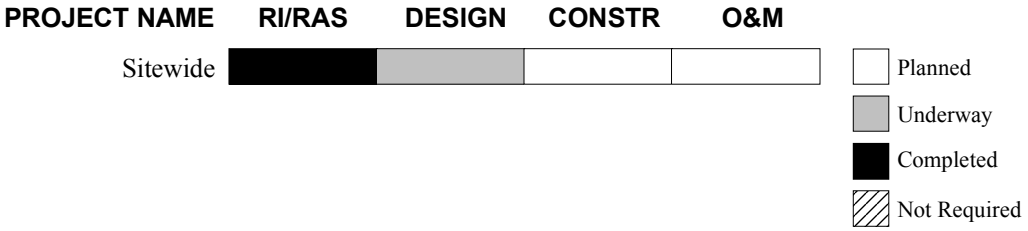


Syncon Resins

77 Jacobus Avenue — Kearny Town — Hudson County

BLOCK: 289 **LOTS:** 12, 13, 13R

CATEGORY: Superfund
State Lead

TYPE OF FACILITY: Paint Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 15 Acres

SURROUNDING LAND USE: Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Pesticides Metals	Treating
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Pesticides Metals	Partially Removed/Treating
Structures	Asbestos	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$23,202,000
Spill Fund	$793,000
General State Fund	$2,297,000
1986 Bond Fund	$761,000
Corporate Business Tax	$1,789,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Syncon Resins manufactured paint, varnish and resins at this site until 1982. It is located in a coastal management area and borders the Passaic River. The facility consisted of 13 buildings, numerous large storage vessels and tanks and two unlined wastewater lagoons. At the time operations ceased, approximately 13,000 55-gallon drums of various chemicals were being stored at the site, most of which were in poor condition and leaking. USEPA added the Syncon Resins facility to the National Priorities List of Superfund sites (NPL) in 1983. The following year NJDEP implemented an Interim Remedial Measure (IRM) to remove and dispose of all of the drums.

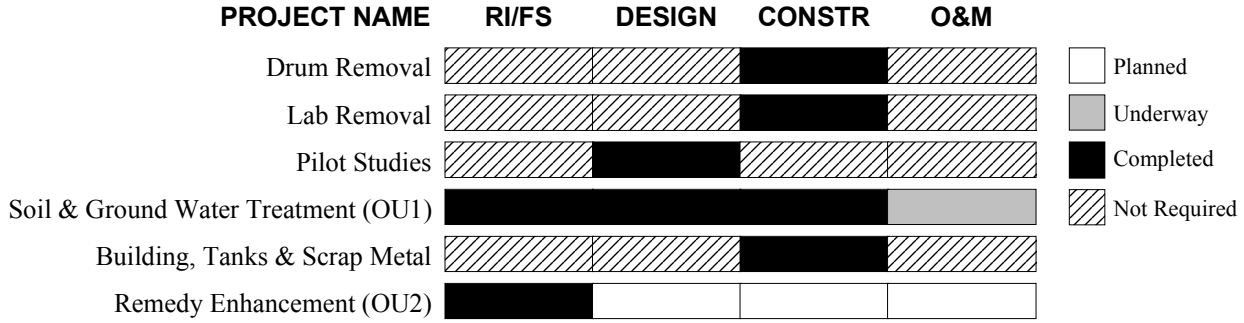
Between 1984 and 1986, NJDEP conducted a Remedial Investigation and Feasibility Study (RI/FS) that revealed extensive contamination in the soil, ground water and building, and large volumes of liquid and solid chemical wastes in the various storage vessels and tanks at the site. USEPA issued a Record of Decision (ROD) with NJDEP concurrence in 1986 that required the following remedial actions: 1) removal of the lagoon liquids and sediments and the contents of the storage vessels and tanks; 2) excavation and disposal of the grossly contaminated soil and decontamination of the buildings and other site structures; 3) installation of an on-site remediation system to extract and treat the contaminated ground water; and 4) treatment of residual soil contamination by soil flushing. In 1989, NJDEP conducted a second IRM to remove thousands of small containers of chemicals from the on-site laboratory and initiated the remedial actions specified in the ROD. By 1992, NJDEP had removed the lagoon liquids and other wastes from the site, decontaminated the buildings and tanks, excavated and removed the grossly contaminated soil and completed construction of a soil flushing/ground water treatment system. These actions were subsequently designated Operable Unit 1 (OU1).

While operation of the soil flushing/ground water treatment system was underway, NJDEP conducted supplemental studies that revealed highly contaminated soil and ground water at the southwestern portion of the plant were not being adequately addressed by the existing system. In 2000, USEPA issued a ROD for the southwestern portion of the site, which was designated OU2. The ROD requires excavation of approximately 30,000 cubic yards of heavily contaminated soil from a 2.5 acre area, followed by treatment and disposal of drained free product from the soil, improvement of the subsurface drainage at the southwestern portion of the site, and backfilling the excavation with the drained soil after nutrients have been added to enhance

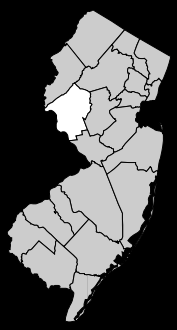
Syncon Resins

(Continued from previous page)

biodegradation of the residual organic contaminants. These actions are expected to significantly improve the effectiveness of the soil flushing/ground water treatment system and expedite cleanup of the site. The ROD also requires establishment of a Deed Notice or other institutional controls to ensure that the property is used for industrial or commercial purposes only. NJDEP plans to begin the Remedial Design for the OU2 remedial action in 2003.



Hunterdon County



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Arrowhead Road Ground Water Contamination

Arrowhead Road Readington Township Hunterdon County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

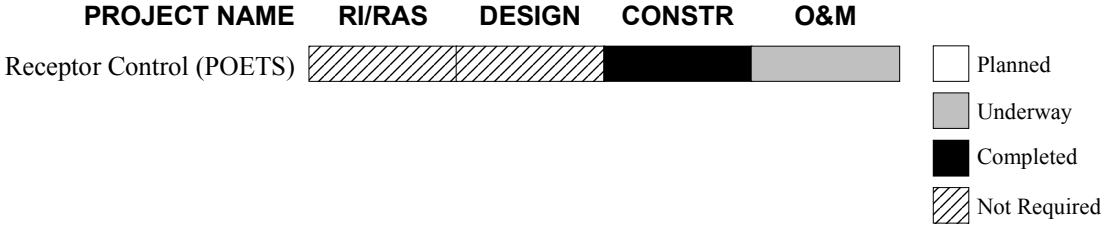
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$21,000
Corporate Business Tax	$25,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Hunterdon County Health Department and NJDEP's Remedial Response Element in 2002 identified 18 private potable wells in this area that were contaminated with dichloroethylene (DCE) and trichloroethane (TCA) at levels exceeding New Jersey Drinking Water Standards for these volatile organic compounds. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element plans to sample additional nearby private potable wells in 2003 and will use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area.



Crown Vantage Landfill

Route 619 Alexandria Township Hunterdon County

BLOCK: 17.01 **LOT:** 1.01

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 10 Acres

SURROUNDING LAND USE: Commercial/Residential

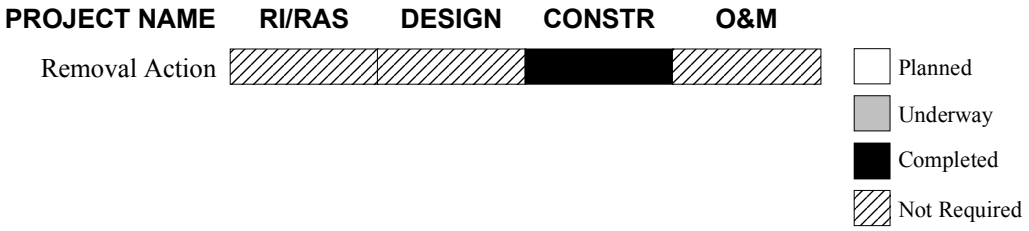
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Metals	Confirmed
Soil	Volatile Organic Compounds Metals	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
Hazardous Discharge Site Cleanup Fund	$500,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Crown Vantage Landfill is an inactive landfill located on the bank of the Delaware River in Alexandria Township. The landfill accepted various wastes for approximately forty years, beginning in the late 1930s. Coal ash, household trash, appliances, construction debris, chemical solvents, metal foil, waste paper and paper fiber sludge from a nearby paper company were reportedly deposited in the landfill while it was in operation. In 1991, the Responsible Party for the landfill conducted a preliminary investigation of the site in response to two Notices of Violations from NJDEP's Division of Hazardous Waste Management and Division of Solid Waste Management. The investigation revealed there were approximately 800 drums on the surface of the landfill and volatile organic vapors present in the soil. The Responsible Party subsequently removed approximately 475 empty drums and 69 drums containing wastes, including flammable liquids. Sampling of the ground water conducted in 1994 did not reveal the presence of any volatile organic compounds at levels exceeding New Jersey ground water quality criteria. Arsenic and lead were detected in the ground water at levels exceeding applicable standards, but it is not known whether these were associated with disposal activities at the landfill. Numerous half-buried empty drum carcasses remained along the western edge of the landfill and there was an area of stained soil approximately 300 square feet in size that may have resulted from dumping of chemicals.

In 2001, NJDEP was awarded funds from Crown Vantage Paper Company's bankruptcy estate to conduct remedial work at the landfill. NJDEP's Remedial Response Element removed drums and some contaminated soil, fenced the site and conducted limited soil sampling outside the fenced area in 2002. NJDEP is evaluating whether additional publicly funded remedial actions are required at the site.



DeRewal Chemical Company

Route 29 (River Road) Kingwood Township Hunterdon County

BLOCK: 50 **LOT:** 4

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.4 Acres

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Delineated
Soil	Volatile Organic Compounds Polycyclic Aromatic Hydrocarbons Metals	Removed

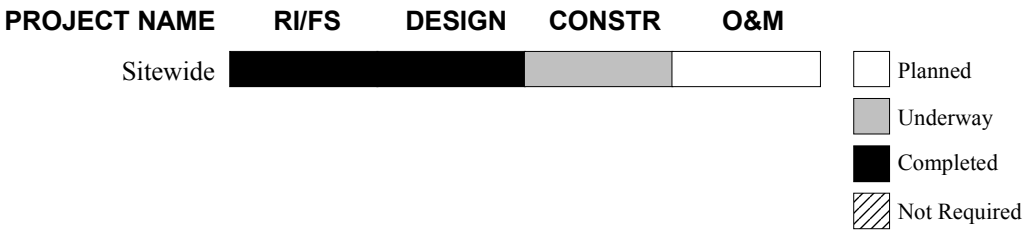
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$11,886,000
1981 Bond Fund	$5,000
1986 Bond Fund	$1,725,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

DeRewal Chemical Company operated a chemical manufacturing facility at this site between 1970 and 1974. The site is located in a rural area where ground water is used for drinking water supplies. Operations at the facility involved mixing and packaging a textile preservative and manufacturing an agricultural fungicide. Substances used at the facility included metals, acid solutions, fertilizer nutrients and other compounds. Numerous chemical spills were reported in 1973, including one incident in which a tank truck drained 3,000 to 5,000 gallons of a highly acidic chromium solution onto the soil. DeRewal Chemical excavated the contaminated soil in 1974 but left it on site in two partially covered piles that were allowed to erode. The owner of the company subsequently ceased operations and filed for bankruptcy.

USEPA added the DeRewal Chemical Company to the National Priorities List of Superfund sites (NPL) in 1984. A Remedial Investigation and Feasibility Study (RI/FS) conducted for the site revealed that the shallow aquifer was contaminated with volatile organic compounds and metals at levels exceeding ground water quality criteria. Contamination was also detected in the deeper aquifer at levels below ground water quality criteria. The RI/FS also revealed that the soil at the site was contaminated with metals, including chromium, as well as organic compounds.

In 1989, after completing the RI/FS, USEPA issued a Record of Decision (ROD) with NJDEP concurrence. The ROD required excavation of the contaminated soil, followed by on-site thermal treatment of the organic-contaminated soil and solidification/stabilization of the inorganic-contaminated soil, and extraction of the contaminated shallow ground water with off-site disposal at an industrial waste water treatment facility. However, after reviewing additional data obtained during the Remedial Design process, USEPA issued Explanations of Significant Differences (ESDs) in 1994 and 1997 that modified the soil remedies to excavation and off-site disposal. The 1997 ESD also stated that chromium-contaminated soil beneath the water table would not be excavated since it is not a source of contamination to the ground water. USEPA completed removal of approximately 60,000 tons of contaminated soil from the site in 1998. USEPA is evaluating recent ground water sampling results to determine whether remediation of the shallow aquifer is still warranted now that soil that may have been contributing to the ground water contamination has been addressed.



Eric's Main Street Mobil Service Station

144 Main Street Flemington Borough Hunterdon County

BLOCK: 36 **LOT:** 1.01

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Auto Repair Shop
OPERATION STATUS: Active

PROPERTY SIZE: 0.3 Acre

SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Potential
Soil	Volatile Organic Compounds	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$332,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site formerly operated as a gas station. It is now an auto repair shop. Investigation of the site began in 1992, after the telephone company discovered gasoline-contaminated ground water had seeped into an adjacent subsurface telephone utility vault. Gasoline vapors were subsequently detected in another nearby telephone utility vault and the basement of a telephone company building, which is connected in line to the two vaults. The telephone company removed the contaminated ground water and installed grates on the vaults to ventilate the gasoline vapors. NJDEP directed the site owner to vent the gasoline vapors from the telephone company's basement and subsurface conduits, determine the source of the discharge and take appropriate remedial actions, but the owner did not comply.

In 1998, NJDEP's Remedial Response Element completed a preliminary investigation that confirmed the ground water and soil at the service station were contaminated with several gasoline-related volatile organic compounds, including benzene, xylene and methyl tertiary-butyl ether (MTBE). In addition, air monitoring confirmed that gasoline vapors accumulated rapidly in the telephone vault when it was not vented. NJDEP is conducting a Remedial Investigation (RI) to characterize the source and evaluate potential receptors. A potable well survey and potable well sampling will be implemented in 2003 to determine whether nearby private wells have been affected by contamination from the site.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Flemington Water Department Well 7

65 Route 12 Flemington Borough Hunterdon County

BLOCK: 35 **LOT:** 37

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

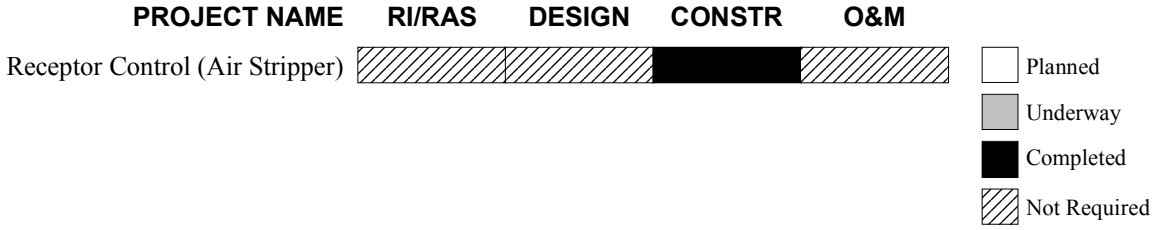
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Carbon Tetrachloride	Confirmed
Potable Water	Carbon Tetrachloride	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$240,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Flemington Water Department Well 7 is a primary source of potable water for 4,000 Borough residents. The supply well was closed down in 1994 when routine sampling revealed that the water was contaminated with carbon tetrachloride at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. NJDEP's Remedial Response Element completed a Remedial Action Selection (RAS) in 1997 that concluded installation of an air stripper on the well was the most cost-effective method to address the contamination. The Flemington Water Department constructed the air stripper in 1998 using funds provided by NJDEP and is operating and maintaining the system. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



High Bridge Water Department Well Field Contamination

Buffalo Hollow Road Lebanon Township Hunterdon County

BLOCK: 10 **LOT:** 38

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Municipal Well Field
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tricholorethylene	Confirmed
Potable Water	Trichloroethylene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$185,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The High Bridge Water Department's Bunnvale Well Field consists of four bedrock aquifer wells. Sampling conducted in 1995 and 1996 revealed that three of the four wells were contaminated with trichloroethylene (TCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. One of the four wells was taken out of service in 1995 due to the high TCE levels and the contamination in the remaining wells was reduced to acceptable levels through blending. NJDEP's Remedial Response Element completed a Remedial Action Selection (RAS) in 1997 that concluded the most cost-effective long-term remedy was to install an air stripper at the well field to treat all four wells. High Bridge Borough completed construction of the air stripper in 1998 using funds provided by NJDEP and is operating and maintaining the system. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.

Mobil Service Station Frenchtown Borough

22 Race Street Frenchtown Borough Hunterdon County

BLOCK: 52 **LOT:** 2

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.25 Acre

SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Potential
Soil	Volatile Organic Compounds	Partially Removed/Delineating
Surface Water	Petroleum Hydrocarbons	Delineating
Sediments	Petroleum Hydrocarbons	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$8,000
Corporate Business Tax	$148,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This former service station is located adjacent to Nishisakawic Creek, a tributary of the Delaware River. The site is separated from the creek by a retaining wall. In 1999, gasoline from a leaking 4,000 gallon underground gasoline storage tank seeped through the retaining wall into the creek, creating a sheen on the surface water and causing gasoline vapors to accumulate in neighboring homes. The service station owner removed the underground tanks, excavated the contaminated soil down to bedrock and backfilled the excavation with clean soil. However, subsequent episodes of seepage into the creek occurred, indicating petroleum product remained in the ground water and/or bedrock fractures. NJDEP's Remedial Response Element removed surface debris from the site in 2002 and plans to install on-site ground water monitor wells in 2003. Source remediation will be implemented based on the results of the monitor well testing.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
IEC Source				

Planned
Underway
Completed
Not Required

Red Horse Shoppes Incorporated

Route 31 & Payne Road Clinton Township Hunterdon County

BLOCK: 89 **LOT:** 8.01

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 1 Acre

SURROUNDING LAND USE: Residential/Commercial

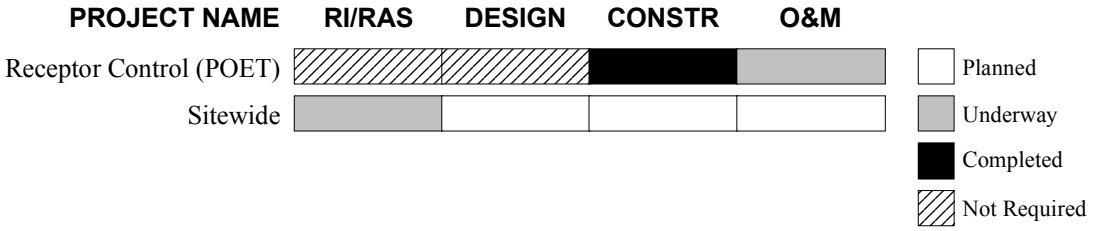
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$483,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is also known as the A&L Oil Mobil service station and is owned by Red Horse Shoppes, Inc. In 1990, NJDEP was notified that the soil at the service station and an on-site potable well and several off-site private potable wells were contaminated with petroleum products. The likely source of the contamination was identified as a leaking underground gasoline storage tank at the service station. NJDEP's Responsible Party Remediation Element issued two directives requiring the gasoline retailer to investigate the site and take immediate corrective action. A&L Oil removed four underground fuel storage tanks but left the soil excavated during the tank removal on site and did not delineate the ground water contamination. In addition, A&L Oil did not comply with a 1993 NJDEP directive that required the gasoline retailer to address nearby private potable wells believed to be contaminated with gasoline-related volatile organic compounds.

In 1999, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water and evaluate cleanup alternatives. Sampling of nearby private potable wells conducted as part of the RI/RAS identified one well that was contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards and a Point-of-Entry Treatment (POET) system was installed at that property. NJDEP began the soil and ground water sampling phase of the RI/RAS in 2001. Two deep monitor wells that were installed as part of the ground water investigation phase have been determined to be free of contamination.



Schaffernoth's Nursery

Old York Road & Route 202

East Amwell Township **Hunterdon County**

BLOCK: 1402 **LOT:** 45

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Flower and Garden Center
OPERATION STATUS: Active

PROPERTY SIZE: 10 Acres

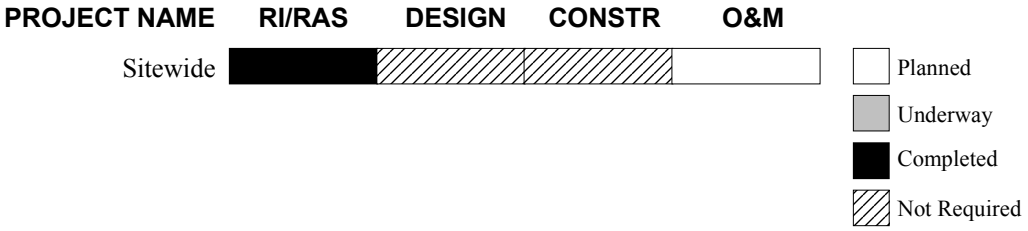
SURROUNDING LAND USE: Agricultural/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Taken Out of Service
Soil	Volatile Organic Compounds	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
1981 Bond Fund	$354,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This property is used for agricultural and retail operations. A retail store, two garages and several greenhouses occupy one third of the property and the remainder is cultivated. Sampling of an on-site potable well in 1997 showed that it was contaminated with methyl tertiary-butyl ether (MTBE), a volatile organic compound used as a gasoline additive. A subsequent investigation revealed that the source of the contamination was a leaking underground gasoline storage tank at the property. The property owner removed the leaking underground gasoline storage tank and contaminated soil and the potable well at the property was taken out of service. NJDEP's Remedial Response Element completed a Remedial Investigation (RI) in 2001 that revealed low levels of MTBE and other volatile organic compounds remained in the ground water. Sampling of additional private potable wells in the area during the RI did not identify any others that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. NJDEP is periodically sampling monitor wells at the site to evaluate ground water quality.



Tunis Cox Road & Coddington Road

Tunis Cox & Coddington Roads

Readington Township **Hunterdon County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

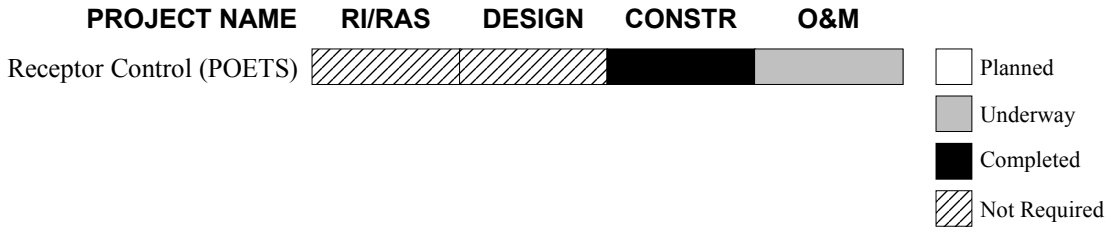
SURROUNDING LAND USE: Residential/Agricultural/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$9,000
Corporate Business Tax	$110,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Hunterdon County Health Department and NJDEP's Remedial Response Element in 2001 identified nine private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). Point-of-Entry Treatment (POET) systems were installed on the wells using funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element has delineated the Currently Known Extent (CKE) of the potable well contamination and plans to conduct a water supply alternatives analysis in 2003 to evaluate long-term alternatives to provide potable water to the area. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



US Route 22 & Mountain Road Ground Water Contamination

US Route 22 & Mountain Road

Readington Township **Hunterdon County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

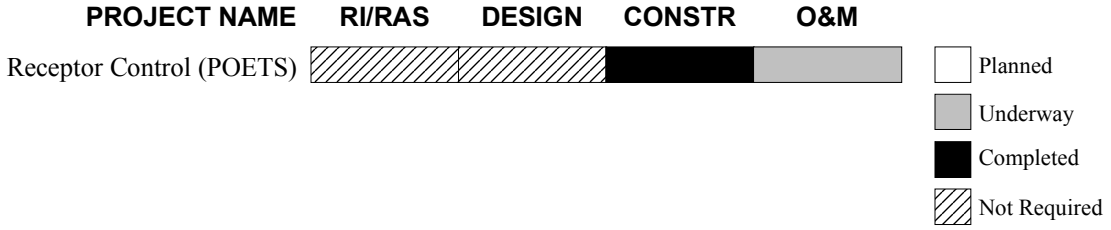
SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$16,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Hunterdon County Health Department in 1991 identified 11 private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were tetrachloroethylene (also known as perchloroethylene, or PCE), trichloroethylene (TCE), trichloroethane (TCA) and dichloroethylene (DCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. NJDEP's Remedial Response Element subsequently completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected residences. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Whitehouse Station Ground Water Contamination

Various Locations Readington Township Hunterdon County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

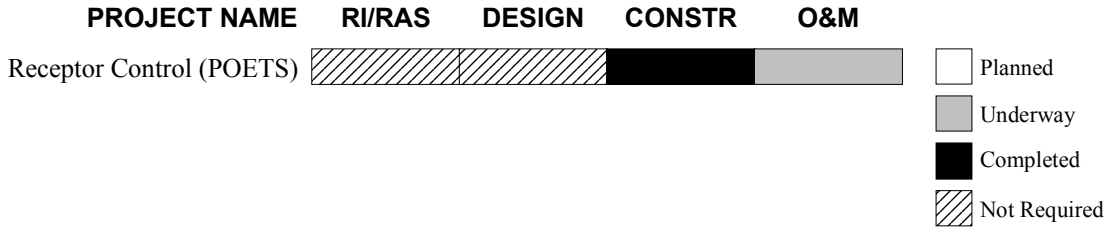
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$380,000
Corporate Business Tax	$8,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted in 2001 during a Remedial Investigation of a local gas station identified eight private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminant was dichloroethane (DCA). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Responsible Party Remediation Element, which was overseeing the investigation of the gas station, determined that the gas station was not the source of the DCA, therefore the potable well contamination was referred to the Remedial Response Element for further action. The Remedial Response Element sampled additional nearby wells during 2002 and will use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Willocks Court Ground Water Contamination

Willocks Court Readington Township Hunterdon County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

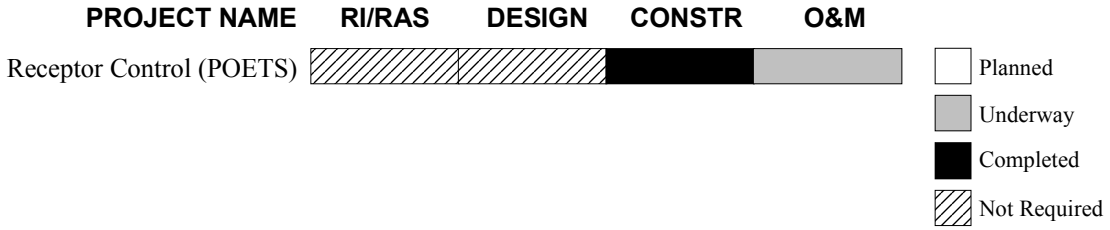
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

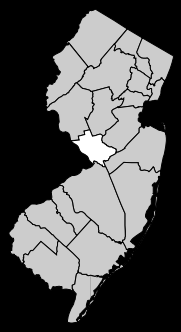
FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$110,000
1981 Bond Fund	$8,000
1986 Bond Fund	$15,000
Corporate Business Tax	$85,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the local health department and NJDEP's Remedial Response Element between 1988 and 1998 identified 19 private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were dichloroethylene (DCE) and trichloroethane (TCA). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. The Remedial Response Element completed a water supply alternative analysis in 1990 that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Mercer County



MERCER

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398 Olden Avenue

398 Olden Avenue — Trenton City — Mercer County

BLOCK: 202D **LOT:** 181
BLOCK: 202E **LOT:** 160, 162

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Stations
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.6 Acres (total)

SURROUNDING LAND USE: Commercial/Residential

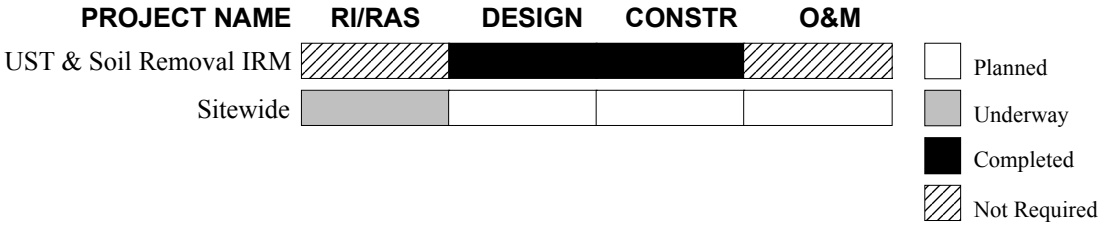
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Soil	Volatile Organic Compounds	Removed
Air	Volatile Organic Compounds	Monitoring

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$416,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site consists of two abandoned gasoline service stations located in close proximity to one another. One, known as Frank's Service Station, is located on the corner of North Olden Avenue and Dickinson Street. The other is known as Tex's Service Station and is located on the corner of North Olden Avenue and Lawrence Street. Each is approximately 0.3 acres. Between the two former service stations is an industrial blacksmith building. In 1993, the local electric and gas company alerted NJDEP that heavy gasoline odors were present in an underground utility vault located near the sites. NJDEP investigated and determined that several underground storage tanks at the two former service stations still contained petroleum product. NJDEP's Responsible Party Remediation Element issued directives to current and former owners of the properties that required them to address the vapor hazard and close the underground storage tanks, but they did not comply.

In 1999, NJDEP's Remedial Response Element began a Remedial Investigation (RI) to delineate the contamination in the soil and ground water at the former gas stations. The Remedial Response Element implemented an Interim Remedial Measure (IRM) in 2001 to remove nine underground storage tanks and 1,600 tons of contaminated soil from the sites. Monitor wells will be installed at the sites in 2003 and these will be sampled to determine whether a ground water remedial action is necessary.



Hopewell Borough Water Department Well 4

Louellen Street & Model Avenue Hopewell Borough

Mercer County

BLOCK: 13 **LOT:** 1

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

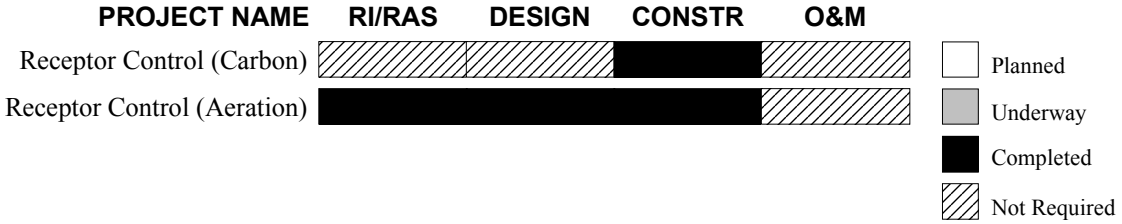
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$90,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Municipal Well 4 provides water for approximately one-third of Hopewell Borough's daily demand. Routine sampling conducted in 1993 revealed that the well was contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). NJDEP's Remedial Response Element installed a carbon filtration system on the well as an interim measure in 1993. The Borough installed an air stripper on the well as a permanent remedy in 2001 with funds provided by NJDEP and is operating and maintaining the system. An investigation is underway to identify possible sources of the ground water contamination at this site.



Princeton Farms Ground Water Contamination

Moores Mill-Mount Rose Road & Howard Way

Hopewell Township **Mercer County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

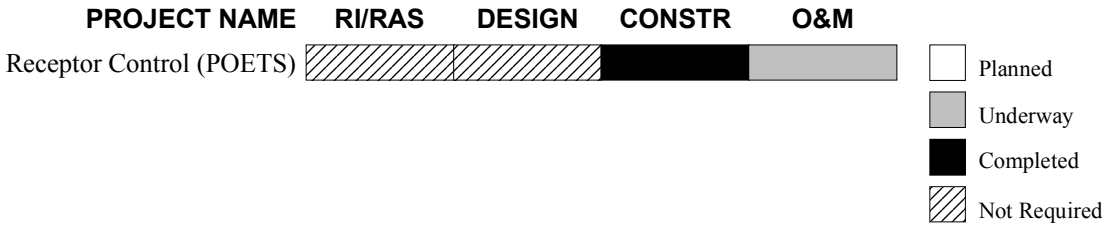
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tetrachloroethylene	Confirmed
Potable Water	Tetrachloroethylene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$19,000
1981 Bond Fund	$19,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the local health department in 1995 identified 12 private potable wells in this area that were contaminated with tetrachloroethylene (also known as perchloroethylene, or PCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. NJDEP's Remedial Response Element completed a water supply alternatives analysis for the site in 1997 that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected residences. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Trenton Fibre Drum Company Inc.

1545 New York Avenue Lawrence Township Mercer County

BLOCK: 408 **LOT:** 1-19

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Drum Reconditioning
OPERATION STATUS: Inactive

PROPERTY SIZE: 2 Acres

SURROUNDING LAND USE: Industrial/Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Pesticides Metals	Delineating
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Petroleum Hydrocarbons Pesticides Metals	Delineating
Surface Water	Semi-Volatile Organic Compounds Pesticides Metals	Delineating
Sediments	Volatile Organic Compounds Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Petroleum Hydrocarbons Metals	Delineating
Building Interior (Foundation)	Volatile Organic Compounds Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Petroleum Hydrocarbons Metals	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$25,000
Corporate Business Tax	$651,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Trenton Fibre Drum Company operated a steel and fiber drum reconditioning facility at this site between 1965 and 1985. The building was demolished and all that remains at the site is the foundation. Numerous drums containing chemical wastes were left at the site when operations ceased. A preliminary investigation conducted by USEPA in 1985 revealed that the soil at the site and the sediments and surface water in a nearby ditch were contaminated with organic compounds and metals. USEPA disposed of approximately 1,000 drums and a 550-gallon underground gasoline storage tank during a removal action in 1991.

The Township of Lawrence and NJDEP's Site Remediation Program subsequently entered into a Memorandum of Agreement (MOA) in which the Township agreed to investigate the extent of the contamination at the property. The Township completed a Preliminary Assessment Report and Site Investigation Report in 1997 that concluded numerous spills and subsurface sources had contaminated the soil, surface water and ground water and that the contamination was migrating off site. However, the Township terminated the MOA in 1997 before the Remedial Investigation was completed. In 1999, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Alternatives Analysis (RI/RAS) to delineate the contamination at the site and evaluate cleanup alternatives. The RI/RAS is scheduled to be completed in 2003. NJDEP will use the findings of the RI/RAS to select final remedial actions for the site.

Trenton Fibre Drum Company Inc.

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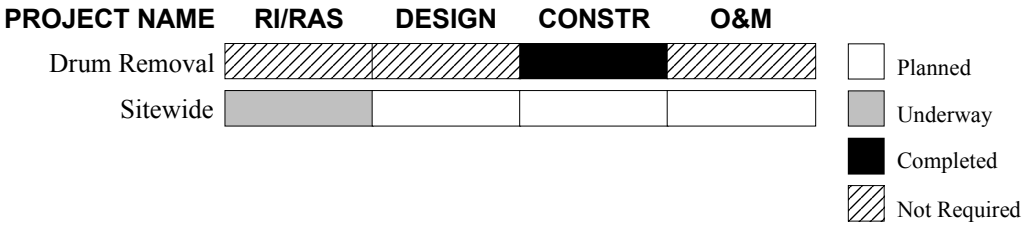


Yard Road Ground Water Contamination

Route 31 & Yard Road Hopewell Township Mercer County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

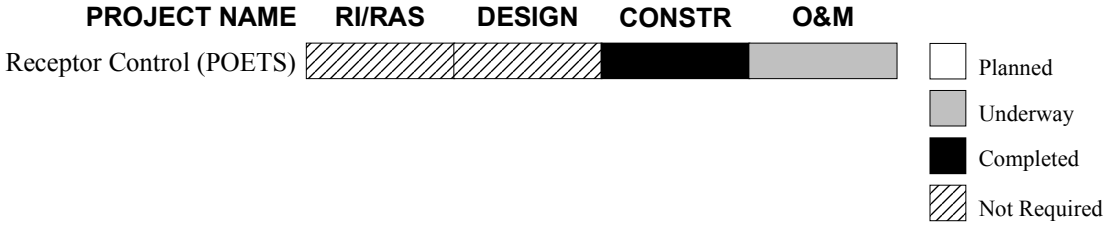
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

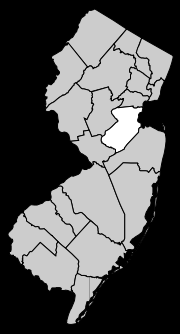
FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$1,000
Corporate Business Tax	$130,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Hopewell Township Health Department and NJDEP's Remedial Response Element between 1999 and 2001 identified 20 private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminant was trichloroethylene (TCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. In 2002, the Remedial Response Element delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected residences. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Middlesex County



MIDDLESEX

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Atlantic Resources Corporation

Horseshoe Road Sayreville Borough Middlesex County

BLOCK: 256 **LOT:** 2.03

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Metals Recovery
OPERATION STATUS: Inactive

PROPERTY SIZE: 5 Acres

SURROUNDING LAND USE: Industrial/Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals Pesticides	Delineating
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals Pesticides	Delineating
Sediments	Volatile Organic Compounds Metals Pesticides	Potential
Buildings	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals Pesticides	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$2,000,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Atlantic Resources Corporation operated a precious metals reclamation facility at this site between 1972 and 1985, when the company went bankrupt. Activities included recovering gold and silver from x-ray and photographic film, circuit boards and other waste materials. The site is situated on the banks of the Raritan River and is adjacent to the Horseshoe Road Superfund site. Authorities became aware of environmental conditions in the Horseshoe Road area in 1981, when a brush fire exposed a dump where approximately 70 drums of hazardous wastes had been discarded. USEPA transferred the drums to another part of the Horseshoe Road site and NJDEP subsequently disposed of them. USEPA performed a removal action at the Atlantic Resources facility 1987 to empty leaking vats of acids, clean up mercury spills and dispose of containers of hazardous substances and contaminated debris. USEPA added Horseshoe Road and Atlantic Resources Corporation to the National Priorities List of Superfund sites (NPL) in 1995 and 2002, respectively.

USEPA is addressing the Atlantic Resources Superfund site as three Operable Units (OU): the on-site buildings and miscellaneous debris (OU1), on-site contaminated soil and ground water (OU2), and potential contamination in the wetlands adjacent to the Raritan River (OU3). Work at the Horseshoe Road Superfund site is being conducted concurrently. USEPA issued a Record of Decision (ROD) for OU1 in 2000 that required demolition and removal of the buildings and removal of miscellaneous debris. Potentially Responsible Parties completed this work at the Atlantic Resources site in 2002. USEPA is conducting a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination at OU2 and evaluate cleanup alternatives. USEPA will use the findings of the RI/FS to select the final remedial actions to address these media, which will be outlined in a second ROD for the site. The Potentially Responsible Parties are expected to begin the sampling phase of the RI/FS for OU3 in late 2003.

Atlantic Resources Corporation

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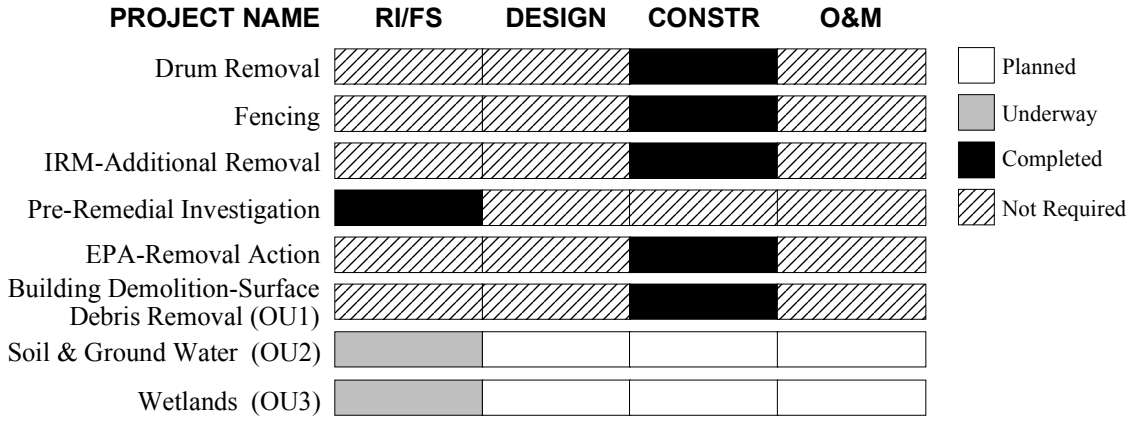


Amoco Service Station Milltown Borough

29 South Main Street Milltown Borough Middlesex County

BLOCK: 74 **LOT:** 3

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 2.4 Acres

SURROUNDING LAND USE: Commercial

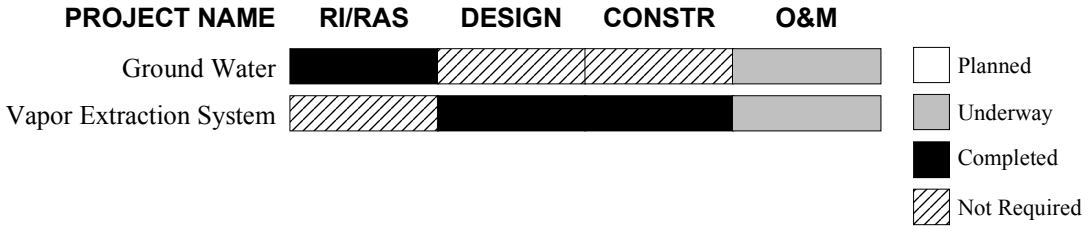
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Soil	Volatile Organic Compounds	Remediating
Air	Volatile Organic Compounds	Remediated/Monitoring

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$2,000
1981 Bond Fund	$270,000
1986 Bond Fund	$53,000
Corporate Business Tax	$40,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Soil and ground water at this site were contaminated with gasoline due to leaking underground gasoline storage tanks. The contamination caused gasoline vapors to intermittently accumulate in an adjacent building beginning in the early 1980s. The gas station owner removed eight underground storage tanks and 400 cubic yards of gasoline-contaminated soil from the site in 1990 but did not address the vapor problem at the adjacent building. In 1993, NJDEP's Remedial Response Element implemented an Immediate Environmental Concern (IEC) interim action at the site that included installing a sump pump and an oil/water separator in the basement of the adjacent building and collecting soil and ground water samples at the gas station and off-site areas. The results of the sampling confirmed the presence of gasoline contamination. NJDEP installed a soil vapor extraction system (SVE) on the adjacent property in 1996 to remediate the contaminated soil and prevent gasoline vapors from migrating into the building.

Between 1996 and 1998, NJDEP conducted a Remedial Investigation/Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water at the site and evaluate cleanup alternatives. The RI/RAS revealed that there was no contaminated soil remaining at the on-site or off-site areas and the levels of contaminants in the ground water had significantly decreased. In addition, sampling of the indoor air at the adjacent building conducted during the RI/RAS showed that the levels of gasoline vapors have remained low. Based on these findings, NJDEP selected natural attenuation as the final remedy for this site. Under this remedy, NJDEP established a Classification Exception Area (CEA) for the ground water contamination and is periodically sampling the ground water to monitor the natural degradation of the contaminants. NJDEP plans to shut down the SVE system in early 2003 and will periodically monitor the volatile organic vapors in the soil to determine whether the system can be removed.



Arthur Gundacker Property

687 Spotswood-Englishtown Road

Monroe Township Middlesex County

BLOCK: 36 **LOT:** 7

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Landscaping Business
OPERATION STATUS: Inactive

PROPERTY SIZE: 5 Acres

SURROUNDING LAND USE: Residential

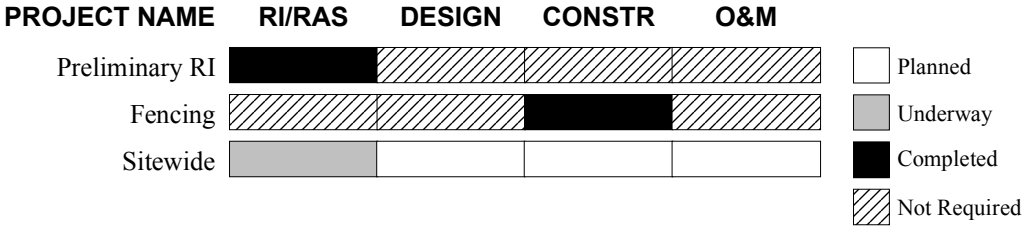
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Delineated
Soil	Volatile Organic Compounds	Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$18,000
1981 Bond Fund	$147,000
1986 Bond Fund	$411,000
Corporate Business Tax	$274,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site operated as a landscaping business between 1962 and 1981 and is currently a private residence. While the site was a landscaping business, the owner allegedly disposed of drums of chemical wastes in a ravine at the rear of the property. NJDEP's Remedial Response Element conducted a preliminary investigation of the site in 1993 that included sampling the on-site ground water, collecting subsurface soil samples near the suspected disposal area and testing private potable wells in the area for contaminants. The results of the preliminary investigation indicated that the soil and ground water near the waste fill were contaminated with volatile organic compounds, but nearby private potable wells were free of any contamination that could be attributed to the Gundacker site.

In 1997, NJDEP began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water and evaluate remedial alternatives. NJDEP has completed the RI phase and plans to issue a Proposed Plan outlining its preferred remedial action for the soil in 2003. Remedial alternatives to address the ground water are being reviewed. A fence has been installed across the entrance to the property to restrict access while the investigative and cleanup work is underway.



Cheesequake State Park

Perrine Road — Old Bridge Township — Middlesex County

BLOCK:	LOT:
3230	1
4185	51
4185	56
4185	59

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Landfill/Drum Reconditioning
OPERATION STATUS: Inactive

PROPERTY SIZE: 1,341 Acres

SURROUNDING LAND USE: Recreational

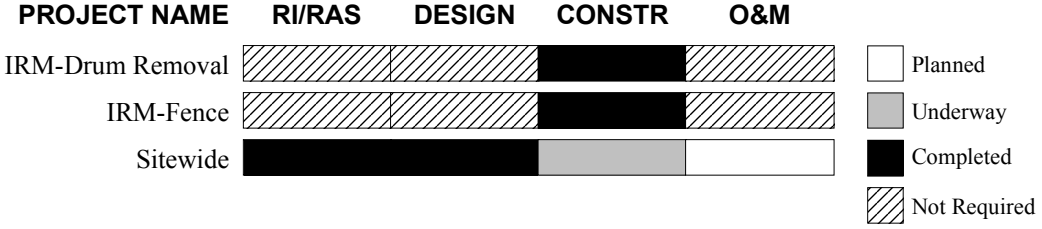
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Levels Not of Concern
Surface Water	Semi-Volatile Organic Compounds Metals	Levels Not of Concern
Soil	Semi-Volatile Organic Compounds Metals	Levels Not of Concern/Capped
Sediment	Semi-Volatile Organic Compounds Metals	Levels Not of Concern

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$12,000
1986 Bond Fund	$49,000
Corporate Business Tax	$810,000
Hazardous Discharge Site Cleanup Fund	$27,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Perrine Pond Area of Cheesequake State Park was used as a municipal landfill and drum reconditioning facility during the early 1960s. This area was later incorporated into the park property. In 1982, approximately 200 drums of hardened lead-based paint sludges left over from the previous operations were discovered in part of the Perrine Pond Area. NJDEP subsequently disposed of approximately 900 cubic yards of buried drums and other waste materials, but evidence of additional buried drums remained. NJDEP installed a fence around the area in 1991 to restrict access by park visitors.

In 1997, NJDEP's Remedial Response Element completed a Remedial Investigation (RI) of the Perrine Pond Area as well as at several other areas in the park where contamination was suspected. The RI revealed that there was no significant contamination in the soil, surface water and sediments. NJDEP also concluded that the ground water in the Perrine Pond Area is slightly contaminated but does not present a threat to human health and the environment. In 1999, NJDEP issued a Decision Document that required installation of a soil cover over the inactive landfill and removal of surface debris and other physical hazards from Perrine Pond area and surrounding areas as the final remedial actions for the site. In 2002, after completing a Remedial Design, NJDEP removed the surface debris and installed the soil cover along with an erosion mat. NJDEP also removed the fence that was restricting access to the Perrine Pond area. Trees will be planted on the soil cover in the spring of 2003 as a final erosion control measure.



Chemical Insecticide Corporation

125 Whitman Avenue Edison Township Middlesex County

BLOCK: 199A **LOT:** 31-B-1

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 6 Acres

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Pesticides Herbicides Metals	Delineated
Soil	Pesticides Herbicides Metals	Delineated/Removed/Capped
Surface Water	Pesticides Herbicides Metals	Levels Not of Concern
Sediments	Pesticides Herbicides Metals	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$60,000
Superfund	$42,542,000
1981 Bond Fund	$203,000
1986 Bond Fund	$1,266,000
Corporate Business Tax	$4,000,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

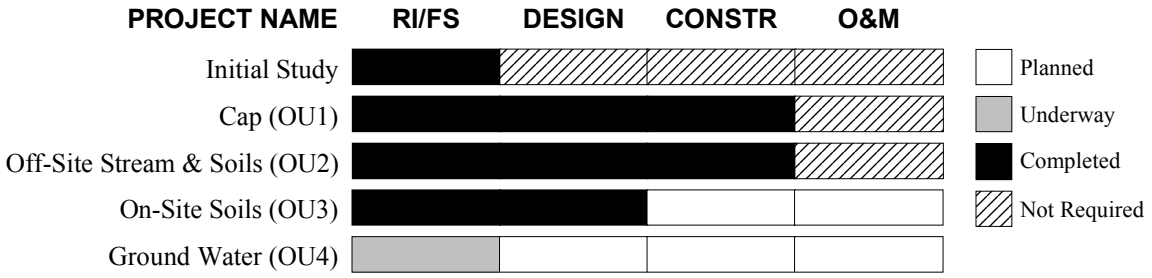
Chemical Insecticide Corporation (CIC) processed pesticides at this site between the mid-1950s and 1970, when the owner declared bankruptcy. The buildings were razed in 1975 and the property is currently vacant. An unnamed stream that is a tributary of Mill Brook is adjacent to the site. Both the unnamed stream and Mill Brook flow through nearby residential areas. USEPA began an initial Remedial Investigation and Feasibility Study (RI/FS) at the site in 1987, after previous sampling indicated that the soil was contaminated with dioxin. The results of the initial RI/FS confirmed that both the soil and ground water were contaminated with various pesticides and herbicides. The RI/FS also revealed that during periods of precipitation, surface water runoff contaminated with arsenic and the herbicide Dinoseb discharged into the adjacent stream. USEPA added CIC to the National Priorities List of Superfund sites (NPL) in 1990.

USEPA is addressing the investigation and cleanup of the site in four phases or Operable Units (OU): an interim remedial action to control runoff of contaminated surface water (OU1); off-site contaminated soils and sediments (OU2); contaminated soil on the CIC property and neighboring industrial areas (OU3); and ground water (OU4). In 1989, USEPA issued a Record of Decision (ROD) with NJDEP concurrence for OU1 that required installation of a cap over the site to prevent runoff of contaminated surface water. The remedial work for OU1 was completed in 1994 and included grading the soil, installing an impermeable cap over the 6-acre site with a system to control surface water runoff, and fencing the entire site perimeter. In 1995, USEPA issued a second ROD with NJDEP concurrence for OU2 that required removal of the off-site contaminated soil and sediments and restoration of the excavated areas. Approximately 13,300 cubic yards of arsenic-contaminated soil and sediments in and around Mill Brook were excavated and disposed of off-site and the stream beds and banks restored when OU2 remedial activities were completed in 1997.

Chemical Insecticide Corporation

(Continued from previous page)

In 2000, after completing a RI/FS for OU3, USEPA issued a ROD with NJDEP concurrence that requires excavation and off-site disposal of the on-site contaminated soils. The Remedial Design for OU3 is complete and cleanup activities are scheduled to start in 2003, pending availability of federal funding. USEPA completed the RI/FS for OU4 in 2002 and expects to issue a Proposed Plan recommending actions to address the ground water in 2003. USEPA will outline the final remedial actions for the ground water in a third ROD for the site.



Citgo Service Station North Brunswick

686 Livingston Avenue North Brunswick Township Middlesex County

BLOCK: 103 **LOT:** 2

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.25 Acre

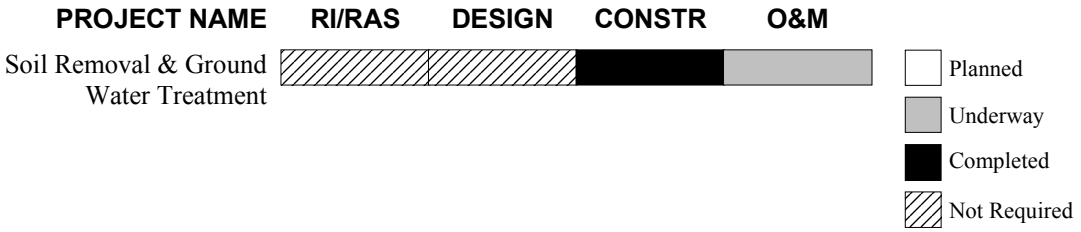
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Remediated/Further Monitoring Required
Soil	Volatile Organic Compounds	Removed
Air	Volatile Organic Compounds	Remediated

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$822,000
1986 Bond Fund	$12,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Between 1987 and 1988, several leaking underground gasoline storage tanks at this service station contaminated the soil and ground water. Gasoline product and vapors traveled along underground utility lines, creating potentially explosive conditions in nearby residences. NJDEP's Remedial Response Element excavated and disposed of the gasoline-contaminated soil and installed a vapor recovery system at the site in 1988. The system was shut down in 1993 when the contaminants in the ground water were reduced to acceptable levels and gasoline vapors were no longer present in the residences. The Remedial Response Element subsequently established a ground water Classification Exception Area (CEA) for the site and is conducting long-term ground water monitoring pursuant to the requirements of the CEA. NJDEP is attempting to negotiate an Administrative Consent Order that would obligate the Responsible Party to conduct future ground water monitoring.



Cornell Dubilier Electronics Incorporated

333 Hamilton Boulevard South Plainfield Township Middlesex County

BLOCK: 256 **LOT:** 1

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Electronics Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 25 Acres

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Polychlorinated Biphenyls (PCBs) Volatile Organic Compounds Metals	Delineating
Soil	Polychlorinated Biphenyls (PCBs) Volatile Organic Compounds Metals	Partially Removed/Delineating
Surface Water	Polychlorinated Biphenyls (PCBs)	Delineating
Sediments	Polychlorinated Biphenyls (PCBs)	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$4,500,000
Spill Fund	$4,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Cornell Dubilier Electronics Inc. manufactured electronic parts and tested transformer oils at this site between 1936 and 1962. Hamilton Industrial Park, a complex of 15 commercial businesses, currently occupies the property. An unnamed tributary of Bound Brook, which flows into New Market Pond, borders the industrial park to the southeast and residences border it at the north and south. USEPA began investigating the site in 1994 after it was notified that transformer oils containing polychlorinated biphenyls (PCBs) and other hazardous substances were dumped onto the ground during the 1950s. Sampling confirmed that soil at the site was highly contaminated with PCBs, as well as with lower levels of metals and the volatile organic compound trichloroethylene (TCE). Fish samples from Bound Brook and New Market Pond were found to contain levels of PCBs greater than the two parts per million (2 ppm) standard established as safe for human consumption by the Food and Drug Administration, which prompted the New Jersey Department of Health and Senior Services to issue a fish consumption advisory for the entire length of Bound Brook in Middlesex County in 1997. Sampling also revealed that the surface soils and indoor dust at some of the neighboring residential properties contained PCBs. In 1997, USEPA issued an Administrative Consent Order (ACO) that directed the current owner of the site to conduct several measures to limit access to areas of PCB contamination and prevent contaminants from migrating to Bound Brook through surface water runoff. The property owner installed a fence and paved driveways and parking areas within the industrial park later that year to comply with the requirements of the ACO. USEPA added the former Cornell Dubilier Electronics property to the National Priorities List of Superfund sites (NPL) in 1998.

In 1998, USEPA and several Potentially Responsible Parties for the site implemented removal actions to clean PCB-contaminated dust from nearby residences. Some of the Potentially Responsible Parties subsequently entered into several ACOs with USEPA to remove and dispose of contaminated soil at 14 nearby residences and delineate the contamination at other properties. The Potentially Responsible Parties are implementing this work under supervision of USEPA.

In 2000, USEPA began delineating contamination at the on-site and off-site areas. To facilitate investigation and cleanup of the site, it is being addressed as three Operable Units (OU): the contaminated soils at off-site residential, municipal and commercial properties (OU1); on-site contaminated soils and buildings (OU2); and contaminated ground water and sediments in Bound Brook (OU3). USEPA has completed a Remedial Investigation and Feasibility Study (RI/FS) for OU1 and drafted a Proposed Plan outlining its recommendations to address these areas. The final remedial actions will be outlined in a Record of Decision for the site. Separate RI/FS are underway to delineate the contamination and evaluate cleanup alternatives for OU2 and OU3.

Cornell Dubilier Electronics Incorporated

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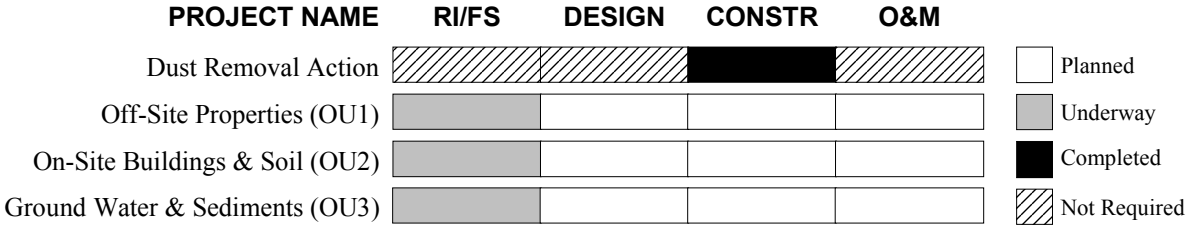

Fried Industries Incorporated

11 Fresh Ponds Road East Brunswick Township Middlesex County

BLOCK: 308.19 **LOT:** 20.03

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 26 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds Arsenic	Removed
Sediments	Volatile Organic Compounds Semi-Volatile Organic Compounds Pesticides	Levels Not of Concern

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$17,203,000
1986 Bond Fund	$400,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Fried Industries manufactured floor finishing products, detergents, adhesives and algaecides at this facility between the early 1960s and 1987. The site has a pond and several wetlands and is located near Farrington Lake and Lawrence Brook. In 1983, USEPA determined that operations at the facility had contaminated the soil, ground water and surface waters and that drums containing chemical wastes were buried at the site. Several nearby residences were connected to the public water line after the potable wells at these properties were found to be contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. USEPA added Fried Industries to the National Priorities List of Superfund sites (NPL) in 1986. In 1989, USEPA began a removal action to address surface drums and containers of chemical wastes that remained at the site after operations ceased. Approximately 1,400 drums and 4,200 laboratory containers of hazardous materials were disposed of during the removal action, which was completed in 1992.

Between 1988 and 1994, USEPA conducted a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination at the site and evaluate cleanup alternatives. The RI/FS revealed that soil was contaminated with arsenic and volatile organic compounds and that the ground water was contaminated with volatile and semi-volatile organic compounds. The RI/FS also revealed that the stream and swamp sediments were only slightly contaminated. Based on these findings, USEPA issued a Record of Decision (ROD) with NJDEP concurrence in 1994 that required demolition of the building complex, excavation and off-site stabilization/disposal of arsenic-contaminated soil, and excavation and off-site treatment/disposal of organics-contaminated soil. The ROD also required installation of a remediation system to extract and treat the contaminated ground water, with discharge of the treated water to surface waters.

USEPA completed the building demolition project in 1998. During the Remedial Design for the soil remedial action, hundreds of additional buried drums were discovered. USEPA removed these drums along with 12,200 tons of contaminated soil during the soil remedial action, which was completed in 1999. In addition, 600,000 gallons of contaminated ground water were pumped from the site during the soil remedial action. Due to the large volumes of contaminated soil and ground water that were removed during the soil remedial action, the Remedial Design for the ground water remediation system was placed on hold pending completion of this phase of the site cleanup. Additional delineation of the ground water contamination is being conducted as part of the Remedial Design for the ground water remediation system.

Fried Industries Incorporated

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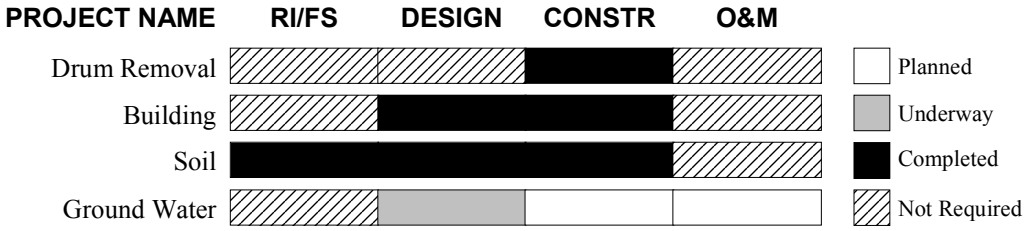


Horseshoe Road

Horseshoe Road — Sayreville Borough — Middlesex County

BLOCK: 246, 256 **LOT:** 1, 1.01, 1.03, 2.02, 2.04

CATEGORY: Superfund, Federal Lead

TYPE OF FACILITY: Chemical Manufacturing/Illegal Dump

OPERATION STATUS: Inactive

PROPERTY SIZE: 17 Acres

SURROUNDING LAND USE: Industrial/Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Delineating
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Pesticides Metals Polychlorinated Biphenyls (PCBs)	Delineating
Sediment	Volatile Organic Compounds Semi-Volatile Organic Compounds Pesticides Metals	Potential
Buildings	Volatile Organic Compounds Semi-Volatile Organic Compounds Pesticides Metals	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$3,500,000
Spill Fund	$165,000
General State Fund	$7,000
Corporate Business Tax	$52,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Horseshoe Road Site is comprised of three industrial properties located near the Raritan River: the former Atlantic Development Corporation facility, the Horseshoe Road Drum Dump and the Sayreville Pesticide Dump. The Atlantic Development Corporation facility was owned and leased by many companies between the 1950s and the early 1980s. Operations at the facility during this period included manufacturing coal tar and asbestos for roofing materials, manufacturing sealants, polymers, resins and pesticide intermediates and the recycling of chlorinated solvents. Disposal of chemical wastes occurred at the Sayreville Pesticide Dump between 1957 and the early 1980s and at the Horseshoe Road Drum Dump between 1972 and the early 1980s. The Atlantic Resources Corporation Superfund site, a former precious metals reclamation facility, is in the immediate vicinity of the Horseshoe Road Superfund site.

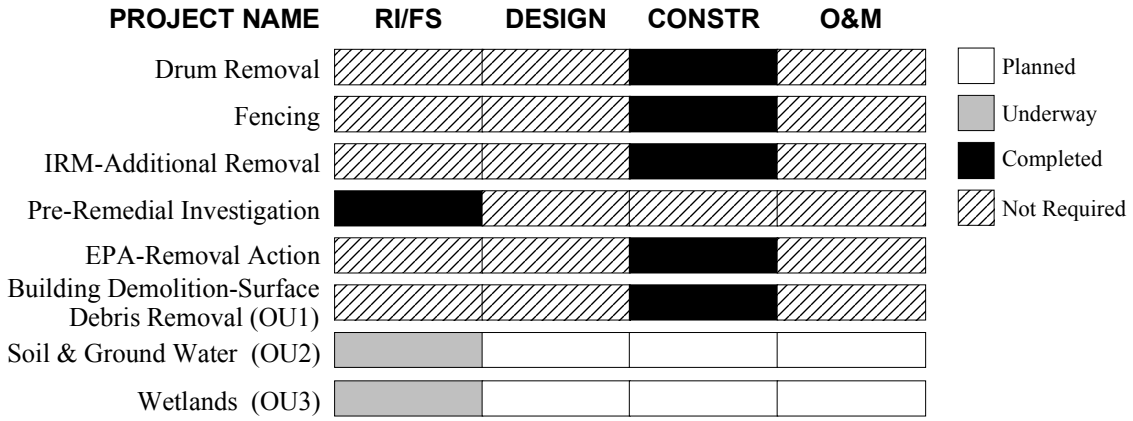
Authorities became aware of the environmental conditions in the Horseshoe Road area in 1981, when a brush fire exposed approximately 70 partially filled drums of chemicals at the Drum Dump area. USEPA relocated the drums to another part of the site and NJDEP disposed of them in 1985. USEPA subsequently performed several additional removal actions, disposing of drums and hazardous materials from the Atlantic Development area, the Pesticide Dump area and the Drum Dump area. More than 3,000 drums, as well as contaminated soil and debris, were removed from the site by USEPA and NJDEP during the removal actions. USEPA added the Horseshoe Road site to the National Priorities List of Superfund sites (NPL) in 1995.

USEPA is addressing the Horseshoe Road Superfund site as three Operable Units (OU): the on-site buildings and miscellaneous debris (OU1), on-site contaminated soil and ground water (OU2), and potential contamination in the wetlands adjacent to the Raritan River (OU3). Work at the nearby Atlantic Resources Corporation Superfund site is being conducted concurrently.

Horseshoe Road

(Continued from previous page)

USEPA issued a Record of Decision (ROD) for OU1 in 2000 that required demolition of the buildings and removal of miscellaneous debris. This work was completed at the Horseshoe Road Superfund site in 2001. USEPA is conducting a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination at OU2 and evaluate cleanup alternatives. USEPA will use the findings of the RI/FS to select the final remedial actions to address these media, which will be outlined in a second ROD. The sampling phase of the RI/FS for OU3 is scheduled to begin in late 2003.



Neighborhood Garage

1231 Bound Brook Road Middlesex Borough Middlesex County

BLOCK: 59 **LOT:** 15

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Inactive

PROPERTY SIZE: 1 Acre

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Removed

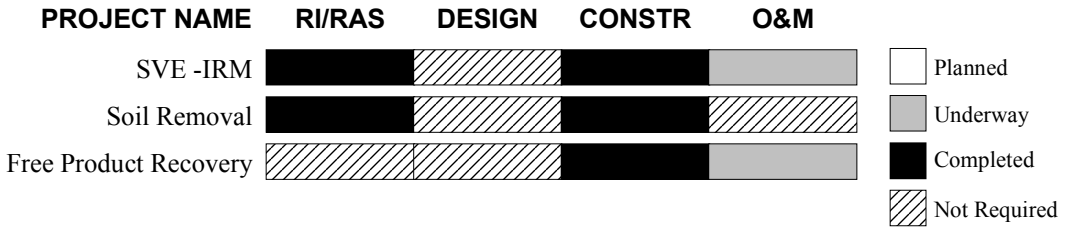
FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$681,000
Corporate Business Tax	$66,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is a former gasoline service station; it currently operates as an automotive repair facility. In 1995, gasoline product discharging from leaking underground storage tanks migrated off site and caused vapors to accumulate in several neighboring homes. The owner subsequently excavated all of the underground tanks and approximately 350 tons of gasoline-contaminated soil and installed several temporary monitor wells at the site under the supervision of NJDEP's Responsible Party Remediation Element. Sampling of the temporary monitor wells showed very high levels of dissolved gasoline-related volatile organic compounds. The site was transferred to NJDEP's Remedial Response Element as an Immediate Environmental Concern (IEC) case in 1996 after the owner of the service station was unable to continue the investigation and remediation of the property. Three nearby residences with private potable wells were connected to the public water line that year.

In 1997, NJDEP implemented an Interim Remedial Measure (IRM) to install a soil vapor extraction system (SVE) at the site after gasoline vapors were detected in nearby residences. The following year, NJDEP excavated and disposed of approximately 5,000 tons of gasoline-contaminated soil, backfilled the excavations with clean soil and repaved the property. NJDEP installed a ground water treatment/free product recovery system at the gas station in 1999 to remove residual gasoline contamination in the ground water.

In 2000, after repeated sampling of the air in nearby residences showed that there were no significant levels of vapors present, NJDEP modified the SVE system to withdraw vapors from the gas station property only. Nearby homes are no longer being monitored for gasoline vapors. NJDEP continues to operate the SVE and ground water treatment/free product recovery system at the gas station.



Pitt Street Ground Water Contamination

Pitt Street South Plainfield Borough Middlesex County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

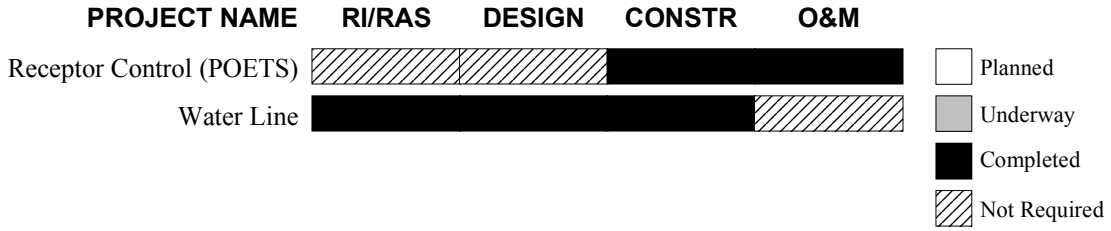
SURROUNDING LAND USE: Residential/Commercial/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

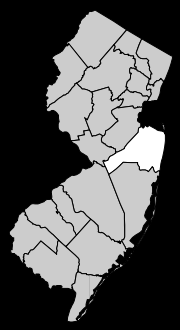
FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$643,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the local health department and residents in 1989 identified approximately 70 private potable wells in this area that were contaminated with a variety of chlorinated volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element subsequently completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was to extend public water lines to the affected homes. South Plainfield Borough extended the water lines in 1994 using funds provided by NJDEP. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Monmouth County



MONMOUTH

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1603 Dumont Terrace

1603 Dumont Terrace Wall Township Monmouth County

BLOCK: 261 **LOT:** 7

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Private Residence
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 0.25 Acre

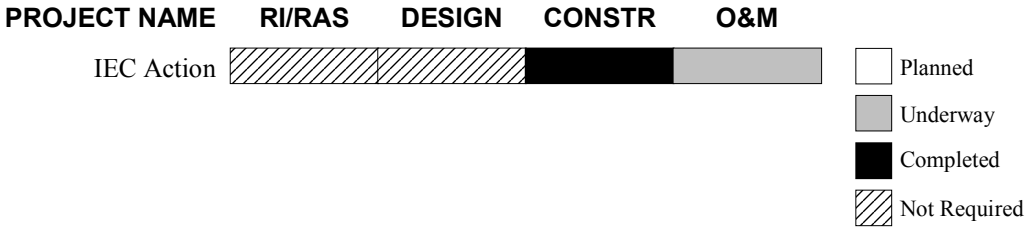
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Monitoring
Air	Volatile Organic Compounds	Monitoring

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$275,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is a residential property located approximately 1,500 feet from the Shark River. It was designated an Immediate Environmental Concern (IEC) in 1998 when the owner of the home reported strong gasoline-like odors in the basement and analysis of a water sample collected from the sump revealed high levels of the volatile organic compounds benzene and methyl tertiary-butyl ether (MTBE). NJDEP's Remedial Response Element installed a new sump pump in the basement along with a carbon treatment unit to remove the volatile organic compounds from the sump water before it is discharged to the storm sewer. A preliminary investigation subsequently revealed a localized, narrow plume of gasoline-contaminated ground water beneath the residence and identified a nearby service station as the likely source. The Remedial Response Element is periodically sampling the ground water to monitor the contaminant plume. The operator of the service station is conducting a Remedial Investigation to delineate the soil and ground water contamination at his property.



Arky Property

217 Route 520 — Marlboro Township — Monmouth County

BLOCK: 268 **LOT:** 79

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Automobile Junkyard
OPERATION STATUS: Active

PROPERTY SIZE: 22 Acres

SURROUNDING LAND USE: Residential

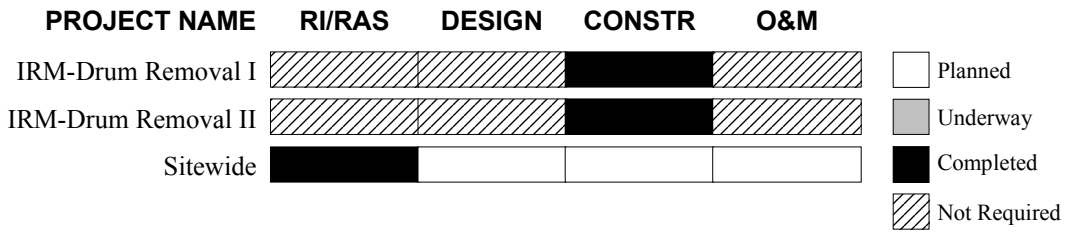
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Delineating
Soil	Volatile Organic Compounds Polychlorinated Biphenyls (PCBs)	Partially Removed/Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$30,000
1986 Bond Fund	$336,000
Corporate Business Tax	$968,000
General State Funds	$126,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The site encompasses 22 acres, seven of which are used as an automobile junkyard. A portion of the junkyard was once used as a dump for drums, sludges, liquid wastes, tires and other debris. In 1987, the Superior Court of New Jersey ordered NJDEP to conduct an investigation of the former disposal area to determine the scope of the contamination and cost to remediate the site. Between 1988 and 1991, NJDEP's Remedial Response Element implemented an Interim Remedial Measure (IRM) to remove 22 buried drums and conducted an initial investigation that confirmed the ground water at the site was contaminated. Sampling of nearby private potable wells that was performed as part of the initial investigation showed that they had not been affected. The Superior Court of New Jersey issued a judgment against the Responsible Party in 1996 for 100% of the past costs incurred by the State.

Between 1998 and 2001, NJDEP conducted a second IRM to excavate and dispose of 70 buried drums of chemical wastes and approximately 1,000 cubic yards of contaminated soil and completed a Remedial Investigation and Remedial Action Selection (RI/RAS) for the site. The RI/RAS revealed that the surface soil within a 1.25-acre area of the junkyard is contaminated with polychlorinated biphenyls (PCBs) and the ground water at the site is contaminated with volatile organic compounds, including trichloroethylene (TCE) and methyl tertiary-butyl ether (MTBE). However, NJDEP concluded that there are no potable wells or other receptors downgradient of the site and that the volatile organic contamination in the ground water may diminish naturally through biodegradation. Based on the findings of the RI/RAS, NJDEP issued a Decision Document in 2002 that required excavation and disposal of approximately 2,000 cubic yards of PCB-contaminated soil and long-term monitoring of the ground water to verify that natural attenuation is occurring. NJDEP has installed additional monitor wells near the site and long-term ground water monitoring is scheduled to start in mid-2003. The soil removal is also scheduled to start in mid-2003, following court approval.



Bog Creek Farm

Herbertsville Road Howell Township Monmouth County

BLOCK: 46 **LOT:** 29

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Illegal Dump
OPERATION STATUS: Inactive

PROPERTY SIZE: 12 Acres

SURROUNDING LAND USE: Agricultural/Recreational

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds Pesticides Metals	Partially Remediated/Delineating
Sediments	Volatile Organic Compounds Pesticides	Remediated

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$30,250,000
Spill Fund	$202,000
1981 Bond Fund	$257,000
1986 Bond Fund	$1,034,000
Hazardous Discharge Site Cleanup Fund	$1,743,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Bog Creek Farm is located in a rural area that is primarily agricultural and recreational in nature. Allaire State Park is located within 1/2 mile of the site. The north branch of Squankum Brook forms the northern border of the site. A pond and a wetlands area (also known as the "bog") are located near the northern border of the site. Between 1973 and 1974, solid and liquid chemical wastes and sludges were discharged to open areas and pits at a four-acre area of the property. Approximately 2,400 cubic yards of wastes, including organic solvents, paint residues, disinfectants and general debris were reportedly disposed of in this manner. Chemicals migrated via the ground water to the pond, bog and Squankum Brook. In 1983, USEPA added Bog Creek Farm to the National Priorities List of Superfund sites (NPL). The site owner subsequently pumped the liquid wastes from the pits, transported the wastes to an approved off-site landfill and backfilled the pits.

In 1983, USEPA began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination in the soil, ground water and sediments and evaluate cleanup alternatives. The initial findings of the RI/FS confirmed that the soil at the waste disposal pits and the wastewater and sediments in the pond and bog were contaminated. In 1985, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that required removal of the contaminated wastewater and sediments from the pond and bog, excavation of the buried wastes and contaminated soil, and incineration of the excavated materials. The ROD also required an evaluation of innovative technologies to address residual soil contamination and a monitoring program to assess the effectiveness of the remedial action . USEPA completed the soil and sediment remedial action in 1990. Approximately 15,000 cubic yards of contaminated soil and sediments were excavated, incinerated and backfilled on site during the cleanup.

USEPA also concluded based on the RI/FS that the ground water at the site was contaminated with volatile organic compounds and contaminated sediments were present in Squankum Brook. In 1989, after completing the RI/FS, USEPA issued a second ROD with NJDEP concurrence that required installation of a remediation system to extract and treat the contaminated ground water and excavation and incineration of the contaminated brook sediments. Incineration of the contaminated sediments was completed in 1990 during the soil remedial action. USEPA completed construction of the ground water remediation system in 1994 and is operating and maintaining the system.

In 2002, USEPA delineated areas of subsurface soil contamination that were not removed during the soil cleanup and completed an optimization study for the site. USEPA is evaluating options to remediate the subsurface soil contamination, which may accelerate the ground water remedial action.

Bog Creek Farm

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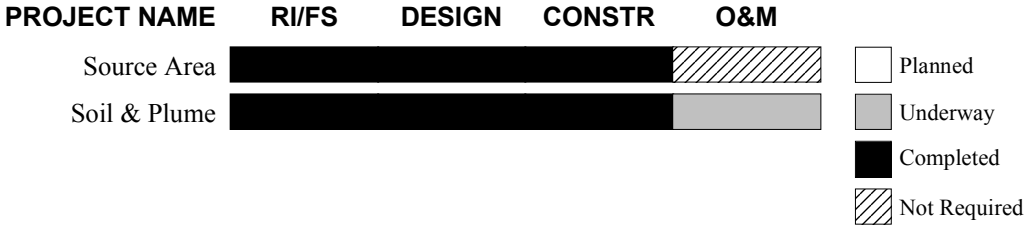


Burnt Fly Bog

Texas & Spring Valley Roads

Marlboro Township Monmouth County

BLOCK: 146 **LOT:** Upland Area: 47
Tar Patch: 7
N. Wetlands: 8
W. Wetlands: Various

CATEGORY: Superfund
State Lead

TYPE OF FACILITY: Waste Oil Storage
OPERATION STATUS: Inactive

PROPERTY SIZE: 1,700 Acres

SURROUNDING LAND USE: Undeveloped/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Surface Water (Wetlands)	Petroleum Hydrocarbons Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Lead	Delineated
Soil	Petroleum Hydrocarbons Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Lead	Partially Removed/Delineated
Sediment	Petroleum Hydrocarbons Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Lead	Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$57,421,000
Spill Fund	$2,219,000
1981 Bond Fund	$32,000
1986 Bond Fund	$884,000
General State Fund	$898,000
Corporate Business Tax	$2,489,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Burnt Fly Bog site is located on a ground water discharge area of the Englishtown aquifer, where ground water flows to the surface and drains into Deep Run, a nearby creek. During the 1950s and 1960s, waste oil was stored in several unlined lagoons encompassing a 10-acre area of the property. The lagoon area became known as the "Uplands." Waste oil from the Uplands eventually contaminated other areas, which became known as the "Northerly Wetlands," the "Tar Patch," and the "Westerly Wetlands." In addition, adjacent to the Westerly Wetlands is the "Downstream Area," where contaminated sediments that migrated from upgradient areas had settled in a stream bed. While the entire Burnt Fly Bog encompasses about 1,700 acres, the areas of contamination are limited to approximately 60 noncontiguous acres.

USEPA added Burnt Fly Bog to the National Priorities List of Superfund sites (NPL) in 1983. Later that year, NJDEP completed a Remedial Investigation and Feasibility Study (RI/FS) and issued a Record of Decision (ROD) with USEPA concurrence that required remediation of the Uplands. Between 1985 and 1989, NJDEP conducted several remedial actions in the Uplands including the removal of waste referred to as the "Asphalt Pile," removal of lagoon liquids, excavation and off-site disposal of approximately 85,000 tons of contaminated soil, stabilization of sludge and installation of a clay cap over the area. Remediation of the Uplands area was completed in 1992, after NJDEP removed about 700 tons of stockpiled PCB-contaminated soil and transported it off site for incineration.

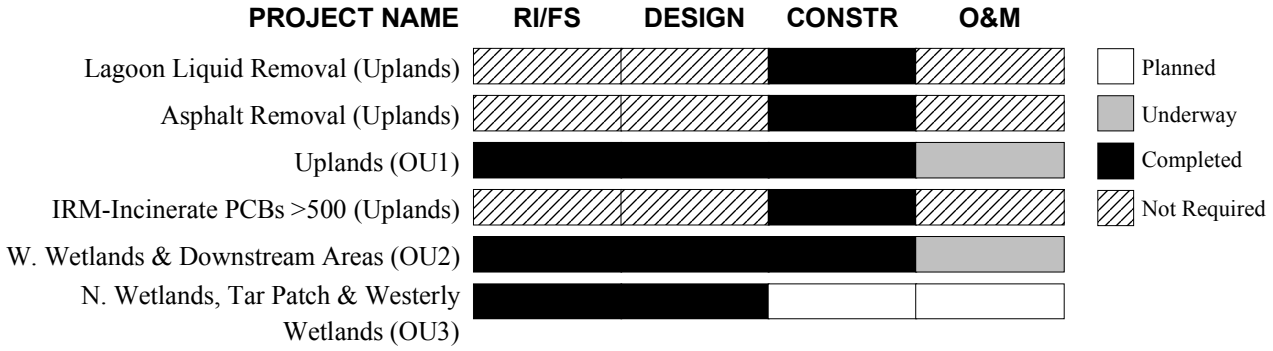
In 1988, NJDEP issued a ROD with USEPA concurrence for the Westerly Wetlands. The ROD required the evaluation of innovative technologies to address the contaminated soils at this area, with interim measures to contain the contamination while the evaluations were being conducted. The interim measures included installation of a fence around the Westerly Wetlands, removal of contaminated soil and sediments from the Downstream Area, and the installation of a sedimentation basin to prevent

Burnt Fly Bog

(Continued from previous page)

contaminated sediments from the Westerly Wetlands and other areas from migrating off site. NJDEP completed excavation and off-site disposal of approximately 12,000 tons of contaminated soil and sediments from the Downstream Area and construction of the sedimentation basin in 1996. NJDEP is maintaining the sedimentation basin and sampling the surface water and sediments in Burnt Fly Brook, which receives water from the basin, on a regular basis. Access to the Westerly Wetlands is being prevented by a security fence that was installed pursuant to the 1988 ROD.

In 1998, after completing a supplemental Feasibility Study for the site, USEPA signed a ROD with NJDEP concurrence for the Westerly Wetlands, Northerly Wetlands and the Tar Patch. The ROD required excavation and disposal of contaminated soil from the Northerly Wetlands and the Tar Patch followed by backfilling of these areas with clean materials and reestablishment of the wetlands, and no action for the Westerly Wetlands except for long-term biological sampling to monitor the impact of the contaminants on wildlife. NJDEP completed the Remedial Design for the cleanup action in 2002 and plans to begin excavating the contaminated soil in mid-2003.



Imperial Oil Company Incorporated/Champion Chemical

Orchard Place Marlboro Township Monmouth County

BLOCK: 122 **LOT:** 29

CATEGORY: Superfund
State Lead

TYPE OF FACILITY: Oil Blending & Repackaging
OPERATION STATUS: Active

PROPERTY SIZE: 15 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Petroleum Hydrocarbons Metals	Delineated
Sediments	Semi-Volatile Organic Compounds Petroleum Hydrocarbons Polychlorinated Biphenyls (PCBs) Metals	Delineated
Soil	Volatile Organic Compounds Petroleum Hydrocarbons Polychlorinated Biphenyls (PCBs) Metals	Partially Removed/Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$22,574,000
Spill Fund	$4,000
1981 Bond Fund	$14,000
1986 Bond Fund	$1,619,000
Corporate Business Tax	$58,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site has an extensive history of industrial operations dating to 1912. A chemical plant manufactured arsenic-containing compounds at the site in the early part of the century. In 1950, Champion Chemical Company acquired the property and converted it into an oil reclamation facility. Champion Chemical used filter clay and caustic solutions to remove heavy metals and PCBs from waste oil. Since 1969, the Imperial Oil Company has blended and repackaged unused oil at the site under a lease agreement with Champion Chemicals. USEPA added the Imperial Oil/Champion Chemicals property to the National Priorities List of Superfund sites (NPL) in 1983 after sampling showed that a large waste filter clay pile and the soil at the site were highly contaminated with petroleum hydrocarbons, heavy metals and PCBs.

In 1985, NJDEP began a Remedial Investigation (RI) to determine the nature and extent of the contamination at the site. The RI confirmed that both on-site and off-site soils had been contaminated by industrial operations at the facility. In addition, the RI revealed that the underlying Englishtown Aquifer was contaminated and a substantial volume of residual oil product was floating on the water table underneath the waste filter clay pile. Contamination was also found in the sediments of Birch Swamp Brook, which originates near the northeastern border of the site and drains into Lake Lefferts, approximately 1.25 miles away. Due to the size of the property and the complexity of the issues to be addressed, NJDEP has divided the investigation and remediation of the site into several Operable Units (OU): off-site soil that is contaminated with heavy metals and PCBs, and the contaminated sediments in Birch Swamp Brook (OU1); the contaminated ground water (OU2); and on-site soil contaminated with volatile organic compounds, petroleum hydrocarbons, heavy metals and PCBs (OU3). NJDEP performed separate Feasibility Studies (FS) for each OU to evaluate cleanup alternatives and selected the appropriate remedies as detailed below.

Off-site soil and sediments (OU1): In 1990, USEPA issued a Record of Decision (ROD) with NJDEP concurrence for OU1 that required installation of a fence around the off-site area to restrict access to contaminated soils, excavation and off-site disposal of contaminated soils and restoration of the affected wetlands. Soil sampling conducted in 1995 during the Remedial Design revealed an unanticipated sporadic pattern of arsenic contamination, some of which was detected at off-site residential properties.

Imperial Oil Company Incorporated/Champion Chemical

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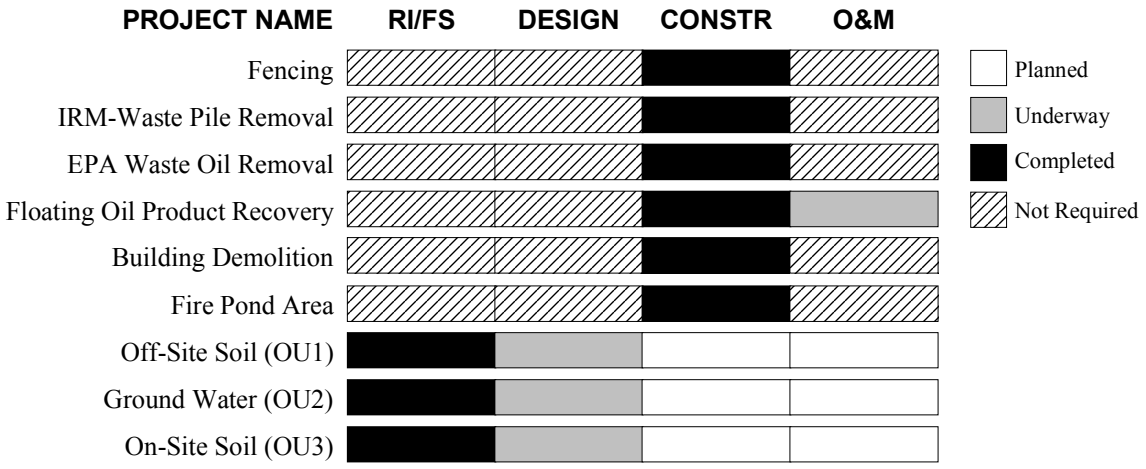
A study by the United States Geological Survey (USGS) concluded that there were multiple sources of the arsenic in the soil, including a minor contribution from natural background, historic application of arsenic-based pesticides and past industrial operations at the Imperial Oil site. The USGS study documented that the arsenic in the soil at four residential properties closest to the site was due to industrial operations. USEPA subsequently issued an Explanation of Significant Differences (ESD) to modify the OU1 ROD to include removal of the arsenic-contaminated soil from four residential properties. Remediation of the arsenic-contaminated soil at the four homes was completed in 1998.

In 1998, NJDEP conducted a Focused Feasibility Study (FFS) to determine the nature and extent of the sediment contamination in Birch Swamp Brook. NJDEP and USEPA concluded based on the findings of the FFS that sediments in the brook from the Fire Pond downstream to Texas Road were contaminated with elevated levels of PCBs and petroleum hydrocarbons. NJDEP also determined that soil at two residential properties located adjacent to Birch Swamp Brook and Texas Road was contaminated with arsenic at levels exceeding New Jersey cleanup criteria. USEPA and NJDEP issued a second ESD for the OU1 ROD in 2002 to add remediation of contaminated Birch Swamp Brook sediments and additional residential soil areas to the OU1 remedy. NJDEP completed the Remedial Design for all remedial components of OU1 in 2002 and cleanup activities are scheduled to begin in 2003.

Ground water (OU2): In 1992, after completing the FS for OU2, USEPA issued a ROD with NJDEP concurrence that required installation of an on-site remediation system to extract and treat the contaminated ground water. The Remedial Design for the ground water remediation system was significantly delayed due to initial site access problems and laboratory analytical interferences that made it difficult to accurately delineate the arsenic plume. After a comprehensive investigation to determine the extent of arsenic in the ground water, NJDEP modified the scope of the Remedial Design to address a smaller contaminant plume that is limited to the site boundary. The Remedial Design for the ground water remediation system is scheduled to be completed in 2003.

On-site soil (OU3): In 1999, after the FS for the on-site contaminated soil was completed, USEPA issued a ROD with NJDEP concurrence for OU3. The ROD required excavation and off-site disposal of an estimated 80,000 cubic yards of contaminated soil and waste pile material and the off-site disposal of 5,000 gallons of oil product recovered from the site. NJDEP is conducting the Remedial Design for OU3.

Interim Remedial Measures: In addition to the work performed by NJDEP to investigate and remediate the three identified Operable Units, USEPA has also implemented four Interim Remedial Measures (IRM) at the site: removal of the heavily contaminated waste filter clay pile in 1991, installation of a recovery system to extract the oil-like floating product layer from the ground water in 1992; demolition and disposal of a dilapidated four-story building in 2000; and removal of contaminated waste material in the wooded area adjacent to Fire Pond in 2002. The floating oil recovery system is currently operating under the supervision of NJDEP. To date, approximately 20,000 gallons of oil have been recovered by the floating oil recovery system and disposed of at an off-site facility.



Magnolia Avenue Ground Water Contamination

Various Locations Wall Township & Sea Girt & Manasquan Boroughs Monmouth County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tetrachloroethylene Trichloroethylene	Delineating
Surface Water	Tetrachloroethylene	Delineating
Soil	Tetrachloroethylene Trichloroethylene	Partially Removed/Investigating
Air	Tetrachloroethylene	Delineating/Venting

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$10,000
Corporate Business Tax	$450,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This case is also known as the White Swan Cleaners Ground Water Contamination site and the Wall Township Ground Water Contamination site. In 1997, the Monmouth County Health Department (MCHD) was notified that analytical testing by a resident had revealed several irrigation wells on Magnolia Avenue in Wall Township were contaminated with tetrachloroethylene (also known as perchloroethylene, or PCE). PCE is a volatile organic chemical that is commonly used as a dry cleaning solvent and degreasing agent. MCHD subsequently performed testing that confirmed irrigation wells in the Magnolia Avenue area were highly contaminated with PCE, as well as with lower levels of trichloroethylene (TCE).

In 1999, MCHD and NJDEP's Remedial Response Element conducted a joint study to delineate the PCE contamination in the ground water and evaluate the risk to Sea Girt's municipal supply wells. The ground water study included sampling additional private irrigation wells, testing the surface water at Wreck Pond in Sea Girt Borough and Spring Lake Heights and monthly sampling of Sea Girt's municipal supply wells. The study revealed that a plume of shallow ground water contamination extended eastward from Route 35 in Wall Township into Sea Girt Borough and a small part of northern Manasquan Borough, and that low levels of PCE were present in the surface water in a portion of Wreck Pond. The federal Agency for Toxic Substances and Disease Registry (ATSDR) reviewed the sampling results and concluded that the ground water was safe to use for irrigation. MCHD and NJDEP also determined that the water from Sea Girt's municipal supply wells met New Jersey Drinking Water Standards. However, as a precautionary measure, Sea Girt Borough installed a treatment system at its well field to remove potential volatile organic contamination. There are no private potable wells at risk of being contaminated due to the ground water plume.

In 2001, NJDEP completed an investigation that identified two defunct dry cleaning establishments and an active gas station in Wall Township as likely sources of the ground water contamination. Extensive soil and ground water contamination was subsequently confirmed at one of the locations, the former White Swan Dry Cleaners on Sea Girt Avenue (now a bank). Based on these findings, in late 2001 NJDEP decided to test the indoor air at residences and a commercial business near the bank for PCE vapors. The testing showed that the indoor air in several adjacent buildings had significantly elevated levels of PCE vapors and the indoor air at some of the more distant properties exhibited low levels of PCE vapors. NJDEP and USEPA installed ventilation systems at several buildings close to the bank to reduce the PCE vapors to acceptable levels. The bank excavated 820 cubic yards of contaminated soil from its property in December 2001 and backfilled the excavation with clean soil under the oversight of NJDEP's Responsible Party Remediation Element. The Potentially Responsible Parties for the two other suspected sources of the ground water contamination, the former Sun Cleaners and a service station on Route 35, have not conducted any investigative or cleanup work at their properties.

Magnolia Avenue Ground Water Contamination

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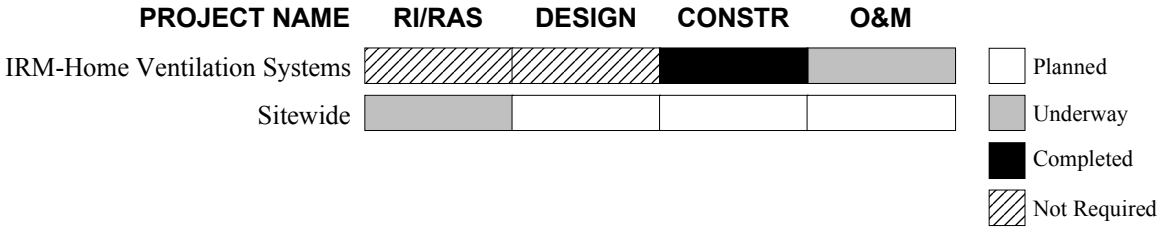
In early 2002, USEPA began addressing the Magnolia Avenue Ground Water Contamination site under its Removal Program. Under this program, USEPA is conducting additional indoor air testing at residential and commercial properties, installing subsurface vapor mitigation (ventilation) systems at properties with high levels of PCE vapors and investigating the two other possible sources of the PCE contamination. NJDEP is installing subsurface vapor mitigation systems in buildings where low levels of PCE vapors have been confirmed. As of December 2002, USEPA had tested the indoor air at more than 250 properties in Wall Township, Sea Girt Borough and Manasquan Borough and installed subsurface vapor mitigation systems at nine properties. NJDEP has installed subsurface vapor mitigation systems at 18 residences. Monitoring and maintenance of those systems is underway. NJDEP plans to conduct an investigation to delineate the shallow ground water contamination in 2003. This information will be used to plan future indoor air testing. USEPA has proposed adding this site to the National Priorities List of Superfund sites (NPL).



Monitor Devices Incorporated

Route 34 (Airport Access Road) Wall Township Monmouth County

BLOCK: 799 **LOT:** 13

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Electronics Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 2.0 Acres

SURROUNDING LAND USE: Commercial/Industrial

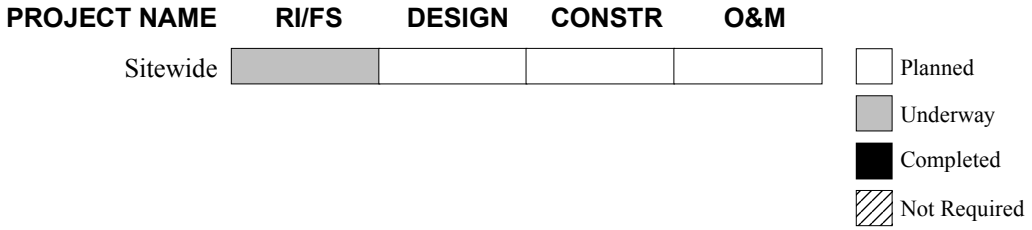
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Further Delineation Required
Soil	Volatile Organic Compounds Metals	Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$1,200,000
General State Fund	$396,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Monitor Devices operated a metals plating and circuit board manufacturing facility at this site between 1977 and 1981. The property is currently occupied by a furniture business. In 1980, during an inspection by the Monmouth County Health Department, two discharge pipes were noted at the rear of the main building. Sampling conducted by NJDEP revealed that the soil and ground water near the pipes were contaminated with solvents, acids and heavy metals. In addition, drums and other containers were stored outdoors and were in poor condition. The high permeability of the soil and the shallow ground water table created a potentially easy route for contaminants to enter the underlying aquifers. NJDEP ordered Monitor Devices to investigate the contamination at the site and take appropriate remedial actions, but the company did not comply. Monitor Devices ceased operations in 1981 and subsequently declared bankruptcy.

In 1986, USEPA added the Monitor Devices facility to the National Priorities List of Superfund sites (NPL) and NJDEP began a Remedial Investigation and Feasibility Study (RI/FS) to determine the nature and extent of the contamination and identify cleanup alternatives. NJDEP completed Phase I of the RI in 1989. USEPA is currently conducting a Phase II RI to further delineate the extent of the ground water contamination, as well as a Focused Feasibility Study (FFS) for an interim soil remedial action. USEPA has concluded that the contamination at the site does not present an immediate risk to human health or the environment.



Waldick Aerospace Devices Incorporated

2121 Route 35 Wall Township Monmouth County

BLOCK: 733 **LOT:** 5

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Machinery Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.72 Acres

SURROUNDING LAND USE: Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Delineated
Soil	Volatile Organic Compounds Petroleum Hydrocarbons Acids Metals	Treated/Removed

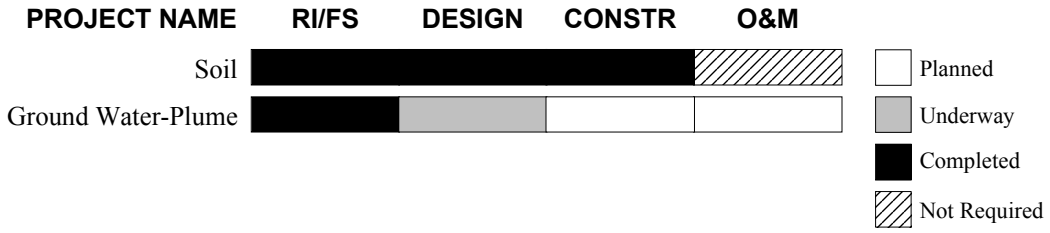
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$14,275,000
1981 Bond Fund	$600,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Waldick Aerospace Devices manufactured mechanical parts for spacecrafts at this site from 1979 to 1985. During the first three years of operation, contaminated wastewater and waste oil were discharged directly onto the ground at the facility. Sampling conducted by local officials and NJDEP between 1982 and 1984 confirmed that the ground water was contaminated with metals and volatile organic compounds, and the contamination had migrated off site. These findings prompted USEPA to add Waldick Aerospace Devices to the National Priorities List of Superfund sites (NPL) in 1986. The company has filed for bankruptcy.

In 1987, USEPA completed an initial Remedial Investigation and Feasibility Study (RI/FS) for the site and signed a Record of Decision (ROD) with NJDEP concurrence that required in-situ treatment of the organic-contaminated soil and excavation and off-site disposal of one area of metals-contaminated soil. The ROD also required a supplementary RI/FS to evaluate the extent of the ground water contamination. However, the selected soil remedy did not conform to federal regulations for disposal of hazardous materials that were promulgated after the ROD was signed. In addition, although USEPA concluded based on the RI/FS that the soil contaminated with volatile organic compounds and petroleum hydrocarbons was divided into two discrete areas according to the presence or absence of metals, sampling performed during the Remedial Design indicated that both areas were contaminated with metals. Based on this finding, USEPA modified the ROD in 1991 to require on-site thermal treatment to remove organic compounds from the soil and off-site treatment and disposal of the metals-contaminated soil. USEPA demolished two of the buildings and completed the soil remedial action in 1993.

In 1991, after completing the supplementary RI/FS, USEPA signed a second ROD with NJDEP concurrence that required installation of a ground water remediation system to extract and treat the off-site contaminated ground water. However, sampling conducted during the Remedial Design showed significantly reduced levels of contaminants in the ground water. USEPA is therefore performing an additional phase of ground water monitoring to evaluate contaminant trends. If the additional monitoring indicates the contaminant plume is dissipating, USEPA may revise the ground water remedy specified in the 1991 ROD.



William Hurley Industrial Complex

Lakewood-Farmingdale Road

Howell Township Monmouth County

BLOCK:	**LOT:**
49	30-33, 38, 44, 45, 46-50
221	4
222	15 & 16
223	2

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Electronics Manufacturing
OPERATION STATUS: Active

PROPERTY SIZE: 212 Acres

SURROUNDING LAND USE: Residential/Industrial/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Delineating
Potable Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds Metals	Delineating
Surface Water	Volatile Organic Compounds Metals	Investigating
Sediments	Volatile Organic Compounds Metals	Investigating
Building Interiors	Volatile Organic Compounds Metals	Investigating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$80,000
1981 Bond Fund	$6,000
Responsible Party Settlement Fund	$64,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is also known as Frequency Engineering Laboratories Inc. It occupies a portion of the William Hurley Industrial Complex on Central Avenue, a small road that intersects with Lakewood -Farmingdale Road. Marsh Bog Brook flows northwest of the complex. Frequency Engineering has manufactured electronic military hardware at the complex since 1964. For approximately 25 years, until 1989, the company discharged rinse waters from its metals plating operations into a drainage ditch behind the facility. Sampling conducted by Frequency Engineering in 1996 indicated that discharges at the site had contaminated the soil and ground water with volatile organic compounds and metals. The following year, Frequency Engineering entered into a Memorandum of Agreement (MOA) in which it agreed to investigate and remediate the contamination under the supervision of NJDEP's Responsible Party Remediation Element.

In 1999, trichloroethylene (TCE), a chlorinated volatile organic compound, was discovered in a private potable well at a downgradient commercial business and Frequency Engineering was identified as the most likely source of the contamination. A Point-of-Entry Treatment (POET) system was installed on the well with funds provided by NJDEP to supply potable water for the occupants. NJDEP's Remedial Response Element and the Monmouth County Health Department subsequently sampled additional nearby private potable wells but did not find any others that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards.

In 2000, Frequency Engineering declared bankruptcy. NJDEP terminated the MOA the following year after the company indicated it would no longer implement the work specified in the agreement. NJDEP's Remedial Response Element began a Remedial Investigation/Remedial Action Selection (RI/RAS) in 2002 to delineate the contamination at the site and evaluate remedial alternatives. The RI/RAS will include sampling of the soil, ground water, surface water, sediments, building interiors and septic systems. The work is being funded in part with $280,000 that NJDEP received from the bankruptcy settlement.

William Hurley Industrial Complex

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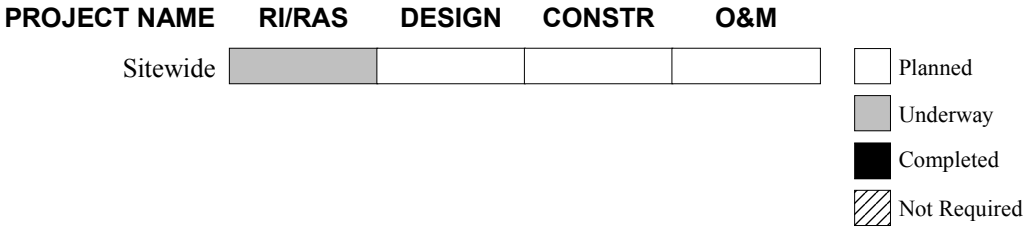


Zschiegner Refining Company

1442 Maxim Southard Road

Howell Township **Monmouth County**

BLOCK: 36 **LOT:** 23

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Metals Recovery
OPERATION STATUS: Inactive

PROPERTY SIZE: 6.1 Acres

SURROUNDING LAND USE: Residential/Rural

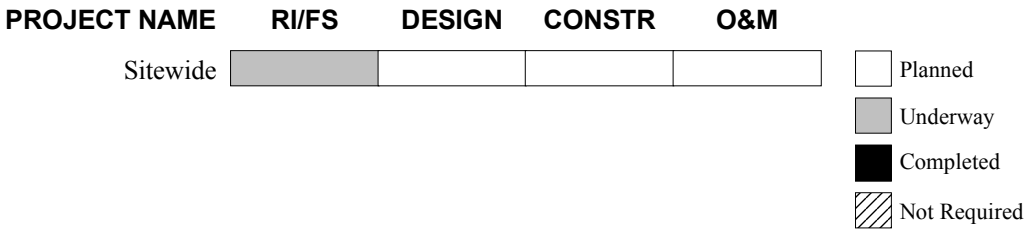
MEDIA AFFECTED	CONTAMINANTS	STATUS
Soil	Metals	Delineating
Surface Water	Metals	Delineating
Sediments	Metals	Delineating
Ground Water	Metals	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$1,640,000
Spill Fund	$6,000

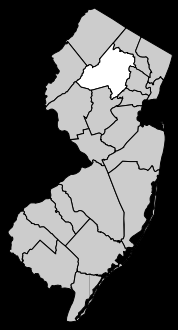
SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Zschiegner Refining Company operated from 1964 to 1992 as a precious metals recovery facility. Operations included the chemical stripping of precious metals from watch bands, film and electrical components. Haystack Brook, its associated wetlands and a tributary to Haystack Brook flow through the property. In 1992, the facility was raided by the Federal Drug Enforcement Agency for illegally manufacturing methamphetamine. Authorities discovered approximately 3,000 different chemicals were being improperly stored at the site, including acids, caustics and potentially explosive and reactive compounds.

In 1992, USEPA began a preliminary investigation to assess environmental conditions at the site. USEPA also implemented an interim removal action, repackaging and disposing of approximately 2,000 gallons of acidic solutions, 1,600 gallons of basic solutions and 1,400 small containers of hazardous substances between 1992 and 1993. Sampling performed during the preliminary investigation indicated that the soil, surface water and sediments at the property were contaminated with metals. Based on these findings, USEPA added the Zschiegner property to the National Priorities List of Superfund sites (NPL) in 1998. Later that year, USEPA began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination in the soil, ground water, surface water and sediments and evaluate cleanup alternatives. Sampling of nearby private potable wells that was conducted in 1998 did not reveal any contaminants at levels exceeding New Jersey Drinking Water Standards. USEPA will use the findings of the RI/FS to select the final remedial actions for the site, which will be outlined in a Record of Decision (ROD).



Morris County



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Adron Incorporated

94 Fanny Road Parsippany-Troy Hills Township Morris County

BLOCK: 448 **LOT:** 5

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Food & Fragrance Manufacturing
OPERATION STATUS: Active

PROPERTY SIZE: 12 Acres

SURROUNDING LAND USE: Industrial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Delineating
Soil	Petroleum Hydrocarbons	Delineating
Surface Water	Volatile Organic Compounds Petroleum Hydrocarbons Metals	Investigating
Sediments	Volatile Organic Compounds Petroleum Hydrocarbons Metals	Investigating

FUNDING SOURCES	AMOUNT AUTHORIZED
1981 Bond Fund	$40,000
Corporate Business Tax	$40,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Adron Incorporated manufactures products for food and fragrance industries. Operations began at the site in 1942 under the name Norda Inc. In 1985 the facility sold the Norda trademark, became an independent entity and changed its name to Adron Inc. It is located within 1,000 feet of several other industries and Lake Intervale. NJDEP began investigating the site in the 1980s, after volatile organic contaminants were discovered in the sediments of Lake Intervale. Sampling of the ground water revealed the presence of several chlorinated and non-chlorinated volatile organic compounds, including benzene, chlorobenzene, tetrachloroethylene, and xylenes, as well as arsenic. In addition, petroleum hydrocarbons were found in soil samples collected in 1998 after the removal of two underground storage tanks. Approximately 20 underground tanks for storage of solvents and fuel oil remain at the site, as well as above ground tanks.

In 2001, NJDEP's Responsible Party Remediation Element issued a directive to the Responsible Parties for Adron Inc. that required them to enter into an Administrative Consent Order with NJDEP and perform remedial work, but they did not comply. NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) at the site in 2002 to delineate the contamination and evaluate remedial alternatives. The RI will include sampling of the soil and ground water as well as the surface water and sediments in a stream that flows by the site. The Adron site has been designated an Immediate Environmental Concern (IEC) due to the potential threat to Lake Intervale.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Asbestos Dump

Division Avenue
257 New Vernon Road
651 White Bridge Road Long Hill Township Morris County
Dietzman Tract/Great Swamp National Wildlife Refuge
Harding Township Morris County

BLOCK: Various **LOT:** Various

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Asbestos Tile Manufacturing/ Illegal Dump

OPERATION STATUS: Inactive

PROPERTY SIZE: 157 Acres (total)

SURROUNDING LAND USE: Commercial/Residential/Agricultural/ Undeveloped

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Asbestos Volatile Organic Compounds	Delineated
Surface Water	Asbestos Volatile Organic Compounds	Delineated
Soil	Asbestos Volatile Organic Compounds	Stabilized/Capped

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$17,531,000
Spill Fund	$498,000
1986 Bond Fund	$634,000
Corporate Business Tax	$845,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Asbestos Dump consists of four separate sites, all of which are associated with asbestos shingle production and waste disposal. The primary site, designated Operable Unit 1 (OU1), is located adjacent to the Passaic River on Division Avenue in the Millington section of Long Hill Township. It consists of a 90,000-cubic yard mound approximately 20 to 30 feet deep, which was the result of dumping of asbestos-laden wastes by several asbestos processing companies between 1922 and 1975. Chemical wastes were also allegedly disposed of at this site during this time. The soil cover of the mound eroded, leaving areas of the asbestos-filled slope exposed. The three satellite sites, located about four miles to the northeast, include two private residences on New Vernon Road and White Bridge Road in Long Hill Township (OU2) and the Dietzman Tract in the Great Swamp National Wildlife Refuge area (OU3). Asbestos wastes were landfilled at the New Vernon Road and White Bridge Road properties during the 1960s and 1970s, and asbestos was dumped at the Dietzman Tract for approximately 40 years.

USEPA placed the Asbestos Dump on the National Priorities List of Superfund sites in 1983. In 1985, National Gypsum Company, which operated the Millington site from 1953 to 1975 and was determined to be responsible for the dumping at the satellite sites, signed an Administrative Order with USEPA in which it agreed to conduct a Remedial Investigation and Feasibility Study (RI/FS). In 1988, after National Gypsum completed the RI/FS, USEPA issued a Record of Decision (ROD) with NJDEP concurrence for OU1. The ROD required installation of a soil cover, stabilization of the side slopes, implementation of erosion and sediment control measures and installation of a security fence; however, National Gypsum declared bankruptcy before it could implement the specified actions. USEPA completed the OU1 remedial action using public funds in 2000 and NJDEP is conducting maintenance activities at the site to ensure the effectiveness of the soil cover and other environmental controls.

In 1990, USEPA performed an Interim Remedial Measure (IRM) to immobilize the asbestos contamination at the New Vernon Road and White Bridge Road residential sites (OU2). The IRM included capping driveways with asphalt, covering other areas with geotextile fabric, decontaminating the residences, removing visible contamination for off-site disposal and erecting signs and fences. The following year, USEPA issued a ROD with NJDEP concurrence for permanent remediation of OU2 that required

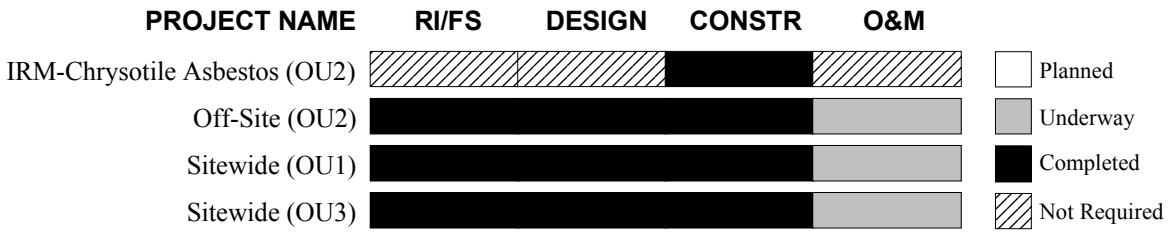
Asbestos Dump

(Continued from previous page)

solidification/stabilization of approximately 37,000 cubic yards of asbestos-contaminated soil at the two properties into an insoluble matrix. USEPA completed the solidification/stabilization of the asbestos-contaminated soil at both of the residences in 1998. NJDEP is conducting maintenance activities at the residences to ensure the effectiveness of the OU2 remedy.

In 1996, USEPA began an RI/FS at the Dietzman Tract (OU3) to determine the extent of the contamination and evaluate cleanup alternatives. The Department of the Interior (DOI) removed approximately 200 drum carcasses and 60 drums of hazardous wastes from the site in 1997. In 1998, after completing the RI/FS, USEPA signed a ROD for OU3 that required the removal of additional drums and the consolidation and containment of the asbestos waste under a biotic cap. Construction of the OU3 remedy was completed in 1999. DOI is conducting maintenance activities at the Dietzman Tract to ensure the OU3 remedy is effective.

USEPA deleted the White Bridge Road portion of the Asbestos Dump Superfund site from the NPL in February 2002. The remaining portions of the site (the Millington landfill, the residential property on New Vernon Road and the Dietzman Tract) remain on the NPL.



B&V Tailoring and Cleaning

82 US Route 46 East Mountain Lakes Borough Morris County

BLOCK: 4 **LOT:** 21.03

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Dry Cleaners
OPERATION STATUS: Active

PROPERTY SIZE: 0.5 Acre

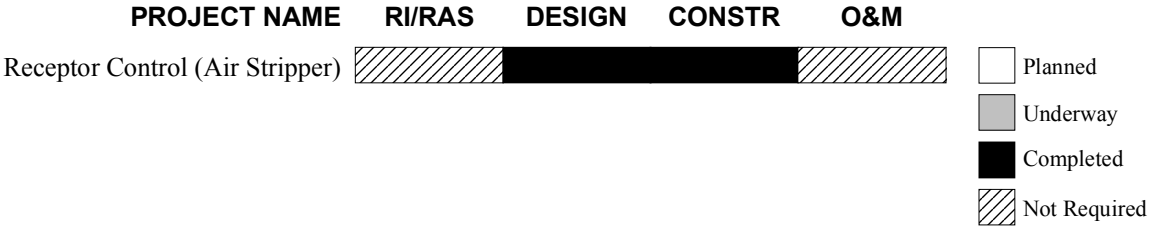
SURROUNDING LAND USE: Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tetrachloroethylene	Confirmed
Potable Water	Tetrachloroethylene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$560,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

B&V Tailoring and Cleaning is a dry cleaning establishment located approximately 100 feet from Mountain Lake Borough's Municipal Well #5. In 1992, low levels of tetrachloroethylene (also known as perchloroethylene, or PCE), a dry cleaning solvent, were sporadically detected in water samples obtained from the municipal supply well. By 1997, PCE was consistently detected when the municipal supply well was tested. Samples collected from the former septic system at B&V Tailoring were found to contain PCE, indicating that it may be the source of the contamination. Mountain Lakes Borough installed an air stripper on the contaminated supply well in 1999 using funds provided by NJDEP and is operating and maintaining the system. Additional investigative work is planned for this site.



Black Brook Treatment Plant

Columbia Turnpike Hanover Township Morris County

BLOCK: 6401 **LOT:** 2M, 3

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 2 Acres

SURROUNDING LAND USE: Commercial/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$2,100,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Southeast Morris County Municipal Utilities Authority (SMCMUA) operates two municipal wells, referred to as Black Brook 1 and Black Brook 2, and a metals removal/chlorination plant at its Black Brook water production facility in Hanover Township. Volatile organic compounds have been detected in Black Brook 1, occasionally at concentrations exceeding New Jersey Drinking Water Standards, since the early 1990s; however, the combined flow from both wells consistently met Drinking Water Standards. The primary contaminants are dichloroethane (DCA) and trichloroethylene (TCE). An industrial facility in neighboring East Hanover Township has been identified by NJDEP as a Potentially Responsible Party for the contamination at the well field.

In 1997, NJDEP's Bureau of Safe Drinking Water advised SMCMUA to install a treatment system at the well field to remove the volatile organic compounds from Black Brook 1. NJDEP's Remedial Response Element evaluated treatment options and in 1998 recommended installation of an air stripper. SMCMUA completed installation of the air stripper in 2001 using funds provided by NJDEP and is operating and maintaining the system.

Chemical Components Incorporated

20 Deforest Avenue East Hanover Township Morris County

BLOCK: 42 **LOT:** 50

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.5 Acres

SURROUNDING LAND USE: Commercial/Industrial

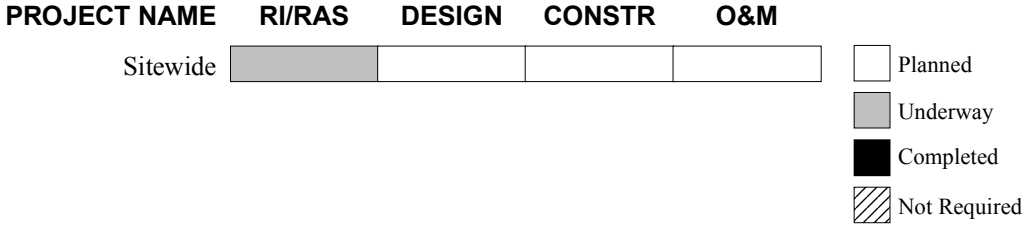
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Soil	Polychlorinated Biphenyls	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$230,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Chemical Components Inc. manufactured, blended and stored specialty chemicals at this site between 1964 and 2001. It has been identified by NJDEP as a Potentially Responsible Party for the East Hanover Township Ground Water Contamination site, where contaminated private potable wells were discovered during the 1980s and 1990s. Areas of environmental concern include a waste water lagoon that was filled with soil in 1974, waste water injection pits, a septic system, a suspected drum burial area and a drum storage area. The company excavated several drums containing organic wastes and more than two dozen empty drums from the former waste water lagoon area in 1984.

Over the years, Chemical Components Inc. has conducted some soil and ground water sampling at the facility in response to NJDEP directives. The sampling confirmed that the ground water is contaminated with volatile organic compounds and soil at the former waste water lagoon, injection pits and drum storage area is contaminated with polychlorinated biphenyls (PCBs) at levels exceeding New Jersey cleanup criteria. NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) in 2002 to delineate the contamination at the site and evaluate cleanup alternatives. The RI field work is scheduled to begin in 2003.



Chester Borough Ground Water Contamination

Route 206 & Route 24 Chester Borough Morris County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead., IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

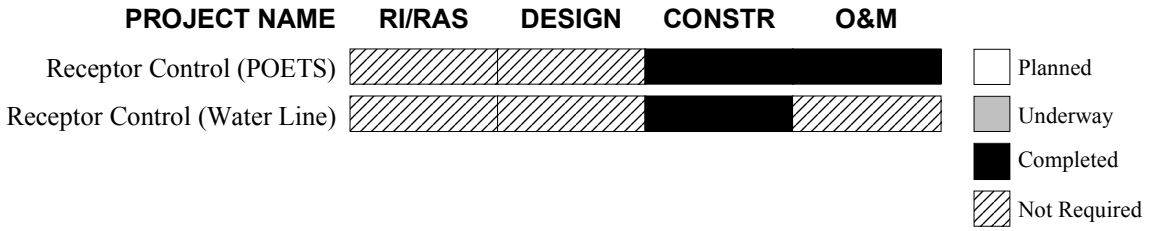
SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$202,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the local health department in 1991 identified nine private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were trichloroethylene (TCE), dichloroethylene (DCE) and benzene. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element subsequently delineated a Ground Water Impact Area (GWIA) that encompassed 11 properties near Route 206 and Route 24 (Main Street) in Chester Borough. In 2000, a private water company extended public water lines to the properties in the GWIA. NJDEP provided funds to connect the buildings in the GWIA to the water lines and seal the private wells. NJDEP is periodically sampling private potable wells outside the GWIA to monitor ground water quality. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Cleaveland Industrial Center

20 Parker Road Washington Township Morris County

BLOCK: 60 **LOT:** 14

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Industrial Park
OPERATION STATUS: Active

PROPERTY SIZE: 17.6 Acres

SURROUNDING LAND USE: Agricultural/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds Metals	Delineating

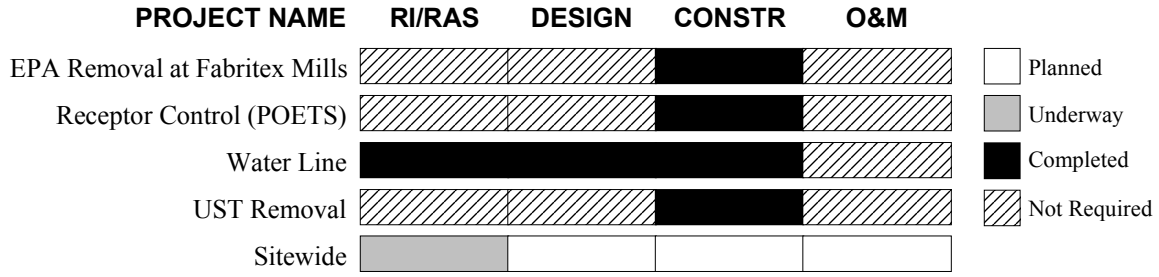
FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$800,000
1986 Bond Fund	$121,000
Corporate Business Tax	$1,989,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Cleaveland Industrial Center has a history of industrial operations dating back more than five decades. The U.S. government manufactured explosives at the site during the 1940s. The property was sold to a private company in 1947 and it has operated as an industrial park since the 1950s. A tenant that manufactured sodium and iodine salts reportedly discharged its process waste water directly onto the ground behind the complex. Another tenant, Lanterman Machine and Tools, Inc., allegedly discharged hazardous wastes into septic systems. Fabritex Mills abandoned approximately 1,000 containers of chemicals, including flammable solvents, caustics, dry chemicals and laboratory reagents, when it ceased operations at the site in 1986.

During the 1980s, sampling of private potable wells in the area revealed that 17 were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. A preliminary investigation by NJDEP indicated that contaminated ground water was migrating from the site. USEPA implemented a removal action in 1991 to dispose of the chemicals left at the buildings formerly occupied by Fabritex Mills. Between 1993 and 1997, the Washington Township Municipal Utilities Authority used funds provided by NJDEP to extend public water lines to the residences with contaminated wells and approximately 170 additional properties with wells that were at risk of becoming contaminated.

In 1999, NJDEP's Remedial Response Element began a Remedial Investigation and a Remedial Action Selection (RI/RAS) to delineate the contamination at the industrial park and off-site areas and evaluate cleanup alternatives. NJDEP implemented an Interim Remedial Measure (IRM) the following year to remove all of the abandoned above ground and underground storage tanks. NJDEP is sampling soil and installing on-site and off-site monitor wells to delineate the contamination.



Combe Fill North Landfill

Gold Mine Road — Mount Olive Township — Morris County

BLOCK: 4100 **LOT:** 10

CATEGORY: Superfund
State Lead

TYPE OF FACILITY: Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 102 Acres

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Monitoring
Surface Water	Volatile Organic Compounds	Contained
Soil	Volatile Organic Compounds Metals	Capped
Air	Methane	Venting

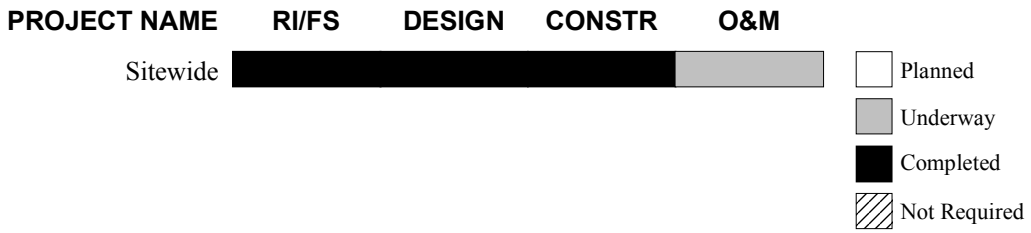
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$15,439,000
Spill Fund	$312,000
General State Fund	$1,988,000
1986 Bond Fund	$165,000
Corporate Business Tax	$357,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Combe Fill North Landfill occupies 65 acres of a 102-acre property. The site was operated as a sanitary municipal landfill from 1966 to 1978, accepting municipal and industrial waste and small amounts of dry sewage sludge. Combe Fill Corporation (CFC) purchased the landfill in 1978. The following year ground water beneath the site was determined to be contaminated with volatile organic compounds. The landfill was not properly closed when operations ceased in 1981 due the bankruptcy of CFC. NJDEP subsequently cited CFC for several violations, including improper landfill cover that resulted in windblown debris and inadequate leachate control. USEPA added Combe Fill North Landfill to the National Priorities List of Superfund sites (NPL) in 1983.

Between 1984 and 1986, NJDEP conducted a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination in the ground water, surface water and soil at the site and evaluate cleanup alternatives. The RI/FS revealed that although low levels of contamination were present in the ground water and surface water, the contamination did not pose an immediate threat to the surrounding residential wells. USEPA issued a Record of Decision (ROD) with NJDEP concurrence in 1986 that required installation of a clay cap and closure of the site pursuant to sanitary landfill regulations, installation of a landfill gas (methane) venting system, fencing of the perimeter of the site and long-term monitoring of the ground water. NJDEP completed construction of the remedies specified in the ROD in 1991. As part of the operation and maintenance (O&M) of the landfill, NJDEP installed surface water controls on the cap in 2000 to alleviate drainage problems.

In 2001, a group of Potentially Responsible Parties entered into an Administrative Consent Order with NJDEP in which they agreed to fund O&M activities at the landfill. As of December 2002, the Potentially Responsible Parties had provided NJDEP with $196,000 for ground water monitoring, landfill gas monitoring, cap maintenance and other O&M activities.



Combe Fill South Landfill

Parker Road Chester & Washington Townships Morris County

BLOCK: 17 **LOT:** 7
37 15, 16 & 16.01

CATEGORY: Superfund
State Lead

TYPE OF FACILITY: Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 102 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals Pesticides	Treating/Further Delineation Required
Potable Water	Volatile Organic Compounds	Treating
Surface Water	Volatile Organic Compounds	Delineated
Soil	Volatile Organic Compounds	Capped

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$55,344,000
Spill Fund	$257,000
1981 Bond Fund	$5,765,000
1986 Bond Fund	$846,000
Corporate Business Tax	$3,367,000
General State Funds	$189,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Combe Fill South Landfill operated as a municipal landfill from the 1940s until 1981. During this time, the landfill was licensed to accept municipal wastes, sewage sludge, chemicals and waste oils. After the landfill closed, contamination was detected in leachate seeping from the sides of the landfill, in shallow and deep on-site ground water monitor wells and in nearby Trout Brook. In addition, several nearby private potable wells were determined to be contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents.

USEPA added Combe Fill South Landfill to the National Priorities List of Superfund sites (NPL) in 1983. NJDEP subsequently conducted a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination at the site and evaluate remedial alternatives. In 1986, after the RI/FS was completed, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that required capping of the landfill, venting of the landfill gases, installation of an on-site remediation system to extract and treat the contaminated ground water in the shallow aquifer, and fencing of the site. The ROD also required installation of a public water line to replace the contaminated private wells and those wells at risk of becoming contaminated in the future, as wells as a supplemental RI/FS to evaluate the contamination in the deep ground water aquifer after initial treatment of the shallow aquifer.

NJDEP's Remedial Response Element completed the landfill cap and the ground water remediation system in 1996. Installation of the water line was not implemented, however, because ground water monitoring conducted after the ROD was issued showed little impact to nearby private potable wells was likely. NJDEP plans to amend the ROD to remove the water line requirement. NJDEP is maintaining the POET systems and periodically sampling certain private wells in the area to monitor potable water quality. NJDEP began the RI/FS to delineate the contamination in the deeper aquifer in 2001, but these activities are currently on hold while NJDEP negotiates an agreement with the Potentially Responsible Parties that would obligate them to conduct the work. Operation and maintenance (O&M) of the landfill cap and ground water remediation system are ongoing.

Combe Fill South Landfill

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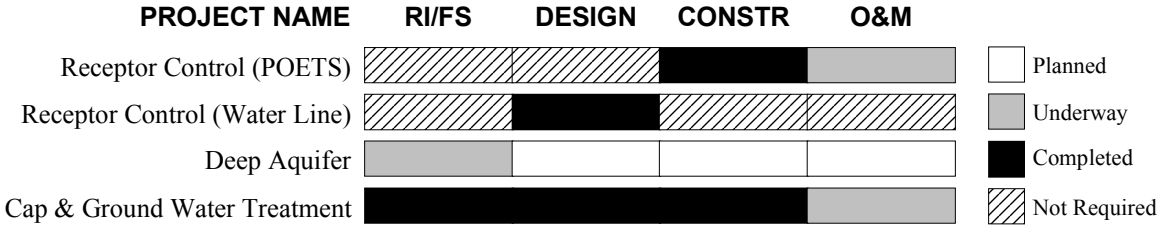


Cross Roads Ground Water Contamination

484 to 555 Main Street Chester Borough Morris County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

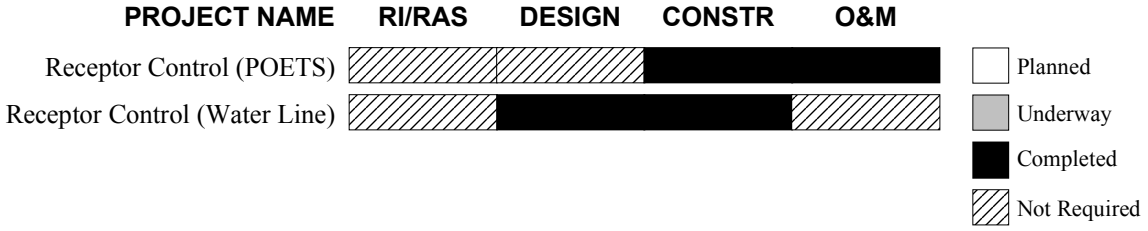
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$401,000
1986 Bond Fund	$13,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the local health department in 1994 identified six private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminant was trichloroethylene (TCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element subsequently delineated a Ground Water Impact Area (GWIA) that encompassed 24 lots, including residential properties and commercial buildings. NJDEP also conducted an investigation to determine the source of the ground water contamination, but the results of the study were inconclusive. In 2000, a private water company purchased the Borough's municipal water system and extended public water lines to homes in the GWIA. NJDEP provided funds to connect the homes to the water lines and seal the private wells. NJDEP is periodically sampling private potable wells outside the GWIA to monitor ground water quality.



Dogwood Drive Ground Water Contamination

3-9 Dogwood Drive & 37- 40 Tingley Road

Mendham Township Morris County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

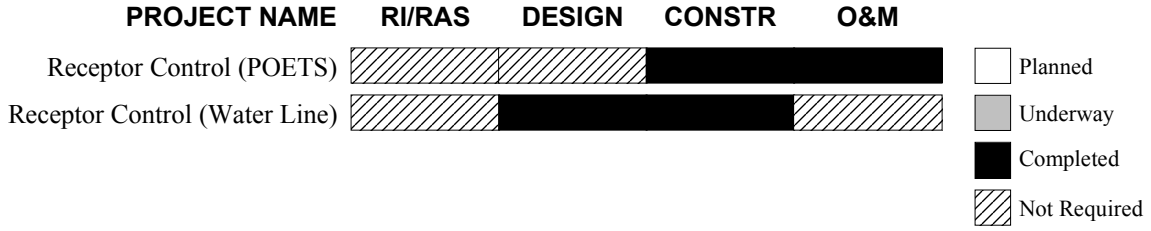
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$105,000
1986 Bond Fund	$28,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site consists of eight residences with private potable wells that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). The contamination was first detected by property owners in 1993. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element subsequently conducted a water supply alternatives analysis that concluded the most cost-effective long-term remedy was extension of the public water lines to the nine properties in the Ground Water Impact Area (GWIA) for the site. NJDEP also conducted an investigation to determine the source of the contamination, but the results of the study were inconclusive. In 1996, the Township of Mendham extended water lines to the properties in the GWIA using funds provided by NJDEP. NJDEP is periodically sampling private potable wells outside the GWIA to monitor ground water quality.



Dover Municipal Well 4

Rutan Drive (Formerly Hooey Street) Dover Town Morris County

BLOCK: 2314 **LOT:** 15

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 0.5 Acres

SURROUNDING LAND USE: Residential/Commercial

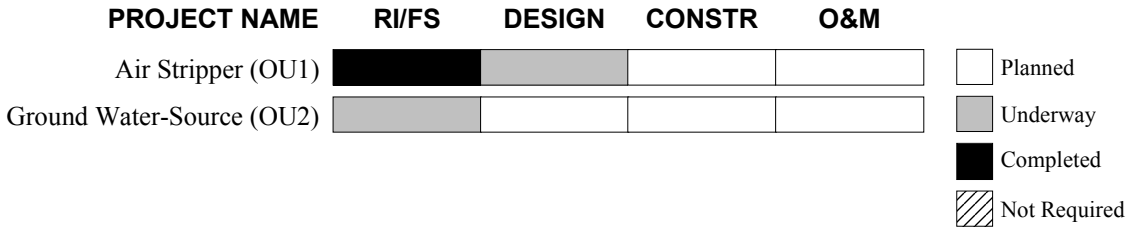
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$4,000,000
Spill Fund	$74,000
General State Fund	$257,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Municipal Well 4 was one of Dover's primary water supply wells. The well was taken out of service in 1980 due to the presence of volatile organic compounds at levels exceeding New Jersey Drinking Water Standards and was replaced by Standby Well 3. The primary contaminants are dichloroethylene (DCE), trichloroethane (TCA) and tetrachloroethylene (also known as perchloroethylene, or PCE). USEPA added Dover Well 4 to the National Priorities List of Superfund sites (NPL) in 1983.

In 1986, NJDEP began an initial Remedial Investigation and Feasibility Study (RI/FS) to determine the nature and extent of the contamination at the site and evaluate cleanup alternatives. In 1992, after completing the RI/FS, NJDEP signed a Record of Decision (ROD) with USEPA concurrence that established two Operable Units (OU) for the site. Under OU1, USEPA will install a ground water treatment system at the well field to remove volatile organic contaminants from Well 4. Under OU2, USEPA is conducting a second RI/FS to further delineate the ground water contamination, identify possible sources and evaluate remedial alternatives to address the sources. The Remedial Design for OU1 and the RI/FS for OU2 are underway and scheduled to be completed in 2003.



East Hanover Township Regional Ground Water Contamination

Various Locations East Hanover Township Morris County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 10 square miles

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$75,000
1981 Bond Fund	$8,000
1986 Bond Fund	$1,100,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Regional ground water contamination was first discovered in East Hanover Township in the early 1980s, when volatile organic compounds were detected in a water sample collected from a municipal supply well. A remediation system was installed at the well field to treat the water from the supply well, but approximately 400 private potable wells at residences and commercial properties in the area remained at risk of contamination. Between 1986 and 1988, NJDEP conducted a study that identified ground water contamination in various parts of the Township and identified several industrial sites as possible sources of the contamination. NJDEP recommended that the Township connect all residences with private potable wells to the municipal water supply system but action was not taken at the time because public funds were not available to pay for the connections.

In 1995, NJDEP's Remedial Response Element sampled 127 private potable wells in the Township to evaluate the extent of the ground water contamination. The sampling revealed that six potable wells were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards and many others had lower levels of contamination. Between 1998 and 1999, NJDEP and the Township connected approximately 240 properties with private wells to the existing water supply system and extended water lines to one area. NJDEP has reviewed the histories of 26 industries that are possible sources of the contamination and plans to conduct Remedial Investigations (RI) to delineate the contamination at these facilities. In late 2002, representatives for 13 of the 26 industries executed a settlement agreement with NJDEP and signed Administrative Consent Orders to investigate and clean up their sites under the supervision of the Responsible Party Remediation Element. The remaining facilities will be addressed separately under NJDEP's Site Remediation Program.

Fenimore Sanitary Landfill

Mountain Road Roxbury Township Morris County

BLOCK: 34 **LOT:** 29

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Sanitary Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 103 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Metals	Confirmed
Soil	Metals	Potential
Surface Water	Metals	Potential
Sediments	Metals	Potential
Air	Methane	Potential

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$15,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site was operated as a privately owned sanitary landfill from 1950 until 1979. The Town of Ledgewood is located one quarter mile to the east. The landfilled area occupies 42 acres of the 103-acre property and there is a shallow leachate collection system at the site. Several streams located on and adjacent to the landfill flow into a tributary of Ledgewood Brook, which is used for fishing and recreation. NJDEP ordered the landfill closed after the owner failed to meet engineering control requirements for leachate collection and containment. A final closure plan submitted for the landfill was rejected by NJDEP as inadequate and consequently the site was never capped and properly closed. Ownership of the landfill has changed several times since 1981 and the property is currently owned by a private investment company.

NJDEP's Remedial Response Element is implementing closure actions at the landfill to prevent the release of methane, a greenhouse gas, from the waste fill and mitigate the impact of landfill leachate on the environment. NJDEP is reviewing the landfill's history and past sampling results to obtain preliminary information for the landfill closure project. NJDEP plans to conduct an Immediate Environmental Concern Assessment at the site in 2003 to identify conditions that could present immediate threats to human health or the environment.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Kenvil Ground Water Contamination

Various Locations Roxbury Township Morris County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

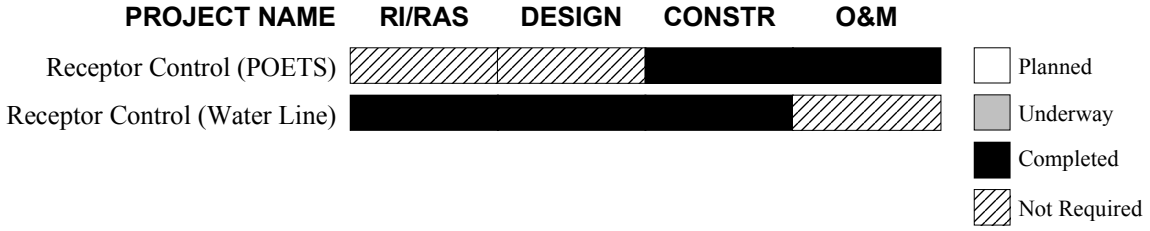
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$29,000
1986 Bond Fund	$1,831,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by residents in 1986 identified several private potable wells in the Kenvil section of Roxbury Township that were contaminated with volatile organic compounds. A subsequent investigation revealed 63 private potable wells in the area were contaminated with a variety of volatile organic compounds at levels exceeding New Jersey Drinking Water Standards, including trichloroethylene (TCE), tetrachloroethylene (also known as perchloroethylene, or PCE) and benzene. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Township of Roxbury extended public water lines to the homes in the 336 residences in Ground Water Impact Area (GWIA) in 1995 using funds provided by NJDEP as a permanent remedy. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Kingtown Diesel

1470 Route 46 — Roxbury Township — Morris County

BLOCK: 9302 **LOT:** 3

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 5 Acres

SURROUNDING LAND USE: Commercial

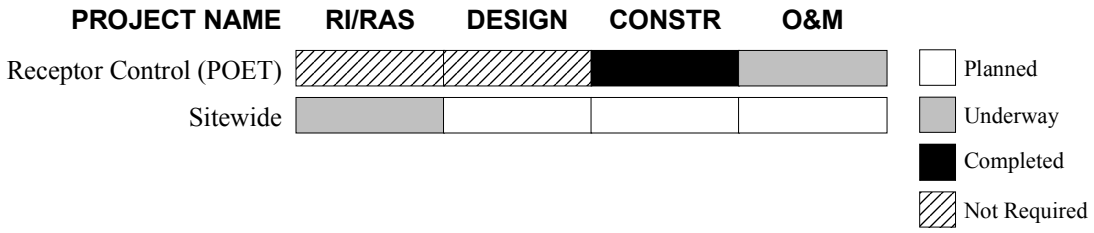
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds Petroleum Hydrocarbons	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$41,000
Corporate Business Tax	$125,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site has operated as a gasoline service station since the 1920s. Sampling conducted by the Roxbury Township Health Department in 1997 revealed that a private potable well at a nearby motel was contaminated with methyl tertiary-butyl ether (MTBE) and benzene at levels exceeding the New Jersey Drinking Water Standards for these volatile organic compounds. A Point-of-Entry Treatment (POET) system was installed on the well with funds provided by NJDEP to supply potable water for the motel. NJDEP's Responsible Party Remediation Element conducted an inspection of the Kingtown Diesel service station and concluded that a discharge at the site, possibly from underground tank piping, may have been the source of the contamination in the motel's well. Subsequent sampling of the potable well at Kingtown Diesel revealed that it was also contaminated with high levels of MTBE and benzene. Sampling of private potable wells at neighboring properties in 1998 did not identify any others that were contaminated with volatile organic compounds at levels exceeding Drinking Water Standards.

In 1999, NJDEP's Responsible Party Remediation Element and the owner of Kingtown Diesel entered into an Administrative Consent Order (ACO) that obligated the owner to investigate the contamination and take appropriate remedial measures. However, the owner did not comply with the requirements of the ACO and the case was transferred to the Remedial Response Element for investigation in 2001. The Remedial Response Element plans to begin a Remedial Investigation (RI) to delineate the contamination at the site in 2003. The RI phase will include sampling of the soil and ground water.



Lusardi Cleaners

2 Wall Street — Rockaway Borough — Morris County

BLOCK: 45 **LOT:** 20

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Dry Cleaners
OPERATION STATUS: Active

PROPERTY SIZE: 0.25 Acre

SURROUNDING LAND USE: Residential/Commercial

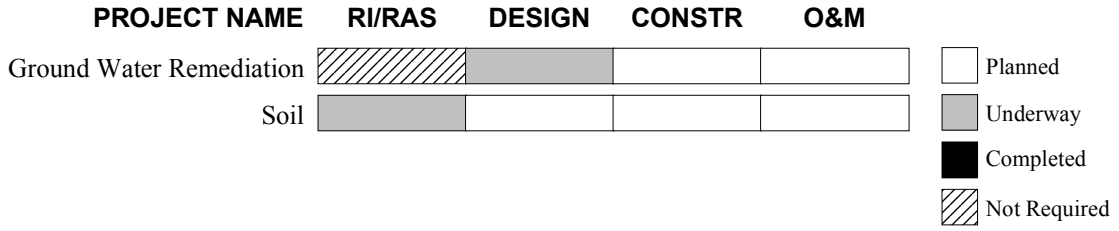
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds	Investigating

FUNDING SOURCES	AMOUNT AUTHORIZED
No Public Funds Authorized to Date	

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Rockaway Borough Well Field consists of three water supply wells located near Union Street. The well field serves approximately 10,000 residents of Rockaway Borough and surrounding communities. In 1981, all three wells were determined to be contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants are trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE), a dry cleaning solvent. A carbon filtration system was installed at the well field in 1981 to remove the contaminants from the water and an air stripper was added in 1993 to improve the effectiveness of the treatment system.

USEPA added the Rockaway Borough Well Field to the National Priorities List of Superfund sites in 1983. USEPA subsequently conducted a Remedial Investigation and Feasibility Study (RI/FS) that identified two separate plumes of contaminated ground water that were impacting the well field. These consisted of a plume of PCE-contaminated ground water emanating from the East Main and Wall Street area of the Borough and a plume of TCE-contaminated ground water emanating from Klockner & Klockner, an industrial property located at Stickle Avenue and Elm Street. The suspected source of the PCE contamination is Lusardi Cleaners, a dry cleaning establishment located on Wall Street. In 1991, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that required installation of two ground water remediation systems to extract and treat the PCE and TCE plumes. Cordant Technologies, the Responsible Party for the Klockner & Klockner site, entered into a Consent Decree with USEPA in 1994 in which it agreed to develop a Remedial Design for ground water remediation systems to address both plumes and implement the remedial action for the TCE plume only. When the Remedial Design is finished, USEPA will construct the ground water remediation system for the PCE plume as a Superfund remedial action using public funds. USEPA is also investigating the extent of the PCE contamination in the soil at the Lusardi's Cleaners property.



Parsippany-Troy Hills Water Department Wells 4 & 4A

Parsippany Boulevard Parsippany-Troy Hills Township

Morris County

BLOCK: 412 **LOT:** 15

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

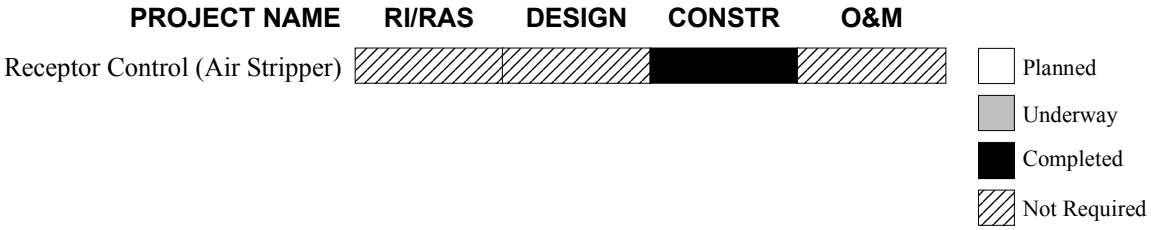
SURROUNDING LAND USE: Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tetrachloroethylene	Confirmed
Potable Water	Tetrachloroethylene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$581,000
Corporate Business Tax	$345,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Wells 4 and 4A are two of 18 water supply wells in the Parsippany-Troy Hills Water Department. The wells were taken out of service in the 1980s after they were determined to be contaminated with tetrachloroethylene (also known as perchloroethylene, or PCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. NJDEP's Remedial Response Element completed a Remedial Action Selection (RAS) in 1998 that concluded installation of an air stripper at the well field was the most cost-effective method to address the contamination. Parsippany-Troy Hills Township installed the air stripper in 1999 using funds provided by NJDEP and is operating and maintaining the system. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Prospect Street Ground Water Contamination

Prospect Street, Montville Avenue & Highland Avenue

Montville Township — Morris County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

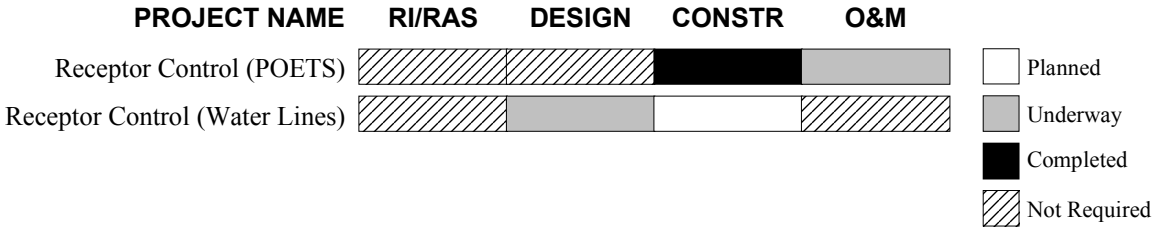
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating/Alternate Water Supply Provided

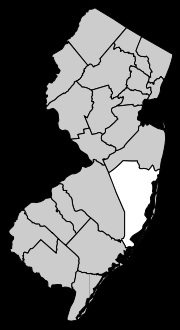
FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$487,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted the Montville Township Health Department in 2000 and 2001 identified 48 wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants are dichloroethylene (DCE), trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). NJDEP installed Point-of-Entry Treatment (POET) systems on some of the contaminated wells as an interim measure and connected residences with contaminated wells that were located near water mains to the public water supply. NJDEP's Remedial Response Element subsequently delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was extension of the public water lines to all of the homes in the CKE. Installation of the public water lines is scheduled to begin in 2003. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Ocean County



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Bayville Russo Gas

399 Route 9 — Berkeley Township — Ocean County

BLOCK: 882.14 **LOT:** 72

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Auto Repair
OPERATION STATUS: Active

PROPERTY SIZE: 0.16 Acre

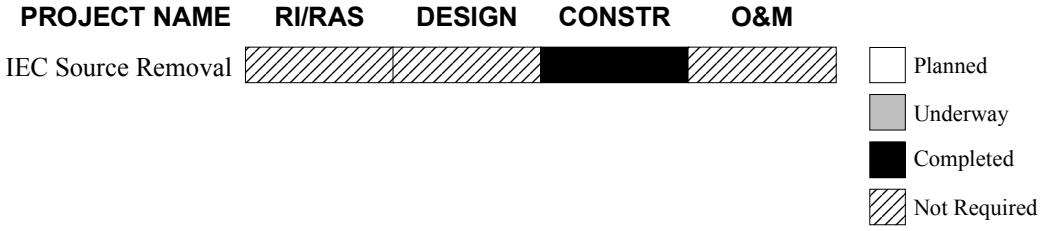
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Partially Removed/Investigating
	Petroleum Hydrocarbons	

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$81,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is a former gasoline service station that currently operates as an auto repair facility. It has been identified as a possible source of the ground water contamination in the Brooks Avenue area of Berkeley Township, where ten private potable wells were determined to be contaminated with benzene and dichloroethane (DCA) at levels exceeding New Jersey Drinking Water Standards in 1993. Berkeley Township subsequently extended public water lines to the Brooks Avenue area using funds provided by NJDEP. A preliminary investigation by NJDEP's Remedial Response Element in the late 1990s revealed the soil and ground water at Bayville Russo Gas were contaminated with gasoline-related compounds, including benzene. NJDEP directed the Potentially Responsible Parties for the site to investigate the extent of the contamination and take appropriate remedial measures, but they did not comply. The Remedial Response Element conducted an Immediate Environmental Concern (IEC) source removal in 2002 that entailed emptying all four underground gasoline storage tanks, removing one and excavating and disposing of 56 tons of contaminated soil. The remaining underground tanks and the contaminated soil and ground water will be addressed in future actions.



Beachwood & Veeder Avenues Well Contamination

Beachwood & Veeder Avenues

Dover Township Ocean County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

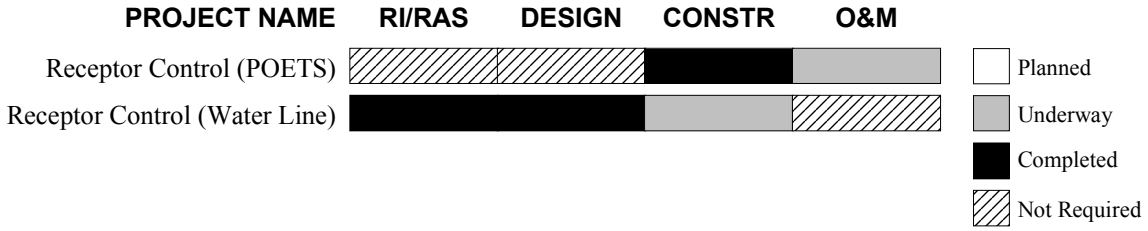
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Mercury	Confirmed
Potable Water	Volatile Organic Compounds Mercury	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$10,000
Corporate Business Tax	$951,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted in 1996 pursuant to Ocean County's real estate transfer regulations identified seven private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard. NJDEP's Remedial Response Element conducted additional sampling between 1997 and 1998 that identified fourteen potable wells in the area that were contaminated with volatile organic compounds at levels exceeding Drinking Water Standards. The primary volatile organic contaminants were trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element subsequently delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded installation of public water lines to the properties within the CKE was the most cost-effective long-term remedy. The local water purveyor completed construction of the water lines in 2001 using funds provided by NJDEP. Connection of the residences to the water lines and sealing of the wells is underway and expected to be completed in 2003. Approximately 70 residences will be connected to the water line when the project is complete.

NJDEP completed a source investigation in 2000 that concluded the volatile organic contamination at the Beachwood and Veeder Avenues site may have migrated from the North Gilford Park Ground Water Contamination Area, which is located three tenths of a mile to the southwest. The origin of the mercury contamination was not identified during the source investigation.



Denzer & Schafer X-Ray Company

Hickory Lane Berkeley Township Ocean County

BLOCK: 858 **LOT:** 46A

CATEGORY: Superfund
State Lead

TYPE OF FACILITY: Metal Reclamation
OPERATION STATUS: Inactive

PROPERTY SIZE: 5 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Levels Not of Concern/Monitoring

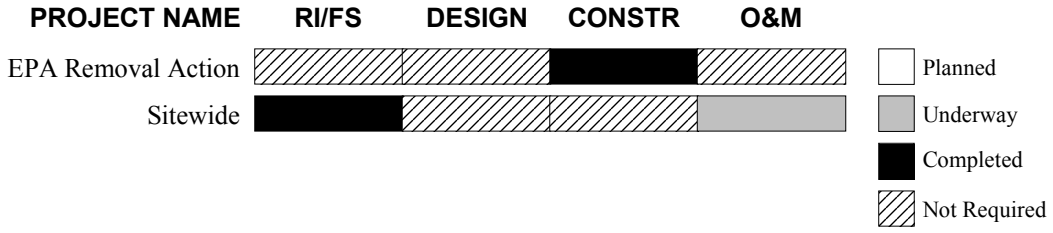
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$1,300,000
1986 Bond Fund	$3,000
General State Fund	$556,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Denzer & Schafer X-Ray Company formerly operated a silver reclamation facility at this site. The industrial process entailed using caustic chemical solutions to strip silver from x-ray film. Between 1974 and 1981, the facility discharged its process waste water to an underground septic system. NJDEP ordered the facility to cease the discharge to the septic system in 1981 and required the owner to install monitor wells to determine whether ground water quality at the site had become degraded due to past discharges. Sampling of the monitor wells confirmed that the underlying shallow aquifer was contaminated with volatile organic compounds and metals. Due to the potential for the contamination to migrate downward and affect domestic and public water supply wells in the area, USEPA added the Denzer & Schafer facility to the National Priorities List (NPL) of Superfund sites in 1983.

Between 1987 and 1995, NJDEP's Remedial Response Element conducted a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination in the soil and ground water and evaluate cleanup alternatives. The RI/FS revealed that the volatile organic contamination detected in the ground water early in the investigation had largely dissipated due to natural biodegradation and attenuation. The RI/FS also revealed that the metals contamination in the ground water did not pose a risk to any private or public wells. Sampling of the surface and subsurface soils across the site and surface water from a ponded area did not indicate contamination above levels of concern. In 1995, NJDEP issued a Record of Decision (ROD) with USEPA concurrence that called for no action at the site except for monitoring. Under the no action with monitoring remedy, there will be no remedial action to address the residual ground water contamination; however, monitoring of the ground water, surface water and sediments would be conducted for a period of at least five years to ensure the concentrations of contaminants in these media remain below levels of concern. The ROD also required establishment of a ground water Classification Exception Area (CEA) at the site to ensure that proper precautions are taken if any new potable wells are installed at the property.

Shortly after the ROD was signed, the owner of the Denzer & Schafer company abandoned the facility and left drums of hazardous materials inside the process building and in a storage trailer that was parked on site. USEPA disposed of the drums of hazardous materials during a Removal Action in 1996 and a private party interested in developing the area subsequently demolished and disposed of the building. USEPA removed the Denzer & Schafer site from the NPL in 1998. NJDEP is periodically monitoring environmental conditions at the site pursuant to the requirements of the ROD.



Exxon Service Station Lakehurst Borough

Route 70 & Eisenhauer Circle Lakehurst Borough Ocean County

BLOCK: 31 **LOT:** 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Inactive

PROPERTY SIZE: 1 Acre

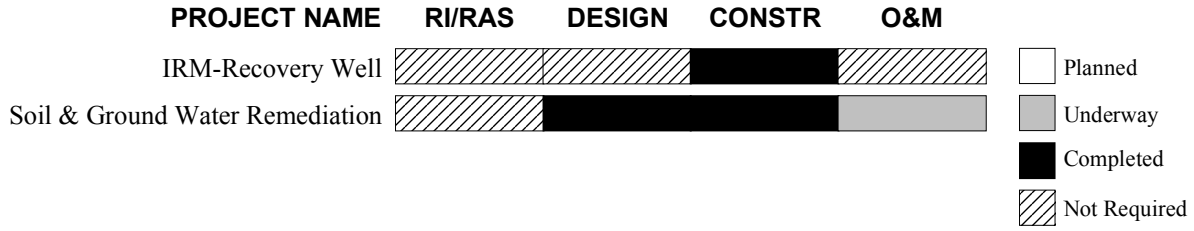
SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds	Partially Removed/Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$991,000
1986 Bond Fund	$19,000
Hazardous Discharge Site Cleanup Fund	$430,000
Corporate Business Tax	$118,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site operated as a service station between the early 1950s and 1985. Several of the underground gasoline storage tanks at the site leaked, contaminating the soil and ground water and forcing Lakehurst Borough to take two of its nearby municipal supply wells out of service. NJDEP 's Remedial Response Element implemented an Interim Remedial Measure (IRM) in 1986 that entailed excavating and disposing of the tanks and approximately 400 cubic yards of contaminated soil, and installing a free-product recovery system to remove gasoline product that was floating on the water table. In 1988, NJDEP installed a ground water remediation system to remove the dissolved gasoline from the ground water. The two municipal wells were restored to service after the ground water remediation system established hydraulic control of the contaminant plume. Sampling of the on-site monitor wells conducted in 1995 showed that the ground water was free of contamination except at one area where subsurface soil contamination remains. NJDEP installed an air sparging/soil vapor extraction system at the site in 1997 to treat the residual soil contamination in this area and improve the performance of the ground water treatment system. NJDEP is operating and maintaining the ground water treatment and air sparging/soil vapor extraction systems and periodically sampling the ground water at the site to evaluate the effectiveness of the remedial actions.



Fuelmart Incorporated

Route 571 Jackson Township Ocean County

BLOCK: 46.02 **LOT:** 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.3 Acre

SURROUNDING LAND USE: Residential

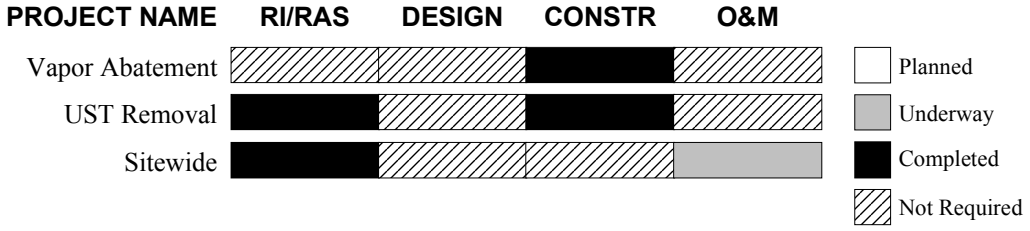
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineated
Soil	Volatile Organic Compounds	Partially Removed/Delineated
Air	Gasoline Vapors	Abated

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$6,000
1986 Bond Fund	$34,000
Corporate Business Tax	$130,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

A leaking underground storage tank at this site caused the soil and ground water to become contaminated with gasoline. The contamination became evident in 1992 when gasoline vapors from the site migrated through the soil to a nearby property and caused an outdoor well pit to explode. NJDEP made emergency modifications to the pumping system of the well pit to reduce the explosion hazard. The private potable well at the service station and other nearby properties were subsequently sampled and found to be free of gasoline-related compounds. The service station owner later removed one leaking underground fuel storage tank from the property but left the other underground tanks in place. The service station ceased operations in 1993.

In 1996, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water at the site and evaluate cleanup alternatives. NJDEP removed the remaining underground storage tanks and completed delineation of soil contamination in 1999. The results of the RI indicate there are elevated levels of gasoline compounds present in the ground water but little off-site migration. NJDEP is reevaluating the priority of the site for cleanup action based on the results of the RI.



Harborage Avenue & Dockage Road Ground Water Contamination

Harborage Avenue & Dockage Road

Berkeley Township **Ocean County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

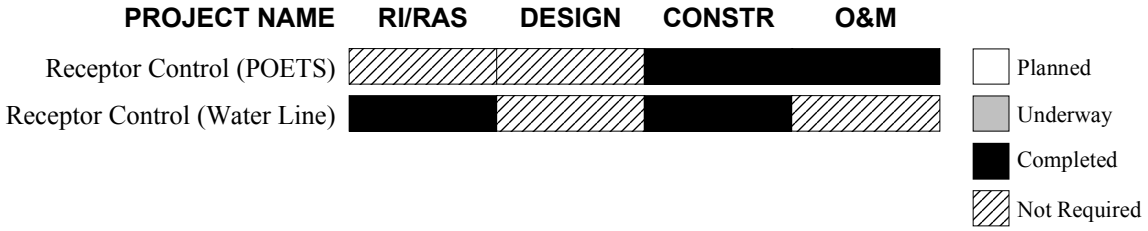
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$116,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Ocean County Health Department in 1991 identified ten private potable wells in this neighborhood that were contaminated with chlorinated volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were dichloroethylene (DCE), trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. In 1995, NJDEP provided the Township with funds to extend public water lines to the homes as a permanent remedy. Five additional contaminated private potable wells were discovered in this neighborhood in 2000 and public water lines were subsequently extended to these homes.

In 2002, NJDEP completed an investigation that identified contaminated soil on Harborage Avenue as the most likely source of the volatile organic contamination affecting private potable wells in the area. The contamination is beneath the street in front of a private residence.



James H. James Landfill

Schoolhouse Road — Brick Township — Ocean County

BLOCK: 1422 **LOT:** 13, 14 & 19

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 19 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Air	Methane	Monitoring

FUNDING SOURCES	AMOUNT AUTHORIZED
Sanitary Landfill Contingency Fund	$104,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Originally a sand and gravel pit, a private company operated this site as a permitted solid waste landfill between 1975 and 1987. Household, commercial and agricultural wastes and other nonhazardous materials were disposed of in the landfill during this period. After landfilling activities ceased, the operator capped the site and installed a landfill gas collection system and methane flare to treat the methane and other gases produced by the decomposition of the buried wastes. The operator also implemented a 30-year post closure plan that included monitoring landfill gases in the subsurface soil at the perimeter of site and ground water quality in the immediate area.

In the 1990s, a developer purchased land directly adjacent to the James Landfill and built homes on the properties. Several of the homeowners whose properties abutted the landfill later discovered buried trash on their properties. NJDEP's Remedial Response Element excavated test pits around the landfill in 2000 and confirmed the presence of uncapped buried trash at five residences on Blenheim Drive. NJDEP subsequently installed landfill gas monitoring wells at ten properties on this street to determine whether the buried trash was producing methane or other hazardous landfill gases at levels that might present a danger to the residents. Sampling of the landfill gas monitoring wells at the residential properties has consistently shown concentrations of methane gas that are below levels of concern. NJDEP is periodically sampling the landfill gas monitoring wells to evaluate methane production and ensure the safety of the nearby residents.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Landfill Gas Monitoring				

Planned
Underway
Completed
Not Required

Nicoletti Road Ground Water Contamination

Nicoletti & Ridgeway Roads & Johnson Avenue

Manchester Township — Ocean County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

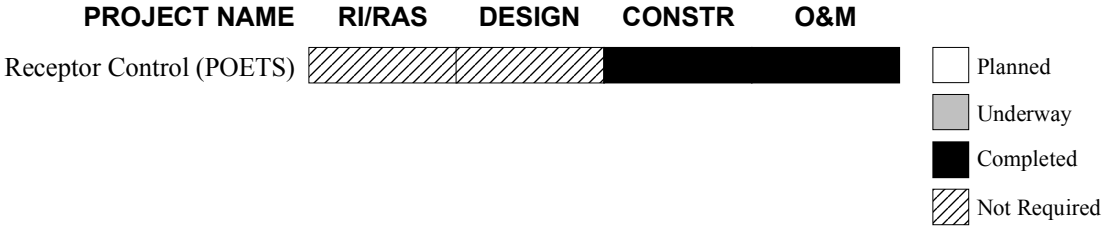
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Mercury	Confirmed
Potable Water	Mercury	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$25,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Ocean County Health Department in 1994 identified 12 private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Township subsequently extended public water lines to the area as a permanent remedy. Service connections and a portion of the connection fees for the affected homes were funded by NJDEP. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



North Maple Avenue Ground Water Contamination

North Maple Avenue Dover Township Ocean County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

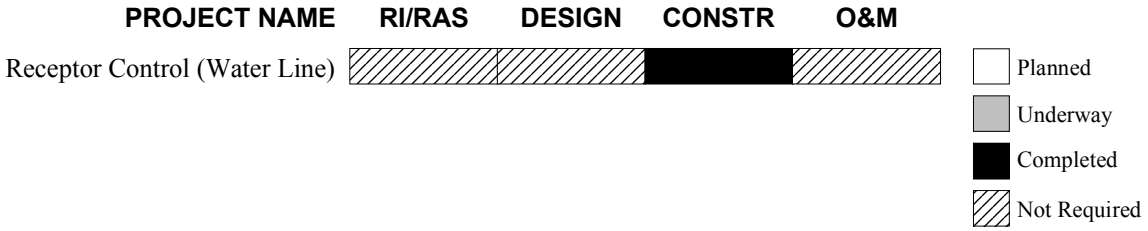
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$54,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Ocean County Health Department in 1993 identified five private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants are benzene, dichloroethane (DCA), trichloroethane (TCA) and dichloroethylene (DCE). The source of the contamination is unknown. NJDEP connected the affected residences to public water lines in 1994. Additional investigative work is planned to identify possible sources of the ground water contamination at the site.



South Brunswick Asphalt

Gladney Avenue — Berkeley Township — Ocean County

BLOCK: 824 **LOT:** 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Asphalt Production/Recycling
OPERATION STATUS: Active

PROPERTY SIZE: 142 Acres

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds	Delineating
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$845,000
Hazardous Discharge Site Cleanup Fund	$150,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

South Brunswick Asphalt makes asphalt and recycles asphalt wastes, concrete and tree stumps. The Beachwood Plaza shopping center is northeast of the site and a gravel pit is southwest of the site. Since 1983, a large quantity of coal tar emulsion wastes mixed with sand and gravel has been stockpiled at an unpaved and unbermed outdoor area at the site. Other environmental concerns include an inactive landfill, abandoned drums, three waste oil lagoons and discarded electrical transformers. Preliminary sampling by NJDEP in the early 1990s confirmed that the soil and ground water at the property were contaminated with volatile organic compounds and semi-volatile organic compounds. A private water company supply well located 1,500 feet east of the site was closed in 1999 due to benzene contamination, but the source of this contamination has not been determined.

NJDEP's Remedial Response Element began a Remedial Investigation/Remedial Action Selection (RI/RAS) in 1999 to delineate the contamination in the soil and ground water and evaluate cleanup alternatives. NJDEP expects to complete the RI phase in 2003 and will use the findings to select final remedial actions for the site.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Stafford Township Landfill

Recovery Road — Stafford Township — Ocean County

BLOCK: 25, 13 **LOT:** 61& 93, 68

CATEGORY: Non-Superfund, State Lead

TYPE OF FACILITY: Sanitary Landfill

OPERATION STATUS: Inactive

PROPERTY SIZE: 123 Acres (total)

SURROUNDING LAND USE: Industrial/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Confirmed
Soil	Volatile Organic Compounds Metals	Potential
Air	Methane	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$265,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

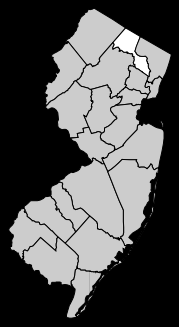
This site consists of two separate parcels of land in the Stafford Township Business Industrial Park that were used for landfilling wastes. The smaller fill deposit is located on a 13-acre lot and received wastes between 1955 and 1970. Little is known about its operational history and actual size since it predated New Jersey's regulations for registering and permitting solid waste facilities. The larger fill deposit, which occupies 75 acres of a 110-acre lot, was operated as a registered solid waste disposal facility by Stafford Township from 1970 to 1983. This unlined landfill accepted municipal wastes, vegetative wastes, sewage treatment sludge, septage wastes and tires under two permits with the state. The facility stopped operating after it reached capacity and the Township's proposal to expand the landfill was rejected by NJDEP. The Township subsequently submitted a closure plan to NJDEP that included installation of an impermeable cover and passive methane venting system but this plan was never implemented. Sampling of the monitor wells at the site between 1990 and 2000 has sporadically indicated the presence of several metals, including lead and mercury, at levels exceeding New Jersey ground water standards. In addition, several volatile organic compounds were detected in the ground water at the site in one round of samples collected in 1995.

NJDEP's Remedial Response Element is implementing closure actions at the landfill to prevent the release of methane, a greenhouse gas, from the waste fill and mitigate the impact of landfill leachate on the environment. NJDEP is currently reviewing the landfill's history and past sampling results to obtain preliminary information for the landfill closure project. NJDEP plans to conduct an Immediate Environmental Concern Assessment at the site in 2003 to identify conditions that could present immediate threats to human health or the environment.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Passaic County



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Old Rifle Camp Road Ground Water Contamination	5
Paperboard Specialties Inc.	6
Pratt Gabriel	7

A-Z Automotive Repair Center

1692 Union Valley Road West Milford Township Passaic County

BLOCK: 7104 **LOT:** 1

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.5 Acre

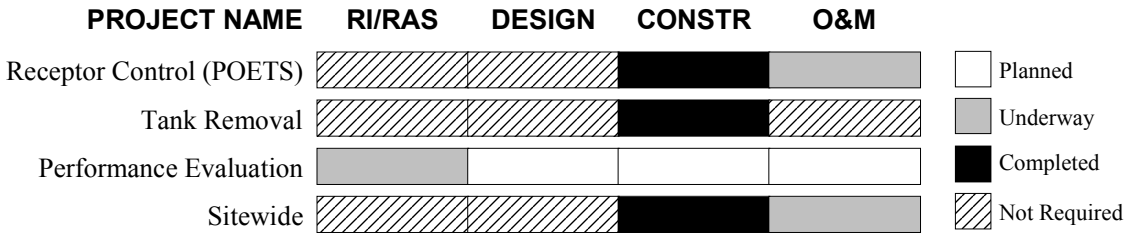
SURROUNDING LAND USE: Residential/Undeveloped

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Potable Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds	Treating
Structures	Gasoline Vapors	Venting

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$2,243,000
1986 Bond Fund	$329,000
Hazardous Discharge Site Cleanup Fund	$431,000
Corporate Business Tax	$1,024,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

In 1989, underground storage tanks at this former service station were found to be leaking gasoline into the ground water. The ground water plume from the site contaminated 18 private potable wells in the area and caused gasoline vapors to seep into several nearby homes. In 1990, the gasoline supplier for the service station removed the underground storage tanks, installed a ground water treatment system and a soil venting system at the site, provided Point-of-Entry Treatment (POET) systems for residents with contaminated private wells and installed a soil vapor recovery system to prevent gasoline vapors from entering nearby homes. NJDEP's Remedial Response Element assumed responsibility for the site in 1991 after the gasoline supply company claimed that it was no longer able to finance the cleanup or maintain the various remedial systems. NJDEP modified the original ground water treatment system to increase hydraulic control of the contaminant plume, improved the on-site soil venting system and removed a previously unidentified underground storage tank. Operation and maintenance (O&M) of the ground water treatment system and soil venting system are underway. NJDEP is periodically sampling private potable wells and monitor wells in the area to evaluate ground water quality. NJDEP plans to reevaluate the ground water Classification Exception Area (CEA) for the site in 2003.



G J Redner Incorporated

83, 87, 95 & 97 Ringwood Avenue

Wanaque Borough **Passaic County**

BLOCK: 108, 204 **LOT:** 1, 8 & 11.02, 1.01 & 3

CATEGORY: Non-Superfund, State Lead

TYPE OF FACILITY: Waste and Sewage Disposal

OPERATION STATUS: Inactive

PROPERTY SIZE: 71.5 Acres (total)

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Soil	Volatile Organic Compounds Petroleum Hydrocarbons Metals	Delineated
Ground Water	Volatile Organic Compounds Petroleum Hydrocarbons Metals	Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$820,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site consists of several properties near the Wanaque Drinking Water Reservoir. G.J. Redner Incorporated operated a waste hauling, septic tank installation and septic system repair business at the 97 Ringwood Avenue property for approximately 50 years, until the mid-1990s. During this time, sewage wastes collected from several generators were allegedly disposed in trenches that were excavated on the 97 Ringwood Avenue property, three nearby privately owned properties, and an adjacent property owned by the North Jersey District Water Supply Commission. A variety of other hazardous substances, including methyl-ethyl ketone, chloroform, toluene, waste oils and magnesium powder were also allegedly discharged or contained in materials used as fill at the properties. The areas of concern are spread across ten to fifteen acres of the overall site, which encompasses approximately 71 acres. A preliminary investigation by NJDEP in 1994 indicated the soil was contaminated with organic compounds and metals. NJDEP directed the Potentially Responsible Parties for the site to investigate the site and take appropriate remedial actions, but they did not comply.

In 2000, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Alternatives Selection (RI/RAS) to delineate the contamination in the soil and ground water. The RI phase was completed in 2002 and showed low levels of contamination. NJDEP is evaluating the findings of the RI to determine the appropriate remedial actions for the contaminated areas.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Oak Ridge Road Ground Water Contamination

Oak Ridge Road West Milford Township Passaic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

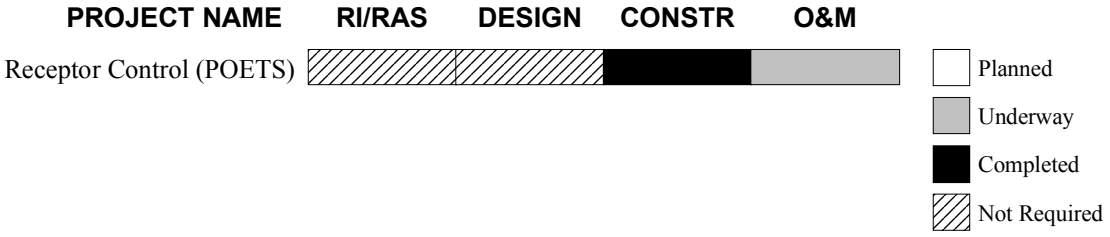
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tetrachloroethylene Trichloroethylene	Confirmed
Potable Water	Tetrachloroethylene Trichloroethylene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$35,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Ground water contamination was discovered in this area in 1996, when sampling of a private well at a local industry revealed the presence of trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE) at levels exceeding the New Jersey Drinking Water Standards for these volatile organic compounds. These compounds were also detected in a private well at a nearby commercial facility in 1998. Subsequent sampling of nearby private potable wells by the Passaic County Health Department did not identify any other wells that were contaminated above Drinking Water Standards. Point-of-Entry Treatment (POET) systems were installed on the two contaminated wells with funds provided by NJDEP to supply potable water for the occupants. In 1999, NJDEP's Remedial Response Element delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Old Rifle Camp Road Ground Water Contamination

Old Rifle Camp Road & Oak Ridge Road

West Paterson Borough Passaic County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

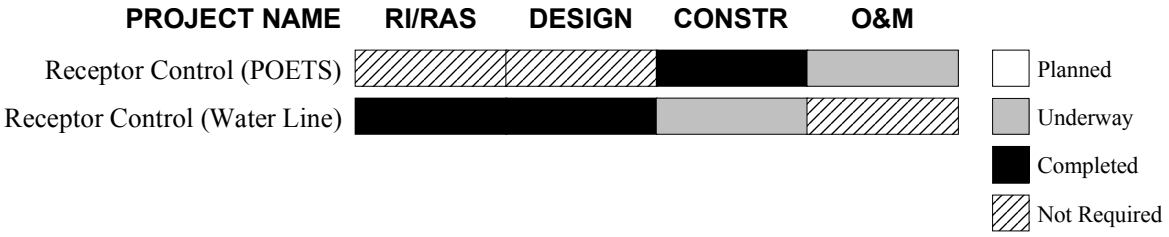
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$302,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Passaic County Health Department in 1997 identified ten private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. In the Old Rifle Camp Road area, tetrachloroethylene (also known as perchloroethylene, or PCE) was detected in six wells, and in the Oak Ridge Road area benzene was detected in two wells and carbon tetrachloride was found in two other wells. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. NJDEP's Remedial Response Element subsequently delineated the Currently Known Extent (CKE) of the potable well contamination and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes, but the Borough of West Paterson elected to extend public water lines to the area instead. NJDEP agreed to provide the Borough with funds equal to the cost of monitoring and maintaining the POET systems for 20 years to help pay for the water lines. Installation of the water lines was completed in 2002 and connection of the residences is underway. NJDEP is periodically sampling private potable wells outside the CKE to monitor ground water quality. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Paperboard Specialties, Inc.

177-302 3rd Avenue — Paterson City — Passaic County

BLOCK:	**LOT:**
CO454	2
CO455	1
CO428	1
CO429	1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Paper Products Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.8 Acres

SURROUNDING LAND USE: Commercial

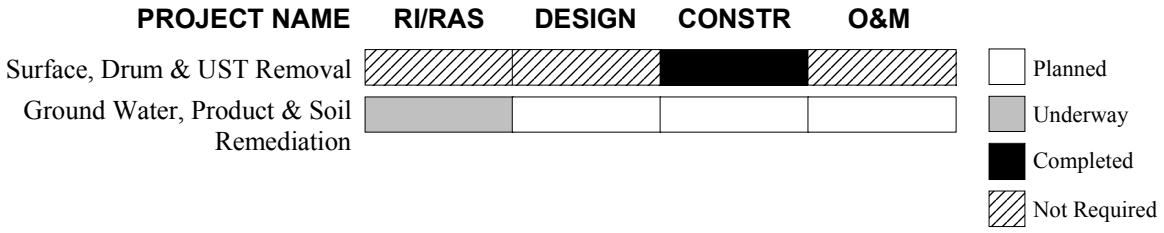
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Soil	Volatile Organic Compounds	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$635,000
1986 Bond Fund	$153,000
Corporate Business Tax	$612,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Paper products were manufactured at this facility for approximately 90 years, beginning in the early 1900s. The facility changed ownership in 1985, which resulted in a mandated environmental investigation under the Environmental Cleanup Responsibility Act (ECRA, now known as the Industrial Site Recovery Act). Paperboard Specialties, Inc. purchased the facility in 1989 and assumed responsibility for compliance with ECRA requirements, but went out of business due to bankruptcy in 1992. A variety of hazardous conditions existed at the site at the time operations ceased. Explosive materials, leaking transformers and containers of chemicals were present within the process building. Drums containing potentially hazardous materials were being stored both inside and outside of the building. An underground storage tank located underneath the building contained 30,000 gallons of fuel oil contaminated with polychlorinated biphenyls (PCBs). In addition, lubricating oil, gasoline and fuel oil from leaking underground storage tanks had contaminated the subsurface soil and ground water. A Responsible Party for the site subsequently removed the leaking underground storage tanks under the supervision of NJDEP's Responsible Party Remediation Element.

NJDEP's Remedial Response Element is conducting a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water and evaluate remedial alternatives. NJDEP installed additional on-site and off-site ground water monitor wells in 2002 to facilitate investigation of the ground water. NJDEP also decommissioned the underground storage tank located beneath the building and removed the waste drums and other surface materials in 2002. NJDEP expects to complete the RI/RAS in 2003. The Responsible Party has reimbursed the State of New Jersey $534,000 for remedial work conducted at the site.



Pratt Gabriel

204 21st Avenue — Paterson City — Passaic County

BLOCK: K1202 **LOT:** 3

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.4 Acre

SURROUNDING LAND USE: Residential/Industrial/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Pesticides Polychlorinated Biphenyls (PCBs) Metals	Potential
Soil	Pesticides Polychlorinated Biphenyls (PCBs) Metals Chlorinated Dioxins/Furans	Investigating
Building Interior	Pesticides Metals	Investigating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$44,000
1981 Bond Fund	$35,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The B.G. Pratt Company and the B.G. Pratt Division of Gabriel Chemical manufactured herbicides, pesticides and fertilizers at this site between 1965 and 1977. Miller Chemical and Fertilizer Corporation conducted similar operations at the facility between 1978 and 1980. The property was purchased by another company in 1981, which subsequently leased the property to a circuit board assembly shop. The site consists of a two-story building that covers most of the lot, two loading docks and a small (90 feet by 40 feet) yard area located in the back of the property.

In the early 1980s, NJDEP identified the former Pratt Gabriel site as potentially contaminated with dioxin (also known as tetrachlorodibenzo-p-dioxin, or TCDD) based on its past operations. Sampling conducted by NJDEP in 1985 indicated that dioxin, other types of pesticides and polychlorinated biphenyls (PCBs) were present in the soil in the yard area and inside a small shed adjoining the yard. Pesticides other than dioxin were also detected in chip and wipe samples collected from the interior of the main building. NJDEP covered the contaminated soil in the yard area with a tarp and posted warning signs on the fence surrounding the site. In 1986, the property owner demolished a small shed in the yard area, buried the rubble and contaminated soils and paved the entire yard area for use as a parking lot. NJDEP directed the Potentially Responsible Parties to investigate the contamination at the site and take appropriate remedial actions, but they did not comply.

NJDEP's Remedial Response Element is preparing to conduct a Remedial Investigation (RI) to determine the nature and extent of the contamination at the site using public funds. NJDEP is attempting to obtain access to the property to collect samples of the soil, ground water and building interior. If the RI confirms that the site is contaminated, a Remedial Action Selection (RAS) will be conducted to evaluate cleanup alternatives.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Salem County

SALEM

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661 South Broad Street

661 South Broad Street Pennsville Township Salem County

BLOCK: 546 **LOT:** 5

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Inactive

PROPERTY SIZE: 0.25 Acre

SURROUNDING LAND USE: Residential/Agricultural

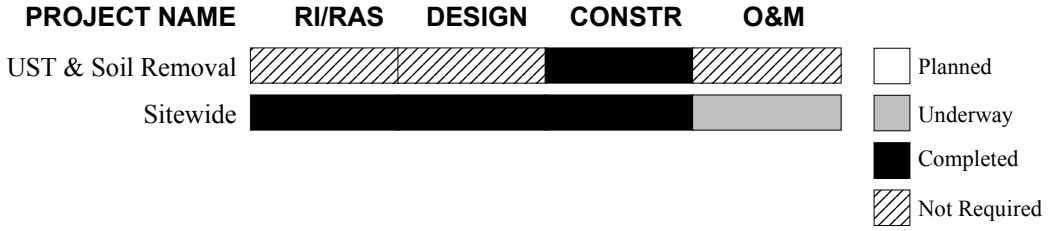
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Soil	Petroleum Hydrocarbons	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$245,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is also known as the Pompper property. It operated as a gasoline service station for approximately 30 years, until 1986. After business operations ceased it was used as a private residence. In 1990, utility workers encountered gasoline vapors while installing a sewer line in front of the property. The source of the gasoline vapors was determined to be two leaking underground gasoline storage tanks that remained on site. NJDEP's Remedial Response Element subsequently excavated and disposed of the tanks and 200 tons of gasoline-contaminated soil. A fire destroyed the small residential building in 1995 and the property is now a vacant lot.

Between 1995 and 1997, NJDEP's Remedial Response Element conducted a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination in the soil and ground water and evaluate remedial alternatives. The RI/RAS revealed that a significant volume of gasoline-contaminated soil remained at the site. The RI/RAS also revealed elevated levels of volatile organic compounds were present in the shallow ground water but the contamination did not extend beyond the boundaries of the property. NJDEP subsequently excavated and disposed of an additional 1,145 tons of contaminated soil and backfilled the site with clean material. In 1999, NJDEP initiated oxygen-enhanced bioremediation to address the contaminated ground water. This remedy entails periodically adding oxygen-releasing pellets to the on-site monitor wells to stimulate the growth of naturally occurring microorganisms in the ground water, thereby increasing biodegradation of the volatile organic compounds in the shallow aquifer. The oxygen-enhanced bioremediation process is expected to reduce the volatile organic compounds to levels below New Jersey Drinking Water Standards in approximately five years. NJDEP is periodically sampling the ground water at the site to monitor the plume and evaluate the effectiveness of the remedy.



Woodstown Pilesgrove Sanitary Landfill

Robbins Road — Pilesgrove Township — Salem County

BLOCK: 89 **LOT:** 10

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Sanitary Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 44 Acres

SURROUNDING LAND USE: Agricultural

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds	Confirmed
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds	Potential
Air	Methane	Potential

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$77,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

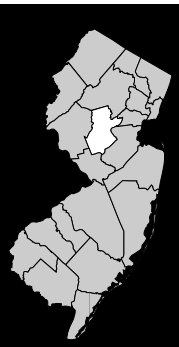
The Woodstown Pilesgrove Sanitary Landfill is a 44-acre inactive sanitary landfill that is jointly owned by Woodstown Borough and Pilesgrove Township. The site began landfilling operations in 1980, accepting municipal and vegetative wastes under a permit with NJDEP. NJDEP ordered the site closed in 1985 after the permit expired and Woodstown and Pilesgrove did not apply for an extension to continue landfilling activities. NJDEP directed Woodstown and Pilesgrove to submit a Closure and Post-Closure Care Plan for the landfill at the time operations ceased but one was not submitted. Although a post-closure plan has not been developed, Woodstown and Pilesgrove have been periodically sampling on-site ground water monitor wells under a NJPDES permit.

NJDEP's Remedial Response Element is implementing closure actions at the landfill to prevent the release of methane, a greenhouse gas, from the waste fill and mitigate the impact of landfill leachate on the environment. NJDEP is currently reviewing the landfill's history and past sampling results to obtain preliminary information for the landfill closure project. NJDEP plans to conduct an Immediate Environmental Concern Assessment at the site in 2003 to identify conditions that could present immediate threats to human health or the environment.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Somerset County



SOMERSET

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Alan & Son Car Care Center

988 Route 202 South Branchburg Township Somerset County

BLOCK: 44 **LOT:** 30

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Auto Repair
OPERATION STATUS: Active

PROPERTY SIZE: 0.5 Acres

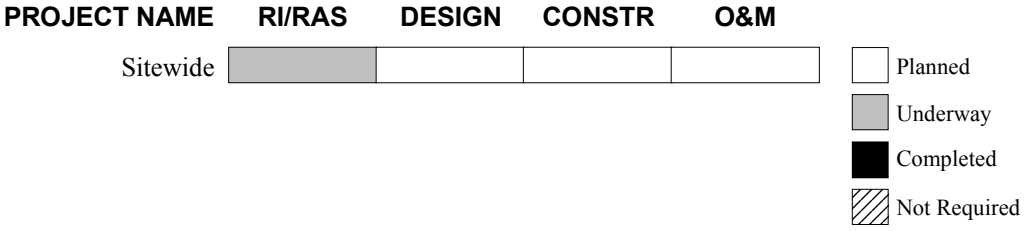
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$18,000
Corporate Business Tax	$1,118,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site has operated as an auto repair shop since the early 1970s. It is located in the Ground Water Impact Area (GWIA) for the Route 202 Ground Water Contamination case. In 1991, the property owner determined that an on-site private potable well was contaminated with gasoline-related compounds. A Point-of-Entry Treatment (POET) system was installed on the well as an interim measure and the property was subsequently connected to the public water line. In 1994, gasoline odors were reported in the adjacent storm sewers and gasoline product was observed in a nearby stream. NJDEP learned that a check valve on underground gasoline tank piping at the site had malfunctioned and may have contaminated the subsurface soil. NJDEP directed the auto repair shop owner to investigate and remediate the soil and ground water at the site but the owner did not comply. NJDEP's Remedial Response Element began a Remedial Investigation/Remedial Action Selection (RI/RAS) in 1997 to delineate the contamination and evaluate remedial alternatives. NJDEP is reviewing the soil and ground water sampling results from the RI phase.



Amwell Road Ground Water Contamination

Amwell Road Hillsborough Township Somerset County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
No Public Funds Authorized to Date	

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Hillsborough Township Health Department in 2001 identified nine private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were dichloroethylene (DCE), trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). Hillsborough Township extended public water lines to the affected properties in 2001. NJDEP's Remedial Response Element has delineated the Currently Known Extent (CKE) of the potable well contamination and plans to conduct additional investigative work to identify possible sources of the ground water contamination at this site.

Brook Industrial Park

100 West Main Street Bound Brook Borough Somerset County

BLOCK: 1 **LOT:** 34

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Industrial Park
OPERATION STATUS: Active

PROPERTY SIZE: 4.5 Acres

SURROUNDING LAND USE: Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Pesticides Metals	Delineated
Soil	Pesticides Dioxin Volatile Organic Compounds Metals	Removing/Capped/Delineated
Surface Water	Volatile Organic Compounds Pesticides Metals	Levels Not of Concern
Sediments	Volatile Organic Compounds Pesticides Metals	Levels Not of Concern
Structures	Pesticides Metals	Delineated/Capped

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$11,438,000
Corporate Business Tax	$536,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Brook Industrial Park is a complex of warehouses and industries located on the northern bank of the Raritan River in Bound Brook. Chemical and pesticide production and storage operations occurred at the park between 1971 and 1982, when Blue Spruce International occupied a number of the buildings. The current occupants of the Brook Industrial Park consist of a manufacturer of steel products, a manufacturer of plastic products, a manufacturer of specialty chemicals, a metal plating company and an equipment contractor. The Middlebrook Regional Health Commission and NJDEP began an investigation of the industrial park in 1980, after workers at one of the facilities reportedly became ill. Subsequent sampling revealed that the soil, ground water and surface water at the park were contaminated with pesticides, volatile organic compounds and heavy metals. The sampling also revealed that elevated levels of dioxin were present in the soil near the former Blue Spruce building. USEPA covered the dioxin-contaminated soil with an asphalt cap during an emergency response action in 1983.

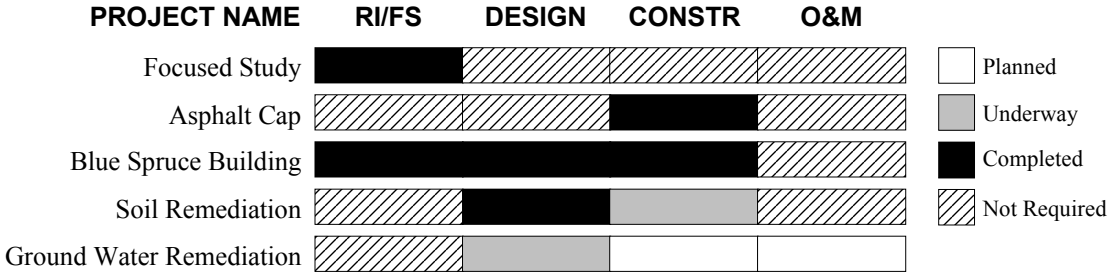
In 1989, USEPA added Brook Industrial Park to the National Priorities List of Superfund sites (NPL) and began a Remedial Investigation/Feasibility Study (RI/FS) to delineate the contamination and evaluate cleanup alternatives. The RI/FS confirmed that the soil at the industrial park was contaminated with pesticides, volatile organic compounds and heavy metals, and the interior of the Blue Spruce facility was contaminated with pesticides, dioxin and heavy metals. A subsurface pit at another building in the industrial park was determined to be contaminated with heavy metals, volatile organic compounds and inorganic compounds. The RI/FS also revealed that the ground water was contaminated with volatile organic compounds and metals, but the surface water and sediments of the Raritan River were not significantly contaminated.

In 1994, after completing the RI/FS, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that required excavation and off-site disposal of contaminated soil from the industrial park as well as the materials from the subsurface pit, demolition and off-site disposal of the contaminated materials from the Blue Spruce building and installation of a remediation system to extract and treat the contaminated ground water. The first phase of the site cleanup, demolition of the Blue Spruce building, was

Brook Industrial Park

(Continued from previous page)

completed in 1999. The soil removal project was begun in 2000 and is in progress. The Remedial Design for the ground water remediation system is underway and scheduled to be completed in 2003. Security fencing is in place to prevent people from coming in contact with hazardous areas of the industrial park while the Remedial Design and cleanup work are underway.



Claire Drive Ground Water Contamination

Claire & Stella Drives Bridgewater Township Somerset County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

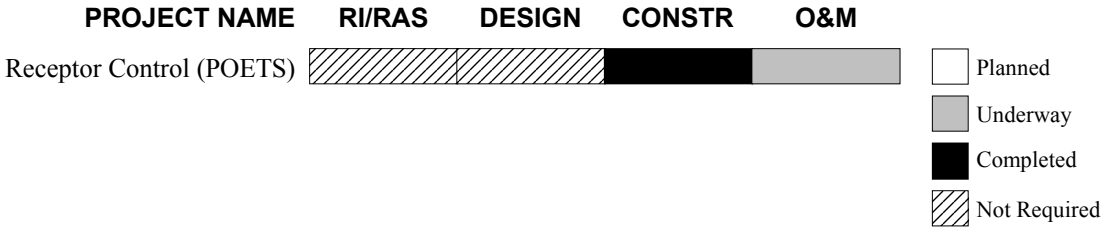
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$12,000
1981 Bond Fund	$40,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Bridgewater Township Health Department in 2000 identified six private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were carbon tetrachloride and trichloroethylene (TCE). The source of the contamination is unknown. NJDEP delineated the Currently Known Extent (CKE) of the potable well contamination and installed Point-of-Entry Treatment (POET) systems on the wells to supply potable water for the residents. In 2002, NJDEP's Remedial Response Element identified four additional private potable wells in the area that were contaminated with volatile organic compounds at levels exceeding Drinking Water Standards and POET systems were also installed on these wells. The Remedial Response Element plans to sample more wells in 2003 and will use the findings to revise the CKE and evaluate long-term water supply alternatives for the area.



Elm Avenue & 9th Street Ground Water Contamination

Elm Avenue and 9th Street Warren Township Somerset County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

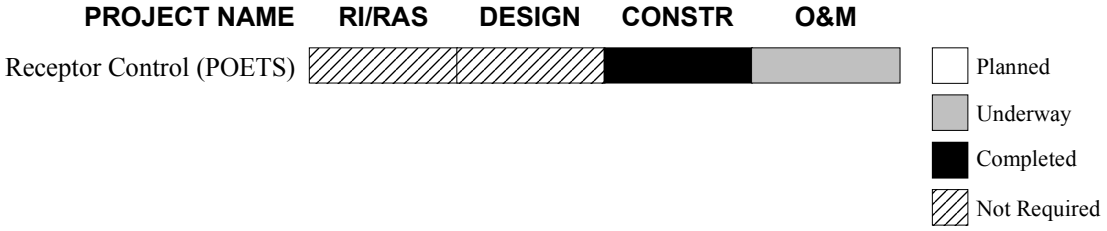
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$29,000
1981 Bond Fund	$27,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Warren Township Board of Health in 1992 identified 13 private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were dichloroethylene (DCE), trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element subsequently completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Federal Creosote Company

Valerie Drive & East Camplain Road

Manville Borough Somerset County

BLOCK: Various **LOT:** Various

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Wood Treatment (Creosoting)
OPERATION STATUS: Inactive

PROPERTY SIZE: 50 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Semi-Volatile Organic Compounds	Delineated
Soil	Creosote	Partially Removed/Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$112,900,000
Corporate Business Tax	$14,000,000

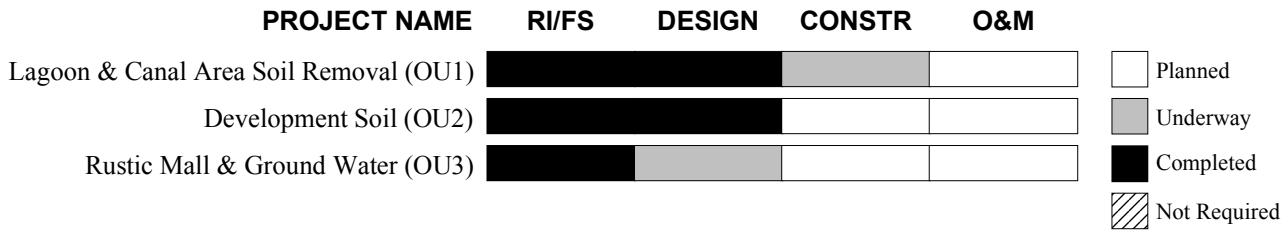
SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

A wood treatment facility operated at this site between 1910 and 1957. Activities at Federal Creosote Company entailed creosoting railroad ties and telephone poles. The excess creosote and creosote-contaminated residues were discharged into trenches and lagoons. These areas were covered with fill material after operations ceased. The Rustic Mall shopping center and the Claremont Development, a residential development consisting of 137 single-family homes, were constructed on the site in the 1960s.

In 1997, a sink hole developed around a sewer pipe at the development. Excavation around the pipe revealed the presence of a tar-like substance that was identified as creosote. USEPA and NJDEP subsequently determined there were two former creosote lagoons, drainage trenches and a drip area at the development. Indoor air testing showed that the creosote in the soil was not adversely affecting indoor air quality at the homes. In 1997, USEPA began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination in the soil and ground water and evaluate cleanup alternatives. USEPA added the Federal Creosote Company to the National Priorities List of Superfund sites (NPL) in 1999.

Based on the initial findings of the RI/FS, USEPA divided the investigation and cleanup of the site into three Operable Units (OU). OU1 encompasses the former lagoon and canal areas, where the highest levels of creosote contamination are present in the soil. OU2 encompasses other areas of the development where concentrations of creosote are lower than at OU1 but still exceed NJDEP's soil cleanup criteria. OU3 addresses contaminated soil at the Rustic Mall and the ground water.

USEPA issued a Record of Decision (ROD) with NJDEP concurrence for OU1 in 1999. The ROD required purchasing and demolishing approximately 19 homes, excavating the subsurface contaminated soil at the properties, treating and disposing of the soil at an off-site facility, and backfilling the excavations with clean soil. This work was begun in 2000 and is still underway. To date, 17 homes have been demolished and the soil from these properties remediated. In 2000, USEPA issued a ROD with NJDEP concurrence for OU2 that required excavation and off-site disposal of contaminated surface soil at approximately 54 residential properties. The Remedial Design for OU2 was completed in 2002 and soil removal activities at this area are underway. Approximately 135,000 tons of creosote contaminated soil have been removed from the OU1 and OU2 areas since remedial activities began. USEPA issued a ROD with NJDEP concurrence for OU3 in 2002. The ROD also required excavation and disposal of contaminated surface soil at the Rustic Mall, as well as long-term monitoring of contaminants in the ground water. The Remedial Design for OU3 is underway and expected to be complete in 2003.



Glenwood Terrace Ground Water Contamination

Glenwood Terrace Bridgewater Township Somerset County

BLOCKS: Various **LOTS:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

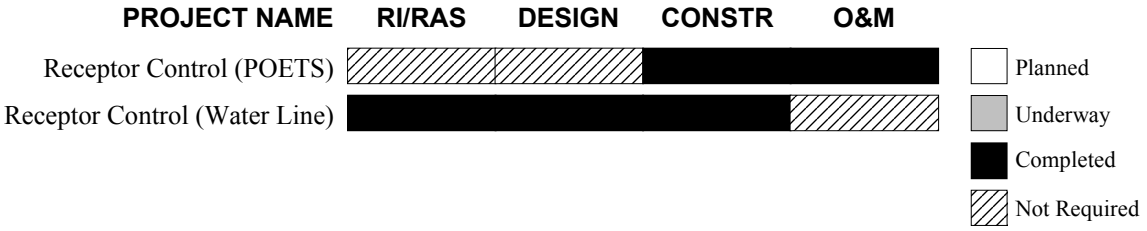
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
1981 Bond Fund	$34,000
1986 Bond Fund	$506,000
Corporate Business Tax	$20,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Bridgewater Township Health Department in 1991 identified seven private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water to the residents. NJDEP's Remedial Response Element subsequently delineated a Ground Water Impact Area (GWIA) for the site and completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was to extend public water lines to residences in the GWIA. The local water company and Bridgewater Township installed the water lines, connected the residences and sealed the private wells in 1998 using funds provided by NJDEP. Approximately 45 residences were connected to the public water supply during the project. The Remedial Response Element plans to sample private wells outside the GWIA in 2003 to monitor ground water quality. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Higgins Disposal Services Incorporated

121 Laurel Avenue Franklin Township Somerset County

BLOCK: 5 **LOT:** 171

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Illegal Dump
OPERATION STATUS: Inactive

PROPERTY SIZE: 38 Acres

SURROUNDING LAND USE: Agricultural/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Polychlorinated Biphenyls (PCBs)	Delineated
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs)	Removed

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$9,492,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Higgins Disposal Services operated a waste disposal facility at this site between the 1950s and 1985. The facility consisted of a waste transfer station, a trash compactor and an unpermitted landfill containing approximately 16,000 cubic yards of solid wastes. Two residences and two businesses, the Hasty Acres Riding Club and a vehicle repair garage, currently occupy the property. In 1985, the local health department determined that several nearby private potable wells were contaminated with volatile organic compounds. Eight residents were restricted from using their wells and advised to install Point-of-Entry Treatment (POET) systems in their homes. Sampling of on-site ground water monitor wells conducted in 1986 confirmed that the potable well contamination was due to the Higgins Disposal site.

In 1990, USEPA added Higgins Disposal Services to the National Priorities List of Superfund sites (NPL) and began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination in the soil and ground water and evaluate cleanup alternatives. During the RI/FS, USEPA identified several areas at the site where soil contamination and buried hazardous wastes were present. Between 1992 and 1996, USEPA removed 765 tons of PCB-contaminated soil from a riding ring used by the Hasty Acres Riding Club and excavated approximately 12,000 tons of contaminated soil and 7,000 containers, ranging in size from 40 milliliter glass vials to 55 gallon drums, from various other locations at the property.

In 1997, after completing the RI/FS, USEPA issued a Record of Decision (ROD) that required extraction and treatment of the contaminated ground water at the site, extension of public water lines to 11 additional residences and no further action for the soil. The ROD specified that the extracted ground water would be conveyed via a pipeline to the nearby Higgins Farm Superfund site for treatment by the existing ground water remediation system. While NJDEP concurred with the proposed ground water remedy, it did not concur with the no further action recommendation for the soil due to the presence of contaminants at levels exceeding New Jersey's soil cleanup criteria. In 1999, FMC Corporation, a Potentially Responsible Party for the site, removed the inactive landfill, excavated small areas of contaminated soil that exceeded NJDEP's cleanup standards and funded the extension of public water lines to 13 residences.

In 2001, FMC Corporation completed a Focused Feasibility Study that concluded installation of a separate ground water remediation system at the Higgins Disposal site was less costly and more feasible than conveying the contaminated ground water to the Higgins Farm site for treatment and disposal. Consequently, USEPA issued an Explanation of Significant Differences (ESD) in December 2002 that modified the final ground water remedy for the Higgins Disposal Superfund site to on-site extraction and treatment, followed by reinjection of the treated ground water. FMC Corporation will design and construct the ground water remediation system under the supervision of USEPA. The Remedial Design for the ground water remediation system is expected to be started in 2003.

Higgins Disposal Services Incorporated

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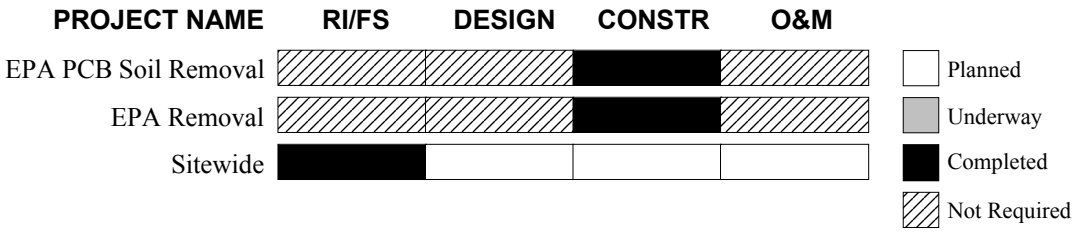


Higgins Farm

Route 518 Franklin Township Somerset County

BLOCK: 5 **LOT:** 26.01

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Illegal Dump
OPERATION STATUS: Inactive

PROPERTY SIZE: 75 Acres

SURROUNDING LAND USE: Agricultural/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Metals	Treating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds Semi-Volatile Organic Compounds Dioxins Metals	Removed
Surface Water	Volatile Organic Compounds Metals	Levels Not of Concern
Sediments	Semi-Volatile Organic Compounds Metals	Levels Not of Concern

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$24,361,000
Spill Fund	$71,000
1981 Bond Fund	$95,000
1986 Bond Fund	$1,213,000
Corporate Business Tax	$930,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Higgins Farm is an active cattle breeding farm. Drums containing chemical wastes were once buried at two areas of the property. The site became the subject of an NJDEP investigation in 1985 after elevated levels of chlorobenzene, a volatile organic compound, were discovered in a nearby private potable well. A geophysical survey revealed drums were buried at the northwest portion of the site approximately 40 yards from the contaminated well. The property owner excavated approximately 50 drums of chemical wastes and visibly contaminated soil from this area in 1986. NJDEP subsequently determined that three other private potable wells in the area were also contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. NJDEP installed Point-of-Entry Treatment (POET) systems on the four contaminated wells as an interim measure to provide potable water for the residents.

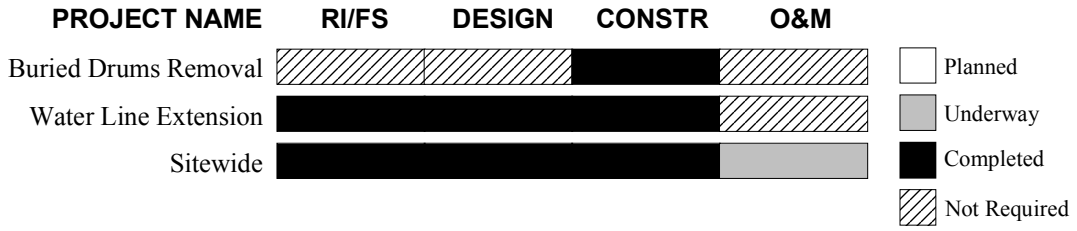
In 1989, USEPA added Higgins Farm to the National Priorities List of Superfund sites (NPL) and began a Remedial Investigation and Feasibility Study (RI/FS) to determine the nature and extent of the contamination and evaluate cleanup alternatives. In 1990, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that required installation of a public water line to replace the contaminated private potable wells and other wells in the area that were at risk of becoming contaminated. Twenty six residences were connected to the water line when it was completed in 1993. USEPA excavated 94 buried drums and contaminated soil from a second drum disposal area during a removal action in 1992.

Based on the findings of the RI/FS, USEPA determined that the ground water at the site was contaminated with a variety of volatile organic compounds, including tetrachloroethylene and benzene, as well as semi-volatile organic compounds and metals. The RI/FS also revealed that the soil at the property and the surface water and sediments in a pond were not significantly contaminated. In 1992, after completing the RI/FS, USEPA issued a second ROD for the site with NJDEP concurrence that required installation of an on-site remediation system to extract and treat the contaminated ground water, with discharge of the

Higgins Farm

(Continued from previous page)

treated water to an existing pond on the property. USEPA completed construction of the ground water remediation system in 1997 and is conducting operation and maintenance (O&M) of the system. Approximately 100,000 gallons of ground water are extracted and treated each day at the site. The ground water treatment is expected to continue for approximately 20 years.



McFarland's Service Station Bridgewater

555 Union Avenue West

Bridgewater Township **Somerset County**

BLOCK: 232 **LOT:** 36

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station/Car Wash
OPERATION STATUS: Active

PROPERTY SIZE: 1.4 Acres

SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Treating/Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Removed

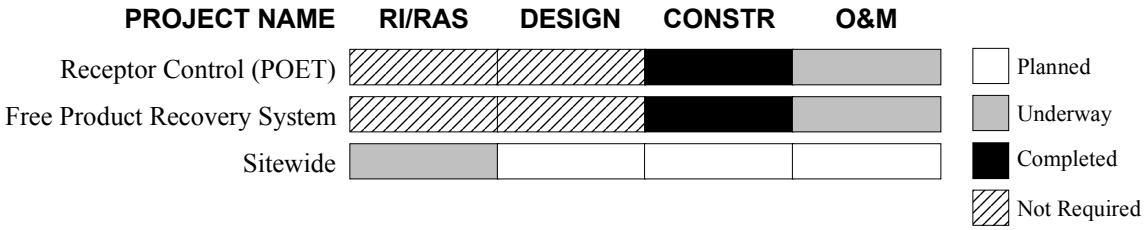
FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$190,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site, also known as McFarland's Pit Stop, operates as a gasoline service station and car wash. The underground fuel storage tanks and associated piping at the site were repaired and upgraded several times between 1975 and 1992. Leaks from this system caused the soil and ground water to become heavily contaminated with gasoline. In the early 1990s, floating gasoline product and dissolved gasoline-related contaminants were found in on-site ground water monitor wells. The ground water contamination migrated off site, contaminating potable wells at nearby residences and businesses. Gasoline vapors were also detected in nearby sewer lines and two neighboring buildings.

Between 1996 and 1998, the gas station owner conducted several remedial actions under the supervision of NJDEP's Responsible Party Remediation Element. These actions included installing an extraction system at the gas station to recover gasoline product and vapors from the ground water table and subsurface soil as well as excavating and disposing of three leaking underground storage tanks and 300 cubic yards of gasoline-contaminated soil. Twenty six properties with private drinking water wells that were determined to be contaminated with volatile organic compounds at levels above New Jersey Drinking Water Standards were connected to the public water line and a Point-of-Entry Treatment (POET) system was installed on a well at a commercial facility where no water line was available.

In 1998, the site was transferred to NJDEP's Remedial Response Element when private funds were no longer available to complete the cleanup. NJDEP is operating and maintaining the free product and vapor extraction system, monitoring the extent of the ground water plume and evaluating the effectiveness of the remedial actions. NJDEP has established the Currently Known Extent (CKE) of the ground water contamination near the site and is periodically sampling potable wells outside the CKE to monitor ground water quality.



Montgomery Township Housing Development

Robin Drive, Route 206 & Sycamore Lane

Montgomery Township **Somerset County**

BLOCK: 29002 **LOT:** 22 through 36

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 77 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineated
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

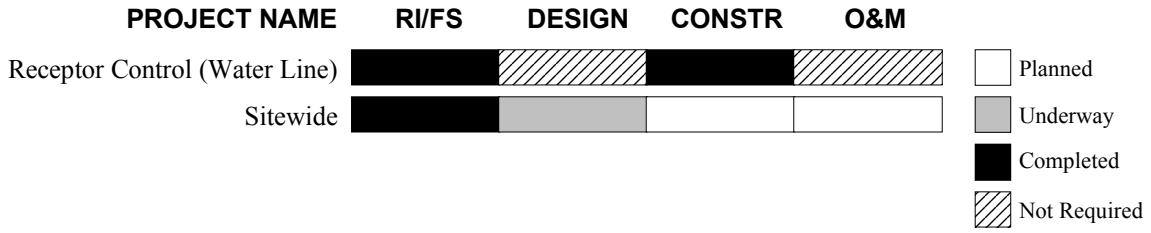
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$3,739,000
1981 Bond Fund	$42,000
Corporate Business Tax	$151,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site consists of approximately 77 private homes that were originally serviced by private potable wells. In 1978, trichloroethylene (TCE) contamination was found in the nearby Rocky Hill Municipal Well. The following year, private potable wells in the housing development were sampled and also found to have elevated levels of TCE. The source of the TCE contamination is believed to be a research facility on Route 518 in Montgomery Township.

USEPA placed the Montgomery Township Housing Development on the National Priorities List of Superfund sites in 1983. A Remedial Investigation and Feasibility Study (RI/FS) was initiated in 1986 to investigate this site along with the possibly related contamination at the Rocky Hill Municipal Well Superfund site. During the RI/FS, two Operable Units (OU) were established for the site: provision of a public water supply for the residents (OU1) and remediation of the contaminated ground water (OU2).

In 1987, USEPA signed a Record of Decision (ROD) with NJDEP concurrence for OU1 that required the extension of public water lines into the Montgomery Township Housing Development. The majority of the residents had their homes connected to the water line between 1981 and 1990, but six residents chose not to connect. In 1988, after the RI/FS was completed, USEPA issued a ROD with NJDEP concurrence for OU2 that required installation of a remediation system to extract and treat the contaminated ground water. The Remedial Design for the ground water remediation system was started in 1991 but subsequently suspended due to an imminent settlement between USEPA and the Potentially Responsible Parties. However, the negotiations were not successful and USEPA resumed work on the Remedial Design in 1999. USEPA and NJDEP reached a tentative financial settlement with the Potentially Responsible Parties for the site in 2002. USEPA expects to complete the Remedial Design for the ground water remediation system in 2003 and begin construction of the system later in the year.



Princeton Gamma Tech Incorporated

1026 Route 518 Montgomery Township Somerset County

BLOCK: 29002 **LOT:** 50

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Electronic Equipment Manufacturing
OPERATION STATUS: Active

PROPERTY SIZE: 3 Acres

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
No Public Funds Authorized to Date	

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Princeton Gamma Tech Incorporated (PGT) has manufactured radar detection and laboratory analysis equipment at this facility since 1968. The facility is adjacent to the Montgomery Township Housing Development and Rocky Hill Municipal Well Superfund sites. A Remedial Investigation completed in 1988 for the Montgomery Township Housing Development and Rocky Hill Municipal Well sites concluded that PGT was the most likely source of the ground water contamination at those sites. An on-site septic tank is suspected as one source of the contamination. USEPA subsequently filed suit against PGT for cost recovery in connection with both the Montgomery Township Housing Development and Rocky Hill Municipal Well sites. USEPA and NJDEP reached a tentative financial settlement with PGT and other Potentially Responsible Parties for the site in 2002. All work at this site will be conducted as part of the Montgomery Township Housing Development and Rocky Hill Municipal Well Superfund sites.

Rocky Hill Municipal Well

Washington Street — Rocky Hill Borough — Somerset County

BLOCK: 6 **LOT:** 1

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 2.0 Acres

SURROUNDING LAND USE: Residential

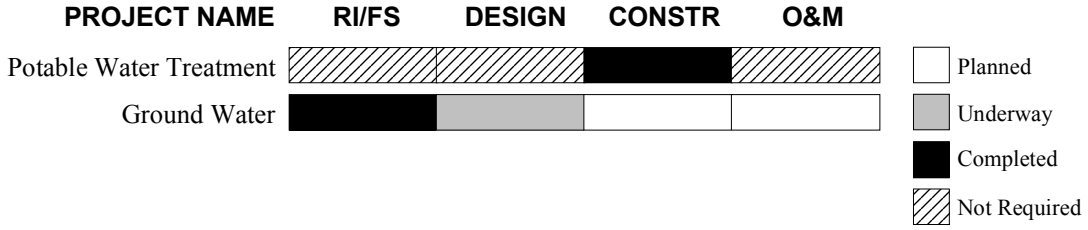
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineated
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$3,296,000
Corporate Business Tax	$241,000
1981 Bond Fund	$13,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Rocky Hill Municipal Well supplies drinking water to approximately 1,000 residents of Rocky Hill Borough. In 1978, a Rutgers University study revealed that the well was contaminated with the volatile organic compound trichloroethylene (TCE). The source of the TCE contamination is believed to be a research facility on Route 518 in Montgomery Township. In 1983, USEPA placed the site on the National Priorities List of Superfund sites (NPL) and the Borough installed an air stripper on the well to remove the contaminants from the water. Operation and maintenance (O&M) of the air stripper is being performed by the Borough.

Between 1986 and 1988, NJDEP conducted a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination and evaluate cleanup alternatives. This work was conducted jointly with the RI/FS for the Montgomery Township Housing Development Superfund site. In 1988, USEPA signed a Record of Decision (ROD) for the site with NJDEP concurrence that required installation of a remediation system to extract and treat the contaminated ground water. The Remedial Design of the ground water remediation system was started in 1991 but subsequently suspended due to an imminent settlement between USEPA and the Potentially Responsible Parties. However, the negotiations were not successful and USEPA resumed work on the Remedial Design in 1999. USEPA and NJDEP reached a tentative financial settlement with the Potentially Responsible Parties for the site in 2002. USEPA expects to complete the Remedial Design for the ground water remediation system in 2003 and begin construction of the system later in the year.



Route 202 Corridor Ground Water Contamination

Route 202 Branchburg Township Somerset County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential/Commercial

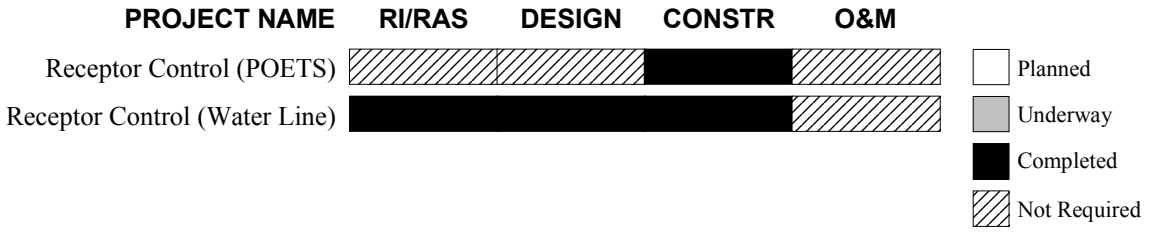
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Suspected

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$622,000
1986 Bond Fund	$130,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Branchburg Township Health Department in 1991 identified 12 private potable wells at residential and commercial properties along a mile stretch of Route 202 that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the occupants. NJDEP's Remedial Response Element subsequently delineated a Ground Water Impact Area (GWIA) for the project that encompassed approximately 50 residential and commercial properties. Branchburg Township extended public water lines to the properties within the GWIA, as well as other properties in the general area, in 1997. NJDEP funded the portions of the water lines that were located within the GWIA.

NJDEP's Remedial Response Element is conducting Remedial Investigations and Remedial Action Selections (RI/RAS) at an auto repair shop and a gasoline service station in Branchburg Township where the ground water contamination may have originated. A third Potentially Responsible Party is conducting an investigation of his gasoline service station under the supervision of NJDEP's Responsible Party Remediation Element. NJDEP is conducting additional investigative work to identify other possible sources of the ground water contamination in the area.



Route 22 Petroleum

1070 & 1074 Route 22 East

Bridgewater Township **Somerset County**

BLOCK: 5304 **LOT:** 2, 3 & 4

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 0.5 Acre

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$127,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

In 1995, volatile organic compounds at levels exceeding New Jersey Drinking Water Standards were detected in private potable wells at a residential property and a commercial property on Route 22. NJDEP identified two gasoline service stations in the area, Route 22 Petroleum (also known as Mr. Gas) and Carbo's Sunoco, as Potentially Responsible Parties for the contamination. NJDEP's Responsible Party Remediation Element directed both Potentially Responsible Parties to install Point-of-Entry Treatment (POET) systems on the contaminated wells. The owner/operator of the Sunoco station installed POET systems on the two wells in response to the directive in 1997; however, sampling of the effluent water from the POET systems continued to show elevated levels of gasoline-related compounds.

In 1999, the potable well contamination was referred to NJDEP's Remedial Response Element as an Immediate Environmental Concern (IEC) case. The Elizabethtown Water Company extended public water lines to the properties with contaminated private potable wells in 2001 using funds provided by NJDEP. The owners/operators of the Sunoco station and Route 22 Petroleum also contributed funds for the water line installation project. Investigation and cleanup of the two service stations is being conducted by the Potentially Responsible Parties under the supervision of the Responsible Party Remediation Element.

Roycefield Road Ground Water Contamination

Roycefield Road Hillsborough Township Somerset County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

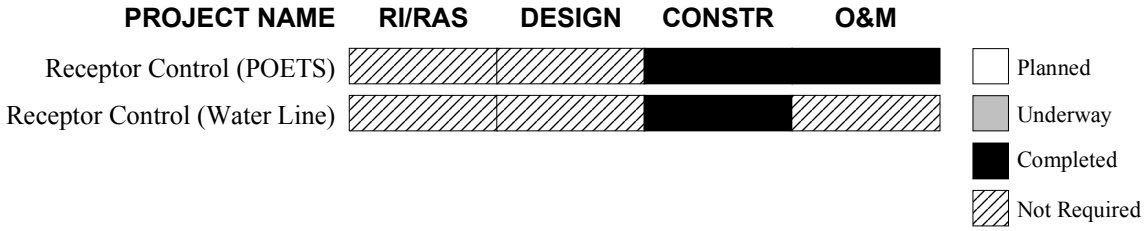
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$29,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by Hillsborough Township Health Department in 2001 identified five private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. Hillsborough Township extended public water lines to the affected homes and sealed the contaminated wells in 2001 as a final remedy. NJDEP's Remedial Response Element subsequently reimbursed the Township for the cost of the water line installation and well sealing through the New Jersey Spill Fund. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Somerville Borough Sanitary Landfill

Route 206 East — Somerville Borough — Somerset County

BLOCK: 124 **LOT:** 1 & 21

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Sanitary Landfill
OPERATION STATUS: Inactive

PROPERTY SIZE: 47 Acres

SURROUNDING LAND USE: Commercial/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Confirmed
Soil	Volatile Organic Compounds Metals	Potential
Surface Water	Volatile Organic Compounds Metals	Potential
Sediments	Volatile Organic Compounds Metals	Potential
Air	Methane	Confirmed

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$15,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Borough of Somerville operated a sanitary landfill facility at this site between 1959 and 1984. It is located within the floodplain of the Raritan River and is separated into two sections by an intermittent stream. Although the exact size of the landfilled area is unknown, it is estimated to comprise 40 acres of the 47-acre property. Residential and commercial wastes, construction debris and possibly industrial wastes were deposited in the unlined landfill while it was in operation. The facility was closed after it reached capacity and NJDEP rejected a proposal from Somerville Borough to expand the landfill. Somerville Borough submitted a closure plan for the landfill that included installation of a clay cap, methane gas venting system, leachate collection system and storm water runoff controls in anticipation of constructing a shopping mall on the site. However, due to lack of a financial assurance plan for the project and the subsequent bankruptcy of the shopping mall developer, NJDEP did not approve the closure plan. Recent monitor well sampling results show that the ground water is contaminated with volatile organic compounds at levels exceeding New Jersey Ground Water Quality Standards. In addition, landfill debris has been noted protruding from the sides of the intermittent stream during recent inspections.

NJDEP's Remedial Response Element is implementing closure actions at the landfill to prevent the release of methane, a greenhouse gas, from the waste fill and mitigate the impact of landfill leachate on the environment. NJDEP is reviewing the landfill's history and past sampling results to obtain preliminary information for the landfill closure project. NJDEP plans to conduct an Immediate Environmental Concern Assessment at the site in 2003 to identify conditions that could present immediate threats to human health or the environment.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Spring Lane Well Contamination

Spring Lane — Warren Township — Somerset County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

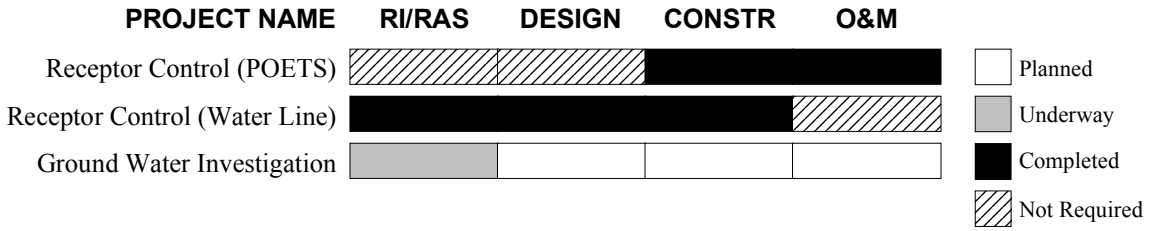
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided
Soil	Volatile Organic Compounds	Investigating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$653,000
1986 Bond Fund	$169,000
Corporate Business Tax	$700,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Warren Township Board of Health and NJDEP in 1992 identified eight private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants are carbon tetrachloride and chloroform. The source of the contamination is unknown. NJDEP installed Point-of-Entry Treatment (POET) systems on the wells as an interim measure and in 1995 provided funds to the Elizabethtown Water Company to extend public water lines to residences in the Ground Water Impact Area (GWIA) as a permanent remedy.

NJDEP's Remedial Response Element is conducting a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the soil and ground water contamination, evaluate cleanup alternatives and identify possible sources. NJDEP installed monitor wells in the area during 2000 and 2001 and is periodically sampling the wells to evaluate ground water quality. NJDEP conducted indoor air testing at six homes in the area in 2002 to determine whether contaminants were volatilizing from the ground water and entering the buildings, but no organic vapors were detected. Additional soil and ground water sampling is scheduled for 2003.



Sunoco Service Station Branchburg Township

954 Route 202 South Branchburg Township Somerset County

BLOCK: 44 **LOT:** 30

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 0.7 Acre

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineating
Soil	Volatile Organic Compounds	Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$17,500
Corporate Business Tax	$907,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is also known as the former Shoplock's Sunoco Service Center. It is located within the Ground Water Impact Area (GWIA) of the Route 202 Corridor Ground Water Contamination case. In 1988, shortly after acquiring the property, the service station owner reported an apparent loss of product from the underground storage tanks. The service station owner subsequently removed the leaking underground tanks and installed several monitor wells at the site. Sampling of the monitor wells confirmed the ground water was contaminated with volatile organic compounds. NJDEP directed the service station owner to investigate the site and take appropriate remedial actions, but the owner did not comply. NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) in 1997 to delineate the contamination at the site and evaluate remedial alternatives. The Remedial Response Element is reviewing the initial findings of the soil and ground water sampling phase of the RI. Additional sampling is planned to further delineate the contamination.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Sunset Ridge Ground Water Contamination

Sunset Ridge — Bridgewater Township — Somerset County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

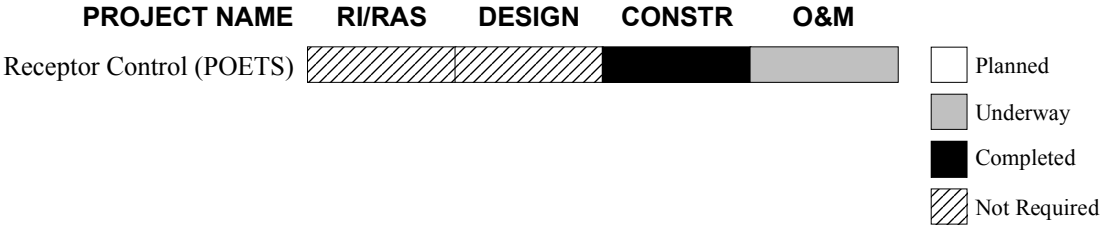
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Chlordane	Confirmed
Potable Water	Chlordane	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$5,000
1981 Bond Fund	$34,000
Corporate Business Tax	$20,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sunset Ridge is a residential development adjacent to Route 202/206 in Bridgewater Township. Sampling conducted by the Bridgewater Health Department and NJDEP's Remedial Response Element between 2000 and 2002 identified six private potable wells in this area that were contaminated with Chlordane at levels exceeding the New Jersey Drinking Water Standard for this pesticide. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element delineated the Currently Known Extent (CKE) of the potable well contamination in 2002 and is evaluating long-term water supply alternatives for the area. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Tysley Road Ground Water Contamination

Tysley Road Bernardsville Borough Somerset County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

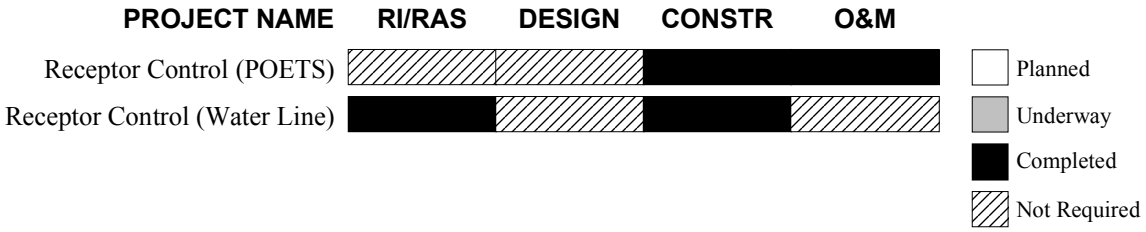
SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tetrachloroethylene	Confirmed
Potable Water	Tetrachloroethylene	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$10,000
Corporate Business Tax	$153,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

In 1998, during an investigation of two nearby service stations, NJDEP's Responsible Party Remediation Element identified two private potable wells on Tysley Road that were contaminated with tetrachloroethylene (also known as perchloroethylene, or PCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. Since the PCE is not believed to have originated from either of the service stations, the potable well contamination case was referred to NJDEP's Remedial Response Element for further investigation. The Remedial Response Element identified one other home in the area that was not connected to the public water line and sampling of this well revealed similar contamination. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure. In 2001, NJDEP provided funds to connect all of the affected homes to the public water supply as a final remedy. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.



Woods Road Ground Water Contamination

Woods Road Hillsborough Township Somerset County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

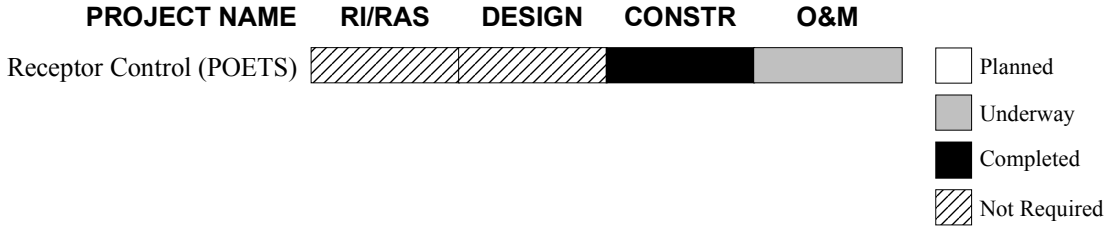
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

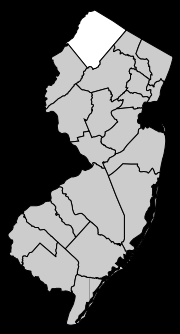
FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$50,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Hillsborough Township Health Department in 1990 identified six private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminant was trichloroethylene (TCE). Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP to supply potable water for the residents. NJDEP's Remedial Response Element subsequently completed a water supply alternatives analysis that concluded the most cost-effective long-term remedy was the continued use of POET systems at the affected homes. Additional investigative work is underway to identify possible sources of the ground water contamination at this site.



Sussex County



SUSSEX

Sussex County Index of Sites

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Metaltec Aerosystems	5
Route 206 Andover	6

Cranberry Lake Ground Water Contamination

Lakeview Trail & Hillcrest Trail Area Byram Township Sussex County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

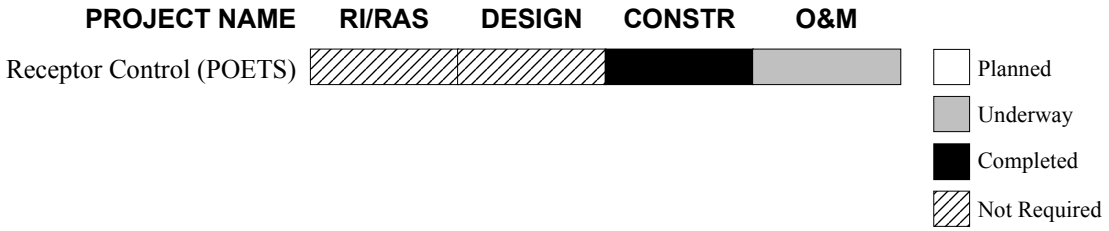
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Delineated
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$32,000
Corporate Business Tax	$25,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Cranberry Lake is a recreational lake surrounded by a densely populated community where many of the residents rely on private wells for potable water supplies. In 1990, low levels of chlorinated volatile organic compounds were discovered in several private wells at residences on the northern end of the lake. Point-of-Entry Treatment (POET) systems were installed with funds provided by NJDEP on the two wells that were contaminated at levels exceeding New Jersey Drinking Water Standards. Sampling conducted by the Sussex County Health Department and NJDEP's Remedial Response Element between 1997 and 2000 identified nine private potable wells in the area that were contaminated with methyl tertiary-butyl ether (MTBE) at levels exceeding the Drinking Water Standard for this compound and POET systems were also installed in these homes. Based on the sampling results, NJDEP delineated the Currently Known Extent (CKE) of the potable well contamination. The chlorinated volatile organic and MTBE contamination are believed to have resulted from one-time discharges by unregulated parties (i.e., surface spillage by a resident), therefore a source investigation is not planned. Since the local water purveyor is not able to provide water service to any additional residences in the area, the continued use of POET systems at the affected residences has been selected as the long-term remedy for this site. NJDEP is periodically sampling private potable wells outside the CKE to monitor ground water quality.



GESG Reclamation Materials Inc.

41 Lenape Road — Andover Borough — Sussex County

BLOCK: 24 **LOT:** 36.03

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Waste Processing
OPERATION STATUS: Inactive

PROPERTY SIZE: 8 Acres

SURROUNDING LAND USE: Commercial/Residential/Industrial

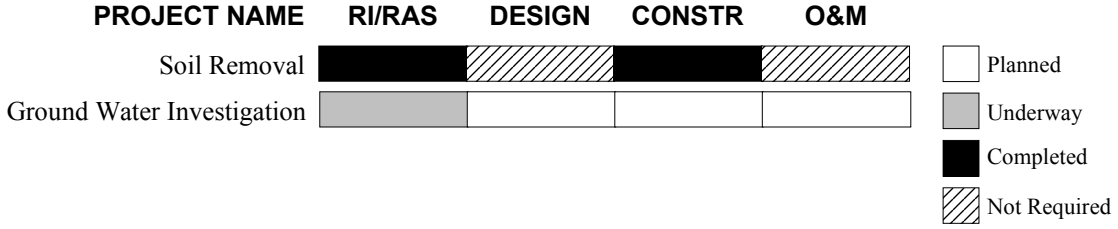
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Metals	Delineating
Soil	Polychlorinated Biphenyls (PCBs) Semi-Volatile Organic Compounds Petroleum Hydrocarbons Metals	Removed
Sediments	Polychlorinated Biphenyls (PCBs) Semi-Volatile Organic Compounds Petroleum Hydrocarbons Metals	Investigating

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$520,000
Corporate Business Tax	$1,319,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

GESG Reclamation Materials Inc. blended contaminated construction debris with sand and gravel at this site to generate fill material for use at other locations. The facility ceased operations in 1992. Preliminary sampling by NJDEP in 1992 indicated the soil at GESG was contaminated with polychlorinated biphenyls (PCBs), metals, semi-volatile organic compounds and petroleum hydrocarbons. NJDEP directed the Potentially Responsible Party for the site to investigate the contamination and take appropriate remedial measures, but the Potentially Responsible Party did not comply. The site is several hundred feet from a public supply well operated by the Andover Borough, but testing has shown that water from the well meets New Jersey Drinking Water Standards. Two other nearby properties that allegedly received contaminated fill from GESG, the Route 206 site in Andover Borough and the Hemlock Avenue Landfill in Andover Township, are also under investigation by NJDEP.

In 1996, NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination in the soil, ground water and sediments at the GESG site and evaluate cleanup alternatives. Based on the initial findings of the RI, NJDEP implemented three removal actions between 1997 and 2001 to excavate and dispose of approximately 3,500 cubic yards of contaminated soil. Sampling has indicated that the sediments in a small wetlands area at the site are not contaminated but additional investigation is planned for this media. NJDEP created a small area of wetlands at the neighboring Route 206 Andover site in 2002 to replace wetlands that were destroyed during the excavation of contaminated soil there. NJDEP plans to install monitor wells at the site in 2003 to evaluate the ground water.



Hemlock Avenue Landfill

Hemlock Avenue Andover Township Sussex County

BLOCK: 60 **LOT:** 4.06

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Illegal Disposal Site
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 130 Acres

SURROUNDING LAND USE: Forest

MEDIA AFFECTED	CONTAMINANTS	STATUS
Soil	Polychlorinated Biphenyls (PCBs) Semi-Volatile Organic Compounds Metals Petroleum Hydrocarbons	Delineated

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$189,000
Corporate Business Tax	$30,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Contaminated fill derived from operations at the nearby GESG Reclamation Materials, Inc. facility was deposited on this property in 1992. Sampling by NJDEP between 1993 and 1995 indicated that the soil was contaminated with polychlorinated biphenyls (PCBs), semi-volatile organic compounds, petroleum hydrocarbons and metals. NJDEP directed the Potentially Responsible Parties for the site to evaluate the contamination and take appropriate remedial measures, but they did not comply. NJDEP's Remedial Response Element subsequently conducted a Remedial Investigation and Remedial Action Selection (RI/RAS) to delineate the contamination and evaluate remedial alternatives. The RI/RAS revealed approximately 5,000 cubic yards of contaminated soil is present at the site. NJDEP is reviewing alternatives to address the contaminated soil and expects to select a final remedial action in 2003.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Sitewide				

Planned
Underway
Completed
Not Required

Metaltec Aerosystems

Wildcat Road — Franklin Borough — Sussex County

BLOCK: 64 **LOT:** 13

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Metal Products Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 16 Acres

SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds Metals	Delineated
Potable Water	Volatile Organic Compounds Metals	Alternate Water Supply Provided
Soil	Volatile Organic Compounds Metals	Removed

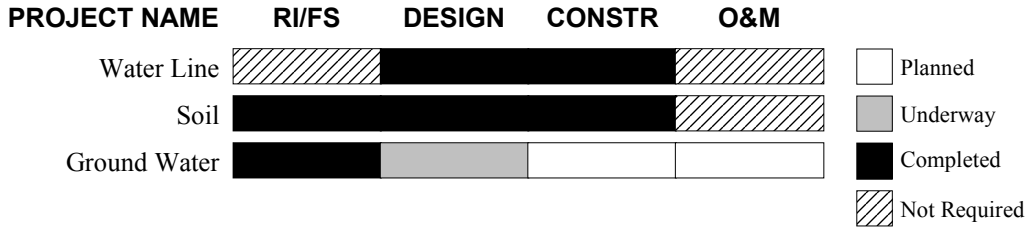
FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$17,515,000
1981 Bond Fund	$1,000,000
Hazardous Discharge Site Cleanup Fund	$435,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Metaltec Aerosystems manufactured pen and lipstick casings at this site between 1965 and 1980. Operations at the site caused the soil and ground water to become contaminated with volatile organic compounds and metals. The contaminated ground water migrated off site, resulting in the closure of three residential drinking water wells and the Borough's backup water supply well in 1980. USEPA added the Metaltec Aerosystems facility to the National Priorities List of Superfund sites (NPL) in 1983.

In 1984, USEPA began a Remedial Investigation and Feasibility Study (RI/FS) to determine the nature and extent of the contamination at the site and evaluate cleanup alternatives. The RI/FS revealed that four parcels of soil and both the shallow and bedrock aquifers were contaminated. USEPA signed the first Record of Decision (ROD) for the site with NJDEP concurrence in 1986. The ROD required excavation, treatment and off-site disposal of the contaminated soil, implementation of a supplemental ground water investigation, and provision of an alternate water supply to the Borough to replace lost drinking water capacity due to the closure of the backup water supply well. By 1988, USEPA had removed approximately 4,900 cubic yards of soil from three of four contaminated parcels at the site. An alternate water supply pipeline to provide the Borough with water from two privately developed wells was completed in 1991.

In 1990, after completing a study of the ground water at the site, USEPA signed a second ROD with NJDEP concurrence that required installation of a remediation system to extract and treat the contaminated ground water. Additional investigative work is being performed as part of the Remedial Design for the ground water remediation system. USEPA completed remediation of the fourth parcel of contaminated soil in 1995. Approximately 10,500 cubic yards of contaminated soil have been removed from the site since remedial activities began.



Route 206 Andover

Route 206 North (Main Street) Andover Borough Sussex County

BLOCK: 24 **LOT:** 25

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Vacant Lot
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 3.2 Acres

SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Lead	Delineating
Soil	Semi-Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Metals	Partially Removed/Delineated
Sediments	Semi-Volatile Organic Compounds	Levels Not of Concern

FUNDING SOURCES	AMOUNT AUTHORIZED
1986 Bond Fund	$1,433,000

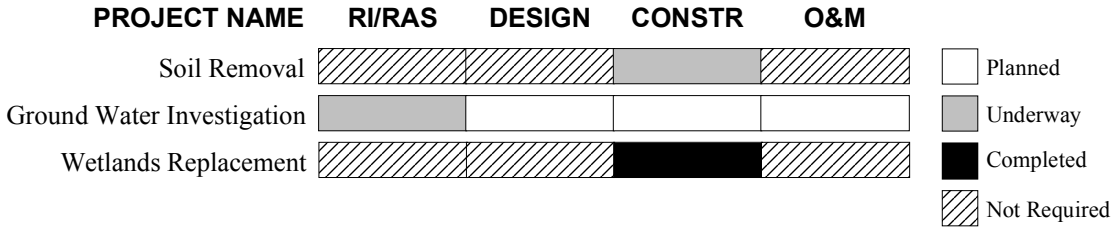
SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is a vacant lot adjacent to Route 206 in Andover Borough. It has a wetlands area and a small unnamed stream borders the property. Contaminated fill derived from operations at the nearby GESG Reclamation Materials, Inc. site was deposited at the property in 1992. Preliminary sampling by NJDEP in 1995 indicated that soil was contaminated with polychlorinated biphenyls (PCBs), metals and semi-volatile organic compounds.

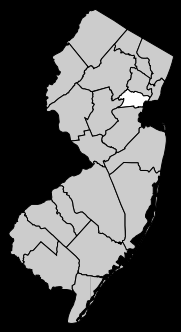
NJDEP's Remedial Response Element began a Remedial Investigation and Remedial Action Selection (RI/RAS) in 1997 to delineate the contamination at the site and evaluate cleanup alternatives. Initial sampling confirmed the soil was contaminated with PCBs, semi-volatile organic compounds and metals at levels exceeding NJDEP's cleanup criteria. In 2000, NJDEP excavated and disposed of 5,800 cubic yards of contaminated soil and backfilled the excavations with clean materials. NJDEP is reviewing post-excavation sampling results to determine whether additional remedial actions are necessary to address the soil at the site.

Sampling of the stream sediments conducted during the RI revealed low levels of semi-volatile organic compounds. However, this contamination was also found in off-site (upstream) samples and is therefore not attributed to the site. NJDEP does not plan to conduct additional sampling of the wetlands and stream sediments. NJDEP created a small area of wetlands adjacent to the existing wetlands in 2002 to replace wetlands that were destroyed during excavation of contaminated soil at the neighboring GESG site.

The ground water investigation phase of the RI/RAS is ongoing. NJDEP plans to install monitor wells at the site in 2003 to delineate the ground water contamination.



Union County



UNION

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Site Name	Page #
1st Street Ground Water Contamination	2

1st Street Ground Water Contamination

1st Street — Plainfield City — Union County

BLOCK: 207 **LOT:** 25, 26, 30-36

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

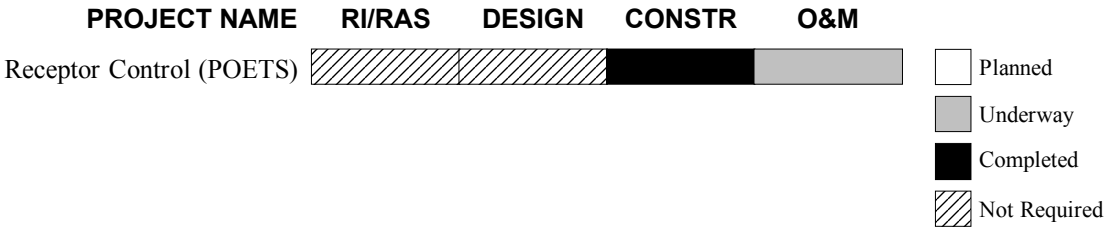
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating/Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$10,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by NJDEP's Remedial Response Element in 2001 identified nine private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element plans to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area in 2003.



Warren County

WARREN

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Site Name	Page #
Edison Road & Cliffside Drive Ground Water Contamination	2
Hope Auto Care	3
Independence Township Ground Water Contamination	4
Petro 31	5
Pohatcong Valley Ground Water Contamination	6

Edison Road & Cliffside Drive Ground Water Contamination

Edison Road & Cliffside Drive

Franklin Township **Warren County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

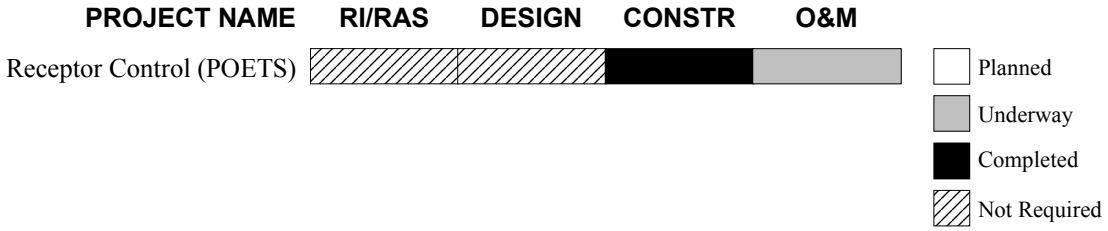
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Trichloroethylene	Confirmed
Potable Water	Trichloroethylene	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$58,000
Corporate Business Tax	$50,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Warren County Health Department and NJDEP's Response Element in 2002 identified 50 private potable wells in this area that were contaminated with trichloroethylene (TCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. The source of the contamination is unknown. Point-of-Entry Treatment (POET) systems were installed on the wells with funds provided by NJDEP as an interim measure to supply potable water for the residents. The Remedial Response Element plans to sample additional nearby potable wells in 2003 and will use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term water supply alternatives for the area.



Hope Auto Care

Route 611 — Hope Township — Warren County

BLOCK: 100 **LOT:** 2600

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Auto Repair Facility
OPERATION STATUS: Active

PROPERTY SIZE: 1 Acre

SURROUNDING LAND USE: Residential

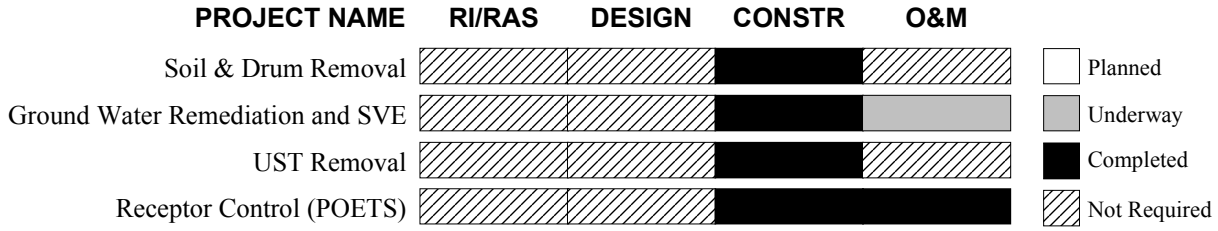
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Treating
Potable Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds	Partially Removed/Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$418,000
Hazardous Discharge Site Cleanup Fund	$455,000
Underground Storage Tanks Trust Fund	$181,000
1986 Bond Fund	$120,000
Corporate Business Tax	$206,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Hope Auto Care site is located in a rural area where residents rely on private wells for potable water supplies. Formerly a gasoline service station, the site currently operates as an automotive repair facility. While the facility was a service station, several underground tanks were used for the storage of gasoline, kerosene and waste oil. In 1989, the property owner excavated two leaking underground storage tanks that had contaminated the soil and ground water. Approximately 90 tons of petroleum hydrocarbon-contaminated soil were removed along with the tanks but some contaminated soil was left in place. Gasoline-related volatile organic compounds were detected in two nearby private potable wells and the Hope Auto Care facility was identified as a Potentially Responsible Party for the contamination.

In 1990, NJDEP's Remedial Response Element installed Point-of-Entry Treatment (POET) systems on the contaminated private potable wells, began a long-term potable well sampling program to protect other residents with private wells in the area, and installed a remediation system to extract and treat the contaminated ground water at the site. NJDEP subsequently installed a soil vapor recovery extraction (SVE) system at the site to address the residually-contaminated subsurface soil, excavated the two remaining underground storage tanks and 150 additional tons of petroleum hydrocarbon-contaminated soil. NJDEP shut down the ground water remediation system in 1996 after sampling of on-site monitor wells showed that the contaminant levels in the ground water were below New Jersey Drinking Water Standards. However, subsequent sampling indicated that the contaminant levels had increased to slightly above ground water quality criteria. NJDEP restarted the ground water treatment system in 1999 and will continue to operate the system until ground water quality criteria are achieved.



Independence Township Ground Water Contamination

Route 46, Asbury Road & Ketchum Road

Independence Township **Warren County**

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

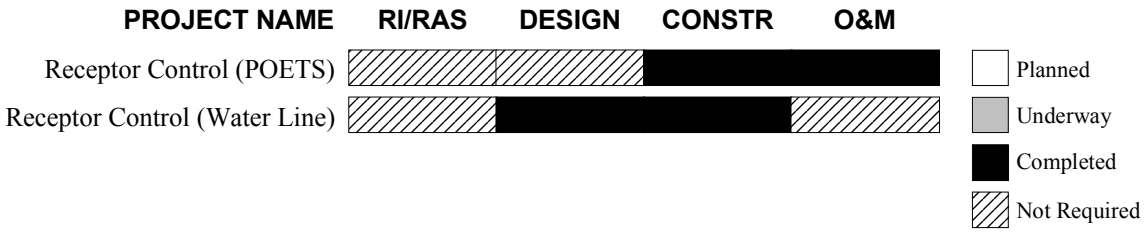
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Alternate Water Supply Provided

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	$511,000
1981 Bond Fund	$226,000
1986 Bond Fund	$3,664,000
Corporate Business Tax	$40,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Ground water contamination was discovered in this area in 1992, after sampling of a residential drinking water well indicated elevated levels of chlorinated volatile organic compounds. The Warren County Health Department subsequently tested 233 private potable wells in the Township and determined 49 of the wells were contaminated with chlorinated volatile organic compounds at levels exceeding New Jersey Drinking Water Standards, while others had traces of the same compounds. NJDEP installed Point-of-Entry Treatment (POET) systems on the wells that were contaminated above Drinking Water Standards as an interim measure to supply potable water for the residents. NJDEP's Remedial Response Element delineated a Ground Water Impact Area (GWIA) for the site and completed a Remedial Action Selection (RAS) that concluded the most cost-effective long-term remedy was to extend public water lines to the 148 properties within the GWIA. Independence Township used funds provided by NJDEP to construct the water lines, connect the homes in the project area and restore the landscaping and roads. All activities related to the water line installation project were completed in 2001. NJDEP has identified a manufacturer of photoelectric devices that is located within the GWIA as a Potentially Responsible Party for the ground water contamination.



Petro 31

440 Route 31 North Washington Borough Warren County

BLOCK: 78 **LOT:** 9.01

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Gasoline Service Station
OPERATION STATUS: Active

PROPERTY SIZE: 0.5 Acre

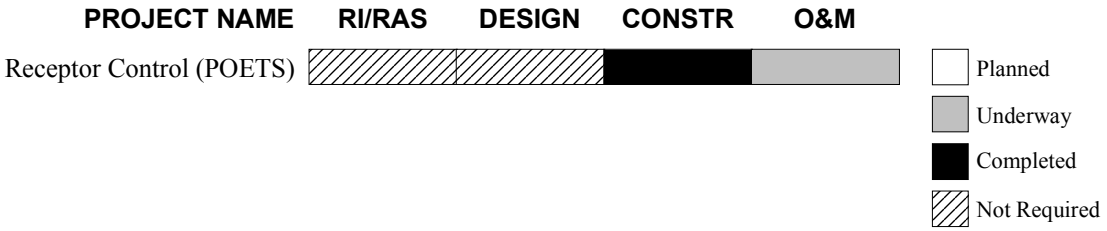
SURROUNDING LAND USE: Residential

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Volatile Organic Compounds	Confirmed
Potable Water	Volatile Organic Compounds	Treating

FUNDING SOURCES	AMOUNT AUTHORIZED
Corporate Business Tax	$200,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This gasoline service station is located at the intersection of Route 31 and Asbury-Anderson Road. In 2001, after learning that a nearby private potable well was contaminated with the gasoline additive methyl tertiary-butyl ether (MTBE), NJDEP directed the owner of Petro 31 to investigate the service station for discharges and sample additional potable wells in the area. The owner removed contaminated soil and leaking underground storage tanks from the property and conducted sampling that revealed five additional nearby private wells were contaminated with MTBE at levels exceeding the New Jersey Drinking Water Standard for this compound. The owner installed Point-of-Entry Treatment (POET) systems on the contaminated wells to supply potable water for the residents but did not monitor or maintain the units. NJDEP's Remedial Response Element will monitor and maintain the POET systems and sample additional private potable wells in the area to monitor ground water quality.



Pohatcong Valley Ground Water Contamination

Route 643 to Route 31 Washington Township Warren County

BLOCK: Various **LOT:** Various

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: 5,600 Acres

SURROUNDING LAND USE: Residential/Industrial

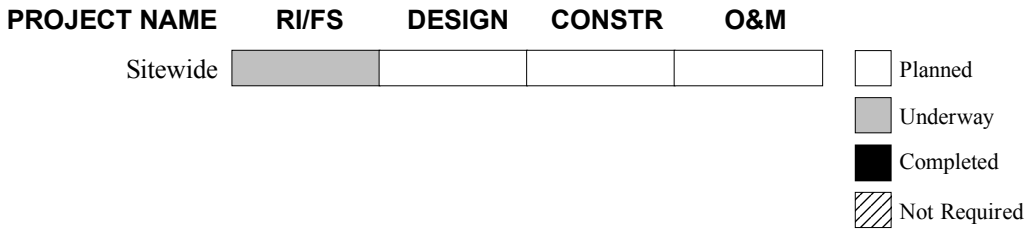
MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Trichloroethylene Tetrachloroethylene	Delineating
Potable Water	Trichloroethylene Tetrachloroethylene	Alternate Water Supply Provided/Treating
Soil	Trichloroethylene Tetrachloroethylene	Investigating/Delineating

FUNDING SOURCES	AMOUNT AUTHORIZED
Superfund	$6,600,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Kittatinny Limestone Aquifer, which serves as the sole source of potable water for private wells and municipal wells in the Pohatcong Valley, is contaminated by volatile organic compounds from an unknown source. The site encompasses portions of Franklin Township, Washington Township and Washington Borough. The contamination was discovered in the late 1970s, when high levels of tetrachloroethylene (also known as perchloroethylene, or PCE) were detected in two local public supply wells. One of the supply wells was closed and a carbon filtration system was installed on the other to remove the contaminants from the water. In the mid-1980s, the Warren County Health Department determined that private potable wells at 79 properties in the region were contaminated with volatile organic compounds. These properties were connected to the public water supply system in 1988. The following year, USEPA added the Pohatcong Valley Ground Water Contamination to the National Priorities List of Superfund sites (NPL).

USEPA is conducting a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination, evaluate cleanup alternatives and identify possible sources. The field work for the RI/FS began in 1999 and has entailed installing ground water monitor wells and temporary well points, sampling private wells at off-site properties, and conducting soil sampling, soil gas surveys, aquifer testing and a geological survey. The RI/FS includes evaluation of ten potential source areas. Sampling of potable wells at approximately 30 residences did not reveal any additional wells that are contaminated at levels exceeding Drinking Water Standards. USEPA will use the findings of the RI/FS to select the final remedial actions to address the contamination, which will be outlined in a Record of Decision (ROD) for the site.



Other Sites

Listed below are other sites in the Remedial Response Element where the necessary remedial work has been completed, the site is awaiting transfer outside of the Element, or the site is awaiting assignment within the Element based on its relative priority to other sites. These sites do not require full site descriptions; nevertheless, they are included here to be consistent with the "Known Contaminated Sites in New Jersey" report.

Brooks Avenue Ground Water Contamination
Berkeley Township, Ocean County

Nine private potable wells in this area were determined to be contaminated with benzene and 1,2 dichloroethane in 1993. Berkeley Township subsequently extended water lines to the affected residences using Spill Fund money provided by NJDEP. NJDEP has identified a nearby gas station as a possible source of the ground water contamination at this site.

Gallagher's Pizza and Deli
Stillwater Township, Sussex County

A Point-of-Entry Treatment System was installed on an on-site contaminated potable well by the Remedial Response Element in 1992. This has since been removed and no further actions are planned.

Garrison Road Ground Water Contamination
Vineland City, Cumberland County

Sixteen private potable wells in this area were determined to be contaminated with mercury and chlorinated volatile organic compounds in 1991. Vineland City subsequently extended public water lines to the affected residences using Spill Fund money provided by NJDEP. NJDEP has identified the Iceland Coin Laundry & Dry Cleaning facility as a possible source of the ground water contamination at this site.

Mosior Residence
Bloomfield Township, Essex County

In 1992, gasoline vapors from the neighboring Semonian Service Station entered the basement of this residence. NJDEP's Remedial Response Element installed a soil vapor extraction system (SVE) to prevent the vapors from entering the house. The SVE was shut down in 1996 when vapors could no longer be detected. The service station owner is addressing the soil and ground water contamination at his site under the supervision of NJDEP's Responsible Party Remediation Element.

North West Avenue and Garden Road Ground Water Contamination
Vineland City, Cumberland County

In the late 1980s, private potable wells in this area were determined to be contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard. All residences in the area were connected to public water lines by 1990. NJDEP is periodically sampling other private potable wells in the immediate area to monitor the extent of the ground water plume.

Pineland Park Landfill
Egg Harbor Township, Atlantic County

In the mid-1980s, private potable wells near this site were determined to be contaminated with several volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Residences in the area were subsequently connected to public water lines. NJDEP is periodically sampling other private potable wells in immediate area to monitor the extent of the ground water plume.

Silverton Ground Water Contamination
Dover Township, Ocean County

This site is located in the Silverton section of Dover Township. In the early 1980s, private potable wells in the area of Hooper Avenue were determined to be contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Residences in the area were subsequently connected to public water lines. NJDEP is periodically sampling other private potable wells in the immediate area to monitor the extent of the ground water plume.

Stoningham Drive Ground Water Contamination
Warren Township, Somerset County

Between 1988 and 1989 private potable wells at residences in this area were determined to be contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The residences were subsequently connected to public water lines. NJDEP is periodically sampling other private potable wells in the immediate area to monitor the extent of the ground water plume. Additional investigative work is planned to identify possible sources of the ground water contamination.

Stafford Township Landfill
Stafford Township, Ocean County

This site is located in the Manahawkin section of Stafford Township. In the mid-1980s, private potable wells in this area were determined to be contaminated with several volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Residences in this area were subsequently connected to public water lines. NJDEP is periodically sampling other private potable wells in the immediate area to monitor the extent of the ground water plume.

Upper Deerfield Township Sanitary Landfill Superfund Site
Upper Deerfield Township, Cumberland County

NJDEP installed a water line in 1986 to address off-site ground water contamination from this site. USEPA issued a Record of Decision in 1991 for no further action based on the findings of a Remedial Investigation. However, work is still required under solid waste closure regulations and is being handled by NJDEP's Division of Solid Waste Management. The site was deleted from the National Priorities List of Superfund sites in 2000. The Township is conducting long-term monitoring of the ground water under an Administrative Consent Order with USEPA.

Wildwood City Pump Station
Middle Township, Cape May County

The contamination at this site resulted from an overturned fuel truck, which released 6,000 gallons of fuel oil at the well field in 1984. The Responsible Party conducted a $1 million emergency response action to address the soil contamination. The potable supply well was taken out of service and replaced with another supply well at a new location. This site is awaiting assignment for investigation of any residual contamination.

Stoningham Drive Ground Water Contamination
Warren Township, Somerset County

Between 1988 and 1989 private potable wells at residences in this area were determined to be contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The residences were subsequently connected to public water lines. NJDEP is periodically sampling other private potable wells in the immediate area to monitor the extent of the ground water plume. Additional investigative work is planned to identify possible sources of the ground water contamination.

Stafford Township Landfill
Stafford Township, Ocean County

This site is located in the Manahawkin section of Stafford Township. In the mid-1980s, private potable wells in this area were determined to be contaminated with several volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. Residences in this area were subsequently connected to public water lines. NJDEP is periodically sampling other private potable wells in the immediate area to monitor the extent of the ground water plume.

Upper Deerfield Township Sanitary Landfill Superfund Site
Upper Deerfield Township, Cumberland County

NJDEP installed a water line in 1986 to address off-site ground water contamination from this site. USEPA issued a Record of Decision in 1991 for no further action based on the findings of a Remedial Investigation. However, work is still required under solid waste closure regulations and is being handled by NJDEP's Division of Solid Waste Management. The site was deleted from the National Priorities List of Superfund sites in 2000. The Township is conducting long-term monitoring of the ground water under an Administrative Consent Order with USEPA.

Wildwood City Pump Station
Middle Township, Cape May County

The contamination at this site resulted from an overturned fuel truck, which released 6,000 gallons of fuel oil at the well field in 1984. The Responsible Party conducted a $1 million emergency response action to address the soil contamination. The potable supply well was taken out of service and replaced with another supply well at a new location. This site is awaiting assignment for investigation of any residual contamination.

Completed Sites

Sites that were fully investigated and remediated by the New Jersey Department of Environmental Protection using public funds are identified in this section and designated as "Completed" sites. As of December 31, 2002, 58 sites met this criteria. This list differs from the "Construction Completed" list maintained by the Site Remediation Program in that it includes sites that were investigated and determined not to be contaminated.

Completed Publicly Funded Sites as of December 31, 2002

Site Name	Street Address	Municipality	County	Type
200 Argyle Avenue North	200 Argyle Avenue North	Margate City	Atlantic	Non Superfund
35B Hendrickson Mill Road	35B Hendrickson Mill Road	Logan Township	Gloucester	Non Superfund
58 Speir Drive	58 Speir Drive	South Orange Village	Essex	Non Superfund
7 Hawk Lane	7 Hawk Lane	Medford Township	Burlington	Non Superfund
A Kurnel & Sons	821 Route 9	Berkeley Township	Ocean	Non Superfund
Arlington Warehouse	50 Paris Street	Newark City	Essex	Non Superfund
Barczewski Street Drum Dump	Barczewski Street	Kearny Town	Hudson	Non Superfund
Barrier Chemical	Route 515	Vernon Township	Sussex	Non Superfund
Beachwood Berkeley Well Field Contamination	Atlantic City Boulevard	Beachwood Borough	Ocean	Superfund
Camden Lutheran Housing Corp	Front & Elm Streets	Camden City	Camden	Non Superfund
Chemical Surplus Industries	610 to 614 13th Street South	Newark City	Essex	Non Superfund
Cooper Road	Cooper Road	Voorhees Township	Camden	Superfund
DEP Drum Inventory & Roundup	Various Locations	Various	Ocean	Non Superfund
El Cid Contracting Corporation	West Farms Road	Howell Township	Monmouth	Non Superfund
Frank S. Farley Marina	600 Huron Avenue	Atlantic City	Atlantic	Non Superfund
Franklin Township Landfill	Lake Road	Franklin Township	Gloucester	Non Superfund
Friedman Property	Routes 539 & 537	Upper Freehold Township	Monmouth	Superfund
Fish Factory	Great Bay	Little Egg Harbor Township	Ocean	Non Superfund
Gateway Terminals Service Corporation	Lafayette Street	Carteret Borough	Middlesex	Non Superfund
Giordano Lane Ground Water Contamination	Giordano Lane	Hammonton Town	Atlantic	Non Superfund
Haas Property	26 Purgatory Road	Southampton Township	Burlington	Non Superfund
Hagaman Property	Route 9 (River Road)	Lakewood Township	Ocean	Non Superfund
Highcrest Road	27 Highcrest Road	Vernon Township	Sussex	Non Superfund
Hill House Horse Farm	54 Baird Road	Millstone Township	Monmouth	Non Superfund
Hillsborough Phase II	New Camplain & Sunnymead Roads	Hillsborough Township	Somerset	Non Superfund
Hudson County Chromate 158	36 to 40 & 77 Isabella Avenue	Bayonne City	Hudson	Non Superfund

Site Name	Street Address	Municipality	County	Type
Humphrey's Pest Control	Routes 561 & 322	Folsom Borough	Atlantic	Non Superfund
Jersey City State College Tidelands Athletic Field	Route 440	Jersey City	Hudson	Non Superfund
Kearny Drum Dump 3	Belleville Turnpike	Kearny Town	Hudson	Non Superfund
Krysowaty Farm	Hockenbury Road & Three Bridges Road	Hillsborough Township	Somerset	Superfund
Lake Shore Drive Ground Water Contamination	Lake Shore Drive & Lakeview Avenue	Hammonton Town	Atlantic	Non Superfund
Lodi Municipal Well Field	Various Locations	Lodi Borough	Bergen	Superfund
Minsei Kogyo Shoji KK American Inc.	Savoy Boulevard	Woodland Township	Burlington	Non Superfund
Moores Trucking Company	571 Stelton Road	Piscataway Township	Middlesex	Non Superfund
Newark Stamp & Die Works	922 McCarter Highway	Newark City	Essex	Non Superfund
NJ Mosquito Control Commission	Georges Road	New Brunswick City	Middlesex	Non Superfund
NJDHS Chemical Inventory Disposal	Various Locations	Various	Statewide	Non Superfund
North Bergen Drum Dump	5000 West Side Avenue	North Bergen Township	Hudson	Non Superfund
North Shore Water Associates	1 Hitoga Trail	Byram Township	Sussex	Non Superfund
PCB Electrical Equipment Project	Various Locations	Various	Statewide	Non Superfund
Pepe Field	Wootton Road & Hillside Avenue	Boontown Town	Morris	Superfund
Perth Amboy PCBs	Garretson Avenue & State Street	Perth Amboy City	Middesex	Non Superfund
Pomona Oaks Well Contamination	Routes 575 & 30	Galloway Township	Atlantic	Superfund
Route 521	West Shore Drive & Mount Benevolence Drive	Stillwater Township	Sussex	Non Superfund
Scarpula Field	West Shore Drive and Sussex Road	Hampton Township	Atlantic	Non Superfund
Signo Trading International	40 Haynes Street	Somerville Borough	Somerset	Non Superfund
Smokey's Servicecenter	1005 Chambers Street	Trenton City	Mercer	Non Superfund
State of NJ Central Motor Pool	82 Commercial Street	Newark City	Essex	Non Superfund
State of NJ Central Motor Pool	364 Egg Harbor Road South	Hammonton Town	Atlantic	Non Superfund
Texaco Service Station Oaklyn Borough	Route 30 & Collingswood Avenue	Oaklyn Borough	Camden	Non Superfund
The Kings Path Ground Water Contamination	The Kings Path	Hopewell Township	Mercer	Non Superfund
Urban Casting Company Inc.	516 Asyla Road	Gloucester Township	Camden	Non Superfund
US Coast Guard Repeater Station	Seacreast Road	Monmouth Beach Borough	Monmouth	Non Superfund
Vineland Developmental Center	Landis Avenue E.	Vineland City	Cumberland	Superfund

Site Name	Street Address	Municipality	County	Type
West Caldwell Small Drum Roundup	Various Locations	West Caldwell Borough	Essex	Non Superfund
Western Boulevard Ground Water Contamination	Western Boulevard & Manhattan & Hoover Avenues	Berkeley Township	Ocean	Non Superfund
West Paterson Memorial School	Memorial Drive	West Paterson Borough	Passaic	Non Superfund
Yardville Youth Correctional Center	Highbridge Road	Bordentown Township	Burlington	Non Superfund

Total: 58

Site Transfers

Sites Transferred From Remedial Response Element to Responsible Party Remediation Element

The following is a list of 80 contaminated sites where remedial work (e.g., Remedial Investigation/Feasibility Study, Remedial Design or Remedial Action) was conducted with public funds or administered by NJDEP or USEPA before responsible parties agreed to complete the remaining remedial activities with NJDEP or USEPA oversight.

Site Name	Municipality	County	Type
A O Polymer Corporation	Sparta Township	Sussex	Superfund
Aerochem Research Laboratories	South Brunswick Township	Middlesex	Non Superfund
Albert Steel Drum	Newark City	Essex	Non Superfund
Alford Industries Inc.	Moorestown Township	Burlington	Non Superfund
Al Storer Landfill	Marlboro Township	Monmouth	Non Superfund
Amoco Service Station Garfield City	Garfield City	Bergen	Non Superfund
A to Z Chemical Resource Recovery Inc.	New Brunswick City	Middlesex	Non Superfund
Baldwin Enterprises	Vernon Township	Sussex	Non Superfund
Borne Chemical Company	Elizabeth City	Union	Non Superfund
Branchburg Motor Fuels	Branchburg Township	Somerset	Non Superfund
Brick Township Landfill	Brick Township	Ocean	Superfund
Bridgeport Oil & Rental Services	Logan Township	Gloucester	Superfund
Buzby Sanitary Landfill	Voorhees Township	Camden	Non Superfund
Caldwell Trucking	Fairfield Township	Essex	Superfund
Chemical Control Corporation	Elizabeth City	Union	Superfund
Ciba Geigy Corporation	Dover Township	Ocean	Superfund
Cinnaminson Ground Water Contamination	Cinnaminson Township	Burlington	Superfund
Colloid Chemical	Hanover Township	Morris	Non Superfund
Corbin City Board of Education	Corbin City	Atlantic	Non Superfund
Crawford Property	Monroe Township	Gloucester	Non Superfund
Curcio Scrap Metal Incorporated	Saddle Brook Township	Bergen	Superfund
D'Imperio Property	Hamilton Township	Atlantic	Superfund
Delilah Road Landfill	Egg Harbor Township	Atlantic	Superfund
Evor Phillips Leasing Company	Old Bridge Township	Middlesex	Superfund
Ewan Property	Shamong Township	Burlington	Superfund
GEMS Landfill	Gloucester Township	Camden	Superfund
Getty Service Station Clifton City	Clifton City	Passaic	Non Superfund
Global Landfill	Old Bridge Township	Middlesex	Superfund
Goldere's Junkyard	Morristown Town	Morris	Non Superfund
Goose Farm	Plumstead Township	Ocean	Superfund
Gorden Services Incorporated	Jersey City	Hudson	Non Superfund
Gulf Service Station Upper Freehold Township	Upper Freehold Township	Monmouth	Non Superfund
Helen Kramer Landfill	Mantua Township	Gloucester	Superfund
High Point Landfill	Franklin Township	Warren	Non Superfund
Holly Chemical Company Incorporated	Mount Holly Township	Burlington	Non Superfund
Hopkins Farm	Plumsted Township	Ocean	Superfund
Horstmans Landfill	East Hanover Township	Morris	Non Superfund
International Flavors & Fragrances Incorporated	Union Beach Borough	Monmouth	Non Superfund
International Way	Newark City	Essex	Non Superfund
Jackson Gravel Pit	Jackson Township	Ocean	Non Superfund
JIS Landfill	South Brunswick Township	Middlesex	Superfund
Kin Buc Landfill	Edison Township	Middlesex	Superfund
Lakeland Regional High School	Wanaque Borough	Passaic	Non Superfund
Landfill & Development Company *	Mount Holly Township	Burlington	Superfund
Lightman Drum Company	Winslow Township	Camden	Superfund

Sites Transferred From RRE to RPRE (continued)

Site Name	Municipality	County	Type
Lone Pine Landfill	Freehold Township	Monmouth	Superfund
Mannheim Avenue Landfill	Galloway Township	Atlantic	Superfund
Maywood Chemical Sites	Maywood Borough	Bergen	Superfund
McCay Development Company Incorporated	Upper Saddle River Borough	Bergen	Non Superfund
Millville City Water Department Airport Well 3	Millville City	Cumberland	Non Superfund
Myers Property	Franklin Township	Hunterdon	Superfund
North American Paint Corporation	Ocean Township	Monmouth	Non Superfund
Northern Fine Chemical Company	Franklin Borough	Sussex	Non Superfund
P&R Extra Service Station Laurel Springs	Laurel Springs Borough	Camden	Non Superfund
Peabody Clean Industries Inc.	Paulsboro Borough	Gloucester	Non Superfund
Pijak Farm	Plumsted Township	Ocean	Superfund
PJP Landfill	Jersey City	Hudson	Superfund
Powers Farm *	Jackson Township	Ocean	Non Superfund
Radiation Technology Incorporated *	Rockaway Township	Morris	Superfund
Reich Farms	Dover Township	Ocean	Superfund
Rockaway Borough Well Field Contamination	Rockaway Borough	Morris	Superfund
Rockaway Township Well Field Contamination	Rockaway Township	Morris	Superfund
Rosenfarb Farms	Randolph Township	Morris	Non Superfund
Routes 539 & 537 (Friedman Property)	Upper Freehold Township	Monmouth	Superfund
Sayreville Landfill	Sayreville Borough	Middlesex	Superfund
Sharkey Landfill	Parsippany-Troy Hills Twp	Morris	Superfund
Spence Farm	Plumsted Township	Ocean	Superfund
Standard Tank Cleaning Corporation	Bayonne City	Hudson	Non Superfund
Tabernacle Drum Dump	Tabernacle Township	Burlington	Superfund
Thomas Street Warehouse	Newark City	Essex	Non Superfund
United Piece Dye Works	Lodi Borough	Bergen	Non Superfund
Ventron Velsicol	Wood-Ridge Borough	Bergen	Superfund
Warwick Laboratories Incorporated	Rahway City	Union	Non Superfund
Washington Valley Auto Repair	Warren Township	Somerset	Non Superfund
Wayne Interim Storage Site	Wayne Township	Passaic	Superfund
Wilson Farm	Plumsted Township	Ocean	Superfund
Witco Chemical Corporation *	Perth Amboy City	Middlesex	Non Superfund
Woodland Township Route 72 *	Woodland Township	Burlington	Superfund
Woodland Township Route 532 *	Woodland Township	Burlington	Superfund
Woodward Metal Processing Corporation	Jersey City	Hudson	Non Superfund

* Administered by Division of Publicly Funded Site Remediation with funding by the responsible party(ies) or reimbursement requirements.

Total: 80

Glossary

Administrative Consent Order (ACO): A binding legal agreement between a government agency and a responsible party. It is an order voluntarily entered into by the responsible party that specifies actions or obligations of the responsible party, which may include site remediation.

Air Stripping: A process whereby volatile organic compounds are removed from contaminated material, such as ground water, by forcing a stream of air through the 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.

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 ground water.

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

Authorization: Monies set aside from a specific revenue fund, e.g., 1986 Bond Fund, to cover specific remedial work at a contaminated site, e.g., a Remedial Investigation.

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

CERCLA/SARA: The federal Comprehensive Environmental Response, Compensation and Liability Act, passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The acts created a special tax that goes into a trust fund, commonly known as Superfund, to investigate and clean up abandoned or uncontrolled hazardous waste sites. Under the program, USEPA can either pay for site cleanup when responsible parties cannot be located or are unwilling or unable to perform the work, or take legal action to force parties responsible for site contamination to clean up the site or pay back the government for the cost of the cleanup.

Classification Exception Area (CEA): This designation must be established as part of an approved remedy whenever standards applicable to ground water in a specific area, which vary throughout the state, are not or will not be met for the term of the remediation. The intent of a CEA is to ensure that the uses of a designated aquifer in a specific area are restricted until standards are achieved.

Cleanup: Actions taken to deal with a release or threatened release of hazardous substances that could affect public health or the environment. The term is often used to describe a Remedial Action or Interim Remedial Measure performed at a contaminated site.

Construction: See Remedial Action.

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

Currently Known Extent (CKE): The extent of the area where pollutant concentrations in ground water exceed maximum contaminant levels (MCLs) or Applicable Cleanup Standards (ACS), based on ground water and/or potable well sampling results. Unlike a Ground Water Impact Area (GWIA), it does not include an expected three-year migration area.

Decision Document: A document prepared at the conclusion of the remedial investigation and feasibility study or remedial alternatives analysis to formalize the selection of a remedial alternative for non-Superfund sites.

Declaration of Environmental Restriction/Deed Notice: Properties must be restricted when contamination will remain above the residential soil cleanup criteria. A Deed Notice requires a property owner's concurrence and documents the location and concentration of all contaminants and how they must be controlled or maintained and monitored, if applicable.

Directive: A document issued by NJDEP to notify the recipient that NJDEP has determined that it is necessary to remove or arrange for the removal of a discharge of hazardous substances and that NJDEP believes the recipient is a person who may be subject to liability for the discharge of a hazardous substance.

Downgradient: A downward hydrologic slope that causes ground water to move toward lower elevations. Wells downgradient of a contaminated ground water source are prone to receiving pollutants.

Extraction Well: A well from which contaminated ground water or vapors are pumped.

Feasibility Study (FS): A feasibility study evaluates alternative remedial actions from a technical, environmental and cost perspective, recommending the most effective remedy for adequate protection of human health and the environment, and preparation of a conceptual design, cost estimates and a preliminary implementation schedule.

Focused Feasibility Study: A limited feasibility study that is performed on a certain aspect of site remediation and/or when more than one remedial measure is considered technically viable for the immediate control of a threat.

Ground Water Impact Area (GWIA): The currently known extent of ground water pollution, based on ground water and/or potable well sampling results, combined with the area where the pollution is likely to migrate over a three-year period.

Hazardous Substance: Any material that poses a threat to human health and/or the environment. Typical hazardous substances are toxic, corrosive, ignitable, explosive or chemically reactive.

IEC (Immediate Environmental Concern): A condition that exists at a contaminated site posing an acute, direct threat to human health.

Incineration: A treatment technology involving destruction of waste by controlled burning at high temperatures.

Inorganic: Compounds that are not hydrocarbons or their derivatives.

Interim Remedial Measure (IRM): Terminology for site stabilization. An IRM may include a removal, a pump and treat ground water system, or a vapor extraction soil gas system among other possible actions.

ISRA: Industrial Site Recovery Act, formerly known as ECRA, the state Environmental Cleanup Responsibility Act of 1983, requires the owner/operator to clean up any environmental contamination that may be on-site prior to the transfer or sale of applicable industrial properties.

Lagoon: A shallow pond where sunlight, bacterial action and oxygen work to purify waste water.

Landfill Gas: Methane gas formed by decomposition of materials in a landfill.

Leachate: The liquid that trickles through or drains from waste, carrying soluble components from the waste, often associated with landfills.

Memorandum of Agreement (MOA): A written agreement between NJDEP and one or more person(s) concerning NJDEP's oversight of remediation. It does not require financial assurances or stipulated penalties.

Metals: Metallic elements with high atomic weights, such as mercury, chromium, cadmium, arsenic and lead. They can damage living things at low concentrations and tend to accumulate in the food chain.

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

Monitor Well: A well installed under strict design specifications that, when sampled, will reveal hydrogeologic data at its point of installation. Monitor wells are installed at predetermined locations, usually in groups, to gain knowledge of site conditions including: extent and type of ground water contamination, soil types, depth to ground water and direction of ground water flow.

National Priorities List (NPL): A list of sites based upon NJDEP's and USEPA's regional submissions of candidate sites that are determined by the federal government to have the highest priority based upon a hazard ranking system. A site listed on the NPL is eligible for federal funding under CERCLA. Published by the USEPA, the NPL is updated periodically. Sites on the NPL are commonly called Superfund sites.

NFA (No Further Action): A determination by the NJDEP that, based upon evaluation of the historical uses and/or investigation of a site or subsite, there are no contaminants present, or that any discharged contaminants that were present at the site or subsite have been remediated in accordance with applicable regulations.

Operable Unit (OU): A portion of an overall site remediation (e.g., a landfill cap or ground water extraction and treatment system). A number of OUs may be implemented during the course of a site cleanup. (See subsite).

Operation and Maintenance (O&M): Activities conducted at a site usually after a Remedial Action or other Interim Remedial Measure has been completed to ensure that the action is effective and any treatment systems in place are operating properly, including continued monitoring of site conditions.

Pending: A site identified as pending assignment to the Division of Publicly Funded Site Remediation will eventually be scheduled for remediation with public funds, by NJDEP, based on the threat to human health and the environment posed by the site in relation to other sites awaiting publicly funded action. A site currently designated for remediation with public monies can be removed from this list if a responsible party or other interested person(s) commits to remediate the site pursuant to a Memorandum of Agreement or another oversight program in the interim.

POET (Point-of-Entry Treatment): A home water filtration system used to remove contaminants from private potable wells to allow unrestricted use.

PCBs (Polychlorinated Biphenyl): A group of toxic, persistent chemicals used in transformers and capacitors for insulating purposes, and in gas pipeline systems as a lubricant. Further sale of new use was banned by law in 1979.

Potable Water: Water that is safe for drinking and cooking from either a private well or a public supply provided through a water line.

Potentially Responsible Parties (PRPs): Parties who may have contributed to the contamination at a site and may be liable for costs of response actions. Parties are considered PRPs until they admit liability or a court makes a determination of liability. This means that PRPs may sign a consent decree or administrative order to participate in site cleanup activity without admitting liability.

Record of Decision (ROD): A formal record documenting the reasons and process of selecting a federal Superfund-financed remedy for a Superfund site. The ROD is based on information and technical analysis generated during the Remedial Investigation and Feasibility Study and consideration of public comments and community concerns.

Reinjection: Recharge to the ground of water that has been extracted and treated to remove contaminants.

Remedial Action (RA): The physical action consistent with the selected remedy to correct a release or threatened release of a hazardous substance into the environment. The term, often referred to as a cleanup action or construction project, includes but is not limited to: confinement, dredging, neutralization, recycling, removal, reuse, storage or treatment of hazardous substances. Other actions include providing alternate water supplies.

Remedial Action Selection Report (RASR): For non-Superfund sites, an evaluation of alternative remedial actions from a technical, environmental and cost perspective, recommending the most effective remedy for adequate protection of human health and the environment. Includes preparation of a conceptual design, cost estimates and a preliminary implementation schedule. A RASR is similar to the Feasibility Study conducted for sites in the Superfund program.

Remedial Design (RD): Normally following a feasibility study or remedial alternatives analysis, the engineering specifications developed to implement the selected remedy.

Remedial Investigation (RI): The Remedial Investigation entails gathering the data necessary to determine the nature and extent of problems at the site, establishing the remedial response criteria and identifying remedial action alternatives.

Responsible Party: Any person, company or other entity who has discharged a hazardous substance or is in any way responsible for a hazardous substance that has been discharged or which NJDEP is removing pursuant to the New Jersey Spill Compensation and Control Act (see Spill Compensation Fund) or any person who is responsible for a release of hazardous substances under CERCLA. The Spill Act has a broader definition of responsible parties than CERCLA, a federal act dealing with site remediation.

Slurry Wall: A subsurface wall of low permeability constructed to control or reduce ground water flow near a polluting waste source in order to capture or contain resulting contamination.

Spill Compensation Fund: The Spill Compensation Fund was created in 1976 with enactment of the state Spill Compensation and Control Act and became effective on April 1, 1977. It provides compensation to qualified individuals and businesses that have suffered damages as a result of a discharge of hazardous substances for which they were not responsible.

Subsite: A contaminated area within a larger contaminated site that can be addressed separately due to its distinctive characteristics, such as its physical features or the nature of the contamination present. Also, a subsite can represent the remaining work that encompasses an entire site after more immediate environmental concerns are handled at the location. (See Operable Unit).

Superfund: The common name for the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) enacted by Congress in December 1980 and amended in October 1986 by the Superfund Amendments and Reauthorization Act (SARA). CERCLA authorized USEPA to provide long-term remedies at hazardous waste sites and established a fund of special taxes and general revenues to clean up these sites.

Superfund Cooperative Agreement: An agreement whereby USEPA transfers funds and other resources to a state for the accomplishment of certain remedial activities at sites on the National Priorities List (Superfund sites) as authorized by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Superfund State Contract: An agreement whereby the State agrees to act in a subordinated support capacity to USEPA for the remediation of sites on the National Priorities List (Superfund sites) as authorized by CERCLA.

Underground Storage Tank (UST): A tank located all or partially under ground that is designed to hold gasoline or other petroleum products or chemical solutions.

Volatile Organic Compound (VOC): VOCs are organic (carbon-containing) compounds that evaporate readily at room temperature. These compounds are used as solvents, degreasers, paints, thinners and fuels. Due to their low water solubilities, environmental persistence and widespread industrial use, they are commonly found in soil and ground water.

Water Line: A pipe used to convey water from a public water supply.