DESCRIPTIONS OF 173 SITES PLACED ON THE FINAL NATIONAL PRIORITIES LIST IN 1985-86

This document consists of descriptions of the 173 sites placed on the final National Priorities List (NPL) in 1985-86. As a convenience, they are compiled here into one document.

The size of the site is indicated on the basis of presently available information. The size may change in the future as additional information is gathered on the extent of contamination.

All sites are arranged alphabetically by State and by site.

Remedial Responses Under Superfund

The Superfund program is authorized by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA), enacted on October 17, 1986.

Under SARA, the Hazardous Substances Superfund pays the costs not assumed by responsible parties for cleaning up hazardous waste sites or emergencies that threaten public health, welfare, or the environment. The Superfund program is managed by the U.S. Environmental Protection Agency (EPA).

Two types of responses may be taken when a hazardous substance is released (or threatens to be released) into the environment:

- Removal actions: emergency-type responses to imminent threats. Typically, these actions were limited to 6 months and/or \$1 million under CERCLA. Under SARA, they are limited to 1 year and/or \$2 million, with a waiver possible if the actions are consistent with remedial actions. Removal actions can be undertaken by the private parties responsible for the releases or by the Federal Government using the Superfund.
- Remedial responses: actions intended to provide permanent solutions at abandoned or uncontrolled hazardous waste sites. They are generally longer-term and more expensive than removals. A Superfund remedial response can be taken only if a site is on the NPL. After publishing two preliminary lists and proposing a formal list, EPA published the first NPL in September 1983. The list must be updated at least annually.

The money for conducting a remedial response or removal action can come from several sources:

- The party or parties responsible for the problem can clean up voluntarily with EPA or State supervision.
- The responsible party or parties can be forced to clean up by Federal or State legal action.
- Superfund can pay for the cleanup, then seek to recover the costs from the responsible party or parties.
- ° A State or local government can choose to assume the responsibility to clean up without Federal dollars.

A remedial response at an NPL site is an orderly process that generally involves the following steps:

- Take any measures needed to stabilize conditions, which might involve, for example, fencing the site or removing above—ground drums or bulk tanks.
- Undertake initial planning activities to scope out a strategy for collecting information and analyzing alternative courses of action.
- Conduct a remedial investigation to determine the type and extent of contamination at the site.
- Onduct a feasibility study to analyze various cleanup alternatives. The feasibility study is often conducted with the remedial investigation as one project. Typically, the two together cost \$875,000 and take from 9 to 18 months to complete.
- ° Select the cleanup alternative that:
 - -- Protects human health and the environment
 - -- Attains Federal and State requirements that are applicable or relevant and appropriate
 - -- Makes maximum use of permanent solutions, alternative treatment technologies, or resource recovery technologies
 - -- Is "cost effective" -- that is, the results achieved are proportionate to the cost (tentative working definition)
- Obesign the remedy. Typically, the design phase costs \$850,000 and takes 6 to 12 months.
- Implement the remedy, which might involve, for example, constructing facilities to treat ground water or removing contaminants to a safe disposal area away from the site. The implementation phase typically lasts 6 to 12 months.

The State government can participate in a remedial response financed by Superfund in one of two ways:

- The State can take the lead role under a cooperative agreement, which is much like a grant in that Federal dollars are transferred to the State. The State then develops a workplan, schedule, and budget, contracts for any services it needs, and is responsible for making sure that all the conditions in the cooperative agreement are met. In contrast to a grant, EPA continues to be substantially involved and monitors the State's progress throughout the project.
- ° EPA can take the lead under a Superfund State Contract with the State having an advisory role. EPA, generally using contractor support, manages work early in the planning process. In the later design and implementation (construction) phases, contractors do the work under the supervision of the U.S. Army Corps of Engineers.

Under both arrangements, the State must share in the cost of the implementation phase of cleanup. EPA expects this phase to average out at about \$10-12 million per site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

INTERSTATE LEAD CO. (ILCO) Leeds, Alabama

Conditions at listing (September 1985): Interstate Lead Co. (ILCO) owns and operates a secondary lead smelting and battery recycling facility in Leeds, Jefferson County, Alabama.

ILCO has generated, treated, stored, and disposed of lead-bearing waste on-site, as well as off-site in numerous locations in the Leeds area. Seven locations have been identified: ILCO parking lot (1,370 tons); City of Leeds landfill (6,335 tons); Fleming's Patio (12,940 tons); Church of God (988 tons); fabricating shop (unknown quantity); Connell property (unknown quantity); and Gulf Station (unknown quantity). Waste quantities are based on company estimates. Six of these locations are within 3 miles of the springs and wells that supply drinking water for 6,000 families in Leeds.

In April 1984, EPA used CERCLA emergency funds to remove leadbearing waste from the Church of God area.

Monitoring by the company in January and February of 1985 detected lead and cadmium in ground water underlying the facility. The State has measured elevated levels of lead in Dry Creek and an unnamed tributary to Dry Creek adjacent to the facility. The Jefferson County Department of Health in 1983 and 1984 measured elevated lead concentrations in ambient air south and southwest of ILCO.

On March 18, 1985, EPA and the State filed a civil enforcement action against ILCO under the Clean Water Act, the Resource Conservation and Recovery Act (RCRA), and CERCIA. In June 1985, EPA signed a Partial Consent Decree with ILCO to provide preliminary measures to reduce the hazards associated with the facility while the litigation was pending. ILCO has agreed to temporarily stabilize two of the contaminated areas (the plant property and the plant parking lot) and to prevent further off-site migration at these areas. The Partial Consent Decree also requires ILCO to construct a totally enclosed system to treat storm water. In addition, in June 1985, EPA signed a separate Partial Consent Decree with a local transporter to stabilize the Fleming's Patio area.

ILCO is currently in voluntary reorganization under Chapter 11 of the Federal bankruptcy code.

Status (January 1986): The transporter has placed a clay cover and fenced the Fleming's Patio area. ILCO has placed a synthetic liner over the parking lot and has begun construction on the storm water treatment system.

Status (June 10, 1986): This site is being placed on the NPL at this time because the owner or operator is in bankruptcy and may not be financially able to take appropriate remedial action. Thus, the site meets one of the requirements of EPA's policy for placing RCRA-related sites on the NPL.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MIDLAND PRODUCTS
Ola/Birta, Arkansas

Conditions at listing (October 1984): Midland Products formerly treated wood on a 4-acre site on Highway 10 in Yell County between the towns of Ola and Birta, Arkansas. The site is just south of the Petit Jean Wildlife Management Area and Keeland Creek in the Quachita Mountains.

Midland Products, now bankrupt, operated the site from 1969 to 1979. The company stored pentachlorophenol and creosote for the wood-treatment process in surface impoundments and above-ground storage tanks. In 1982, EPA detected these chemicals and PCBs in the surface impoundments. A shallow aquifer is also contaminated. Approximately 190 people use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): Under a cooperative agreement with EPA, the State is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. Field activities are expected to begin in the fall of 1986.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ADVANCED MICRO DEVICES, INC. Sunnyvale, California

Conditions at listing (October 1984): Advanced Micro Devices, Inc., manufactures electronic equipment at a plant in Sunnyvale, Santa Clara County, California. The facility occupies about 6 acres and is surrounded by residential, industrial, and business areas.

Monitoring wells on the site are contaminated with chloroform, 1,1-dichloroethylene, 1,1-dichloroethane, trichloroethylene, and tetrachloroethylene, according to analyses conducted by a consultant to Advanced Micro Devices, Inc. Contamination is believed to have resulted from localized spills and leaking underground storage tanks and piping. The same contaminants have been detected in monitoring wells off-site. About 300,000 people within 3 miles of the site depend on ground water as a source of drinking water.

The company has removed an acid neutralization tank from the facility and is working with the California Regional Water Quality Control Board (CRWQCB) to determine the extent of contamination of ground water and soils. The board issued a Cleanup and Abatement Order to the company in June 1984.

This is one of 19 sites in the South Bay Area of San Francisco. Facilities at these sites have used a variety of toxic chemicals, primarily chlorinated organic solvents, which contaminate a common ground water basin. Although these sites are listed separately, EPA intends to apply an area-wide approach to the problem as well as take specific action as necessary.

Status (January 1986): CRWQCB issued Waste Discharge Requirements to the company in August 1985. The requirements are the board's legal mechanism for regulating activities at facilities under its jurisdiction. CRWQCB, in conjunction with EPA and the California Department of Health Services, is considering various response actions at the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

BECKMAN INSTRUMENTS (PORTERVILLE PLANT)
Porterville, California

Conditions at listing (October 1984): Beckman Instruments manufactures electronic equipment on a site near Porterville, a small rural community in Tulare County, California. A number of solvents and electroplating chemicals are used in the facility's operations.

A solar evaporation pond is part of the facility's waste water treatment system. The pond's liner developed a leak, allowing waste water containing heavy metals and volatile organic compounds to enter the soil. The liner and contaminated soil were removed from the site. Organic chemicals similar to those disposed of in the pond have been found in the upper aquifer underlying the area. Beckman has provided bottled water to the 750 residents whose wells are contaminated. The California Regional Water Quality Control Board is working with Beckman to develop a comprehensive monitoring system to determine the full extent of ground water contamination.

Status (January 1986): Beckman has installed and is operating a ground water extraction and treatment system to control the plume of contamination. The company will also conduct a remedial investigation/feasibility study to determine the need for additional remedial measures.

Residents previously using bottled water have been provided with a municipal drinking water supply.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

INTEL CORP. (MOUNTAIN VIEW PLANT)
Mountain View, California

Conditions at listing (October 1984): Intel Corp. manufactured semi-conductors at a plant in Mountain View, Santa Clara County, California, between 1968 and 1981. At that time, the facility occupied 2 acres and was surrounded by residential areas, office buildings, and other semiconductor-manufacturing plants.

Monitoring wells on the site are contaminated with trichloroethylene, xylene, vinyl chloride, and 1,1- and trans-1,2-dichloroethylene, according to analyses conducted by a consultant to Intel. Contamination is believed to have resulted from leaking underground solvent tanks. About 270,000 people depend on ground water within 3 miles of the site as a source of drinking water.

Since early 1982, Intel has been pumping ground water and treating it by carbon adsorption. The company intends to implement additional cleanup activities, including the installation of a system to pump and treat contaminated ground water and excavation of soil beneath the underground storage tanks, which were previously removed. The company is working with the California Regional Water Quality Control Board to determine the full extent of the contamination.

This is one of 19 sites in the South Bay Area of San Francisco. Facilities at these sites have used a variety of toxic chemicals, primarily chlorinated organic solvents, which contaminate a common ground water basin. Although these sites are listed separately, EPA intends to apply an area—wide approach to the problem as well as take specific action as necessary.

Status (February 1986): Intel has removed approximately 4,600 cubic yards of contaminated soil and has installed four wells to pump and treat contaminated ground water.

The California Regional Water Quality Control Board has issued Waste Discharge Requirements to the company. The requirements are the board's legal mechanism for regulating activities at facilities under its jurisdiction.

On Aug. 15,1985, EPA issued a CERCIA Administrative Order on Consent to Intel Corp.'s Mountain View Plant, as well as to Fairchild Camera's and Raytheon Corp.'s Mountain View Plants. The order calls for the three companies to conduct a joint remedial investigation/feasibility study of the area to determine the type and extent of contamination and identify alternatives for remedial action.

Hazardous waste site listed under the Compensation, and Liability Act of 1980 (CERCLA) ("Superfund")

INTEL CORP. (SANTA CLARA III) Santa Clara, California

Conditions at listing (October 1984): Intel Corp. tests micro-processors at its Santa Clara III facility in Santa Clara, Santa Clara County, California. The facility occupies about 4 acres and is surrounded by industrial and business areas.

Monitoring wells on the site are contaminated with 1,1,1-trichloroethane, trichloroethylene, Freon 113, 1,1-dichloroethane, and tetrachloroethane, according to analyses conducted by a consultant to Intel. Contamination is believed to have resulted from leaking tanks. About 300,000 people depend on ground water within 3 miles of the site as a source of drinking water.

Intel is working with the California Regional Water Quality Control Board to determine the extent of contamination of ground water and soils.

This is one of 19 sites in the South Bay Area of San Francisco. Facilities at these sites have used a variety of toxic chemicals, primarily chlorinated organic solvents, which contaminate a common ground water basin. Although these sites are listed separately, EPA intends to apply an area-wide approach to the problem as well as take specific action as necessary.

Status (January 1986): The company has installed and is operating a system to pump and treat the contaminated ground water. The California Regional Water Quality Control Board, in conjunction with EPA and the California Department of Health Services, is overseeing response actions at the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

INTEL MAGNETICS Santa Clara, California

Conditions at listing (October 1984): Intel Magnetics produces and tests magnetic products and bubble memories at a plant in Santa Clara, Santa Clara County, California. The facility occupies approximately 1 acre and is surrounded by industrial and business areas.

Monitoring wells on the site are contaminated with 1,1,1-trichloro-ethane, trichlorofluoromethane, 1,1-dichloroethylene, and trichloroethylene, according to analyses conducted by a consultant to Intel. Contamination is believed to have resulted from leaking tanks. About 300,000 people depend on ground water within 3 miles of the site as a source of drinking water.

Intel is working with the California Regional Water Quality Control Board to determine the extent of contamination of ground water and soils.

This is one of 19 sites in the South Bay Area of San Francisco. Facilities at these sites have used a variety of toxic chemicals, primarily chlorinated organic solvents, which contaminate a common ground water basin. Although these sites are listed separately, EPA intends to apply an area-wide approach to the problem as well as take specific action as necessary.

Status (January 1986): The company has installed a system to pump and treat contaminated ground water. The California Regional Water Quality Control Board, in conjunction with EPA and the California Department of Health Services, is overseeing response actions at the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

LOUISIANA-PACIFIC CORP. Oroville, California

Conditions at listing (October 1984): The Louisiana-Pacific Corp. Site covers 100 acres southwest of Oroville, Butte County, California. The facility consists of a saw mill, a planing mill, and a hardboard plant. Pentachlorophenol (PCP) is sprayed on the lumber as a preservative. Soil and sawdust on the site contain high levels of PCP. Both shallow and deep ground water under the site are contaminated with PCP, according to analyses conducted by an adjacent property owner and the California Regional Water Quality Control Board. About 10,500 people use ground water within 3 miles of the site as a source of drinking water.

The California Department of Health Services, the California Regional Water Quality Control Board, and EPA are presently attempting to determine the extent of contamination and identify the actions necessary to clean up the site.

Status (February 1986): EPA has completed a search for parties potentially responsible for wastes associated with the site and in February 1986 sent Notice Letters to Louisiana-Pacific Corp and Georgia-Pacific Corp., former owner of the site. In the next step, EPA will negotiate for the two companies to conduct a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

The California Regional Water Quality Control Board is sampling ground water on and off the site to determine the extent of contamination.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

OPERATING INDUSTRIES, INC., LANDFILL Monterey Park, California

Conditions at listing (October 1984): Operating Industries, Inc., operated a landfill on 190 acres in the City of Monterey Park, Los Angeles County, California. The 45-acre northern section was separated in the 1960s from the southern 145-acre section by the Pomona Freeway. EPA has evidence that the original landfill included at least a portion of both sections. From 1948 to 1983, solid and liquid wastes, some hazardous, were disposed of at the site.

Leachate generated by the landfill contains vinyl chloride, benzene-type compounds, tetrachloroethylene, heavy metals, and other contaminants, according to testing by the Los Angeles County Sanitation District (LACSD), the California Department of Health Services (CA DOHS), and the company. In July 1983, the South Coast Air Quality Management District (SCAQMD) detected vinyl chloride above ambient standards in air at and around the landfill, which is adjacent to a large residential area. SCAQMD, CA DOHS, and the Los Angeles County Department of Health Services have taken enforcement actions against the facility.

About 23,000 people use ground water within 3 miles of the site as a source of drinking water.

The company acquired Interim Status when it filed Part A of a permit application under the Resource Conservation and Recovery Act (RCRA). The company submitted a draft plan for closing the landfill under RCRA, but CA DOHS, in conjunction with other State agencies and EPA, determined that the plan had numerous deficiencies, most notably the failure to (1) provide financial assurance requirements for closure and (2) develop an adequate plan for monitoring ground water and for collecting and disposing of leachate. The company has not submitted complete and adequate closure and postclosure documents.

Status (February 1986): EPA collected gas samples in November 1984 from 16 subsurface probes in an adjacent housing development. Some samples confirmed the presence of methane and vinyl chloride in subsurface soils. Interior home samples collected in November 1984 had low levels of methane and nondetectable levels of vinyl chloride. Elevated levels of methane and vinyl chloride were also detected in a home adjacent to the landfill in October 1985.

EPA installed six monitoring wells around the landfill in 1984-85. Quarterly samples collected since March 1985 contain organic chemicals and trace metals.

In July 1985, EPA started planning for a comprehensive remedial investigation to determine the nature and extent of the problems associated with the landfill. When the investigation is complete, various alternatives to remedy the problems will be evaluated in a feasibility study. Interim measures are planned to stabilize and control the landfill, including slope stabilization and upgrading of existing gas leachate collection systems. EPA trucked leachate to an off-site treatment facility from October 1985 to February 1986, when the State took over.

Status (June 1986): This site is placed on the NPL because the potentially responsible party declined to initiate work, and CERCLA-funded remedial activities are underway. Thus, the site meets one of the requirements of EPA's policy for placing RCRA-related sites on the NPL.

U.S. Environmental Protection Agency/Remedial Response Program

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

RAYTHEON CORP. Mountain View, California

Conditions at listing (October 1984): Raytheon Corp. manufactures semiconductor products at a plant in Mountain View, Santa Clara County, California. The facility occupies about 30 acres and is surrounded by industrial, business, and residential areas.

Soil and ground water beneath the site are contaminated with tri-chloroethylene, 1,1,1-trichloroethane, and 1,1- and trans-1,2-dichloroethylene solvents, according to analyses conducted by a consultant to Raytheon. Contamination is believed to have resulted from a leaking underground chemical storage tank and/or concrete acid neutralization sumps. About 270,000 people depend on ground water within 3 miles of the site as a source of drinking water.

In late-1982, Raytheon conducted an investigation to determine if downgradient ground water contamination near the north property boundary resulted from a source on its property. Raytheon concluded that it was not possible to establish a specific source of contamination based on data obtained from its investigation. At present, Raytheon is working with the California Regional Water Quality Control Board to determine the full extent of the problem.

This is one of 19 sites in the South Bay Area of San Francisco. Facilities at these sites have used a variety of toxic chemicals, primarily chlorinated organic solvents, which contaminate a common ground water basin. Although these sites are listed separately, EPA intends to apply an area-wide approach to the problem as well as take specific action as necessary.

Status (February 1986): In an attempt to determine the full extent of ground water contamination, Raytheon has installed three wells to pump and treat ground water to contain the contaminated plume.

The California Regional Water Quality Control Board has issued Waste Discharge Requirements to the company. The requirements are the board's legal mechanism for regulating activities at facilities under its jurisdiction.

On Aug. 15, 1985, EPA issued a CERCIA Administrative Order on Consent to Raytheon Corp.'s Mountain View Plant, as well as to Fairchild Camera's and Intel Corp.'s Mountain View Plants. The order calls for the three companies to conduct a joint remedial investigation/feasibility study of the area to determine the type and extent of contamination and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SAN FERNANDO VALLEY (AREA 1) Los Angeles, California

Conditions at listing (October 1984): San Fernando Valley (Area 1) is an area of contaminated ground water in the vicinity of the North Hollywood section of the City of Los Angeles, Los Angeles County, California. This area is part of the San Fernando Valley Basin, a natural underground reservoir that represents an important source of drinking water for at least 3 million people in the Los Angeles metropolitan area. The contaminated ground water, which underlies an area of approximately 5,156 acres, contains trichloroethylene (TCE) and perchloroethylene (PCE), and to a lesser extent, carbon tetrachloride and chloroform, according to analyses conducted by the California Department of Health Services, as well as numerous local government agencies. The State's recommended drinking water guideline for TCE and PCE (5 and 4 parts per billion respectively) are exceeded in a number of public wells in this area. To alleviate this contamination, wells are either taken out of service or blended with water from clean sources to ensure that the public receives water with TCE/PCE concentrations below the State's guidelines.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SAN FERNANDO VALLEY (AREA 2)
Los Angeles/Glendale, California

Conditions at listing (October 1984): San Fernando Valley (Area 2) is an area of contaminated ground water located in the vicinity of the Crystal Springs Well Field in the Cities of Los Angeles and Glendale, Los Angeles County, California. This area is part of the San Fernando Valley Basin, a natural underground reservoir that represents an important source of drinking water for at least 3 million people in the Los Angeles metropolitan area. The contaminated ground water, which underlies an area of approximately 6,680 acres, contains trichloroethylene (TCE) and perchloroethylene (PCE), according to tests conducted by the California Department of Health Services, as well as numerous local government agencies. The State's recommended drinking water guidelines for TCE and PCE (5 and 4 parts per billion respectively) are exceeded in a number of public wells in this area. To alleviate this contamination, wells are either taken out of service or blended with water from clean sources to ensure that the public receives water with TCE/PCE concentrations below the State's guidelines.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SAN FERNANDO VALLEY (AREA 3) Glendale, California

Conditions at listing (October 1984): San Fernando Valley (Area 3) is an area of contaminated ground water in the vicinity of the Glorietta Well Field in the City of Glendale, Los Angeles County, California. This area is part of the San Fernando Valley Basin, a natural underground reservoir that represents an important source of drinking water for at least 3 million people in the Los Angeles metropolitan area. The contaminated ground water, which underlies an area of approximately 5,200 acres, contains trichloroethylene (TCE) and perchloroethylene (PCE), according to tests conducted by the California Department of Health Services, as well as numerous local government agencies. The State's recommended drinking water guidelines for TCE and PCE (5 and 4 parts per billion respectively) are exceeded in a number of public wells in this area. To alleviate this contamination, wells are either taken out of service or blended with water from clean sources to ensure that the public receives water with TCE/PCE concentrations below the State's guidelines.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SAN FERNANDO VALLEY (AREA 4)
Los Angeles, California

Conditions at listing (October 1984): San Fernando Valley (Area 4) is an area of contaminated ground water in the Pollock Well Field area in the City of Los Angeles, Los Angeles County, California. The area is part of the San Fernando Valley Basin, a natural underground reservoir that represents an important source of drinking water for at least 3 million people in the Los Angeles metropolitan area. The contaminated ground water, which underlies an area of approximately 5,860 acres, contains perchloroethylene (PCE), according to tests conducted by the California Department of Health Services, as well as numerous local government agencies. The State's recommended drinking water guideline for PCE (4 parts per billion) is exceeded in a number of public wells in this area. To alleviate this contamination, wells are either taken out of service or blended with water from clean sources to ensure that the public receives water with concentrations below the State's guideline.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SOUTH BAY ASBESTOS AREA Alviso, California

Conditions at listing (October 1984): Portions of Alviso, California, located in north Santa Clara County on the southern edge of the San Francisco Bay, served as dumping areas for over 30 years. Companies disposed of asbestos waste in an old municipal landfill. In addition, asbestos waste was used for fill material at various locations throughout the town.

The site was first proposed for listing under the name "Alviso Dumping Areas."

Soil in the old landfill and around homes contains asbestos, according to tests conducted by the State. Construction activities and wind action stir up asbestos-laden dust, posing a potential health risk to residents. EPA and the State plan to continue sampling the soil and air throughout the 1-square-mile area to determine the degree of risk to public health.

Evening winds may transport asbestos to the San Francisco Bay National Wildlife Refuge, which borders the town and harbors several endangered species.

Status (January 1986): In July 1985, EPA entered into an Interagency Agreement with the U.S. Army Corps of Engineers to conduct a remedial investigation/feasibility study to determine the extent of contamination at the site and identify alternatives for remedial action. The remedial investigation is scheduled to begin in the spring of 1986.

In October 1985, two areas of the town were paved to prevent exposure of residents to potentially significant levels of asbestos fibers. Additional measures are being considered to further reduce exposures to asbestos fibers.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

T. H. AGRICULTURE AND NUTRITION CO. Fresno, California

Conditions at listing (October 1984): T. H. Agriculture and Nutrition Co. operated a pesticide-formulating facility on about 2.5 acres near Fresno, Fresno County, California, from 1962 until 1981. Other companies had formulated pesticides on the site from 1950 to 1962. During the 1950s and 1960s, on-site landfills were used for disposal of empty containers, facility trash, and other wastes generated from the pesticide-formulation operations, including pesticide-laden clays from cleaning of equipment.

This site was first proposed for listing under the name "Thompson-Hayward Chemical Co." Thompson-Hayward Chemical Co. changed its name to T.H. Agriculture and Nutrition Co. in 1981.

Sampling conducted by the company and the California Department of Health Services detected pesticides in soil and ground water at the site. A Cleanup and Abatement Order issued by the California Regional Water Quality Control Board has directed the company to excavate contaminated soil and determine the extent of ground water contamination. In response, the company has excavated 14,000 cubic yards of contaminated soil, and has undertaken sampling to characterize soil contamination, monitor ground water, and characterize the hydrology beneath the site.

Status (January 1986): The company has conducted some initial ground water studies on-site and has proposed an on-site ground water extraction and treatment system. The California Department of Health Services has ordered the company to conduct a remedial investigation/feasibility study and to develop an alternative drinking water supply program.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) ("Superfund")

WESTINGHOUSE ELECTRIC CORP. (SUNNYVALE PLANT)
Sunnyvale, California

Conditions at listing (October 1984): Westinghouse Electric Corp. formerly manufactured electrical transformers at a plant covering 75 acres in Sunnyvale, Santa Clara County, California. The facility is surrounded by residential, industrial, and business areas.

Monitoring wells on the site are contaminated with PCBs and dichloro-, trichloro-, and tetrachlorobenzene, according to analyses conducted by a consultant to Westinghouse. Contamination is believed to have resulted from a leaking PCB storage tank and from localized spills. About 300,000 people depend on ground water within 3 miles of the site as a source of drinking water.

Westinghouse has removed the leaking tanks and is working with the California Regional Water Quality Control Board to determine the extent of soil and ground water contamination.

This is one of 19 sites in the South Bay Area of San Francisco. Facilities at these sites have used a variety of toxic chemicals, primarily chlorinated organic solvents, which contaminate a common ground water basin. Although these sites are listed separately, EPA intends to apply an area—wide approach to the problem as well as take specific action as necessary.

Status (January 1986): In July 1985, the California Regional Water Quality Control Board issued Waste Discharge Requirements to the company for interim measures and a remedial investigation. The requirements are the board's legal mechanism for regulating activities at facilities under its jurisdiction. The California Regional Water Quality Control Board, in conjunction with EPA and the California Department of Health Services, is considering various response actions at the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

EAGLE MINE Minturn/Redcliff, Colorado

Conditions at listing (October 1984): The Eagle Mine and its tailings piles, previously owned by the New Jersey Zinc Co. and Gulf and Western Industries, cover 110 acres in Eagle County, Colorado, between the towns of Minturn and Redcliff. About 1,300 people live within 3 miles of the tailings.

The company's predecessors began purchasing mines in the area in 1912 and immediately began production. A merger in 1938 resulted in New Jersey Zinc owning the mine. Zinc mining and milling operations ceased on Dec. 30, 1977. Silver mining continued intermittently thereafter. The mine is now shut down completely and owned by Miller Enterprises.

Two major tailings piles exist on the site. The old tailings pond was abandoned in 1946 when it reached capacity. A new tailings pond was constructed about 0.5 miles south where Cross Creek and Eagle River meet. Approximately 7 million tons of tailings remaining in the disposal areas are owned by Battlemountain Corp. Several other smaller tailings piles are located on National Forest land nearby, and tailings have been dumped in areas in the Eagle River floodplain.

In the summer of 1984, EPA used CERCIA emergency funds to remove transformers containing PCBs that had been placed in the mine. The transformers were threatened by rising water levels in the mine after dewatering pumps were turned off.

Status (January 1986): The mine is now filling with water, and acidic metal-laden mine water may overflow into the river in the near future.

Gulf and Western has begun studies to determine concentrations of various metals in surface water and ground water, as well as to gather data on whether leachate from the tailings can reach the Minturn drinking water wells.

The State has filed a natural resource damage suit under CERCLA against the site owner. As part of the litigation, the State has collected data on water quality impacts of the various sources and has developed a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The trial is scheduled for April 1986.

Status (June 10, 1986): This mining site is being placed on the NPL at this time because it is a noncoal site with mining operations that occurred after Aug. 3, 1977, the enactment date of the Surface Mining Control and Reclamation Act (SMCRA). Thus, it is neither regulated by SMCRA nor eligible for funds from the SMCRA Abandoned Mine Land Reclamation Program.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SMUGGLER MOUNTAIN Pitkin County, Colorado

Conditions at listing (October 1984): The Smuggler Mountain Site covers approximately 75 acres in the vicinity of Aspen, Pitkin County, Colorado. The site includes many old silver and lead mines that were most active between 1879 and 1920. Little mining is conducted at present. The primary concern is toxic metals contained in mine wastes, mill tailings, and smelter by-products. Some of these wastes have been or may be used as fill material for building foundations or street/road construction. A potential health hazard exists through direct contact and airborne, waterborne, or food-chain exposure to the high concentrations of toxic metals, especially lead. An EPA site investigation found elevated concentrations of cadmium, copper, and zinc in wells near the site. High concentrations of toxic metals, including more than 20,000 parts per million of lead, have been measured in the soils and tailings on the site. Previously, investigators at the Colorado State University Extension Service measured high concentrations of lead in leafy green vegetables grown in contaminated soils.

Approximately 4,500 full-time residents of the community may be exposed to hazardous materials at the site.

Status (January 1986): Under a Consent Agreement with EPA, the potentially responsible parties are conducting a remedial investigation/feasibility study under CERCIA to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Status (June 10, 1986): This mining site is being placed on the NPL at this time because it is a noncoal site with mining operations that occurred after Aug. 3, 1977, the enactment date of the Surface Mining Control and Reclamation Act (SMCRA). Thus, it is neither regulated by SMCRA nor eligible for funds from the SMCRA Abandoned Mine Land Reclamation Program.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

URAVAN URANIUM PROJECT (UNION CARBIDE CORP.)
Uravan, Colorado

Conditions at listing (October 1984): Union Carbide Corp.'s Uravan Uranium Project includes the Town of Uravan in a remote, sparsely settled portion of Montrose County, Colorado. The site is on the San Miguel River 5 miles upstream of where it meets the Dolores River. The facility began as a radium-recovery operation in 1915 and was expanded to include vanadium recovery in 1935. Union Carbide established the Town of Uravan in 1935 to provide housing for the mine and mill workers. Except for the schools, the town is owned by Union Carbide.

As radium recovery became uneconomic, the mill began recovery of uranium in the 1940s, first for national defense and later for nuclear power applications. Past activities have been highly variable due to fluctuation in demand. There is little activity at the plant now due to the depressed uranium and vanadium markets.

Federal and State agencies have inspected this facility many times and have brought action against Union Carbide for numerous permit violations and hazardous material spills. These efforts have established that ground water and air at the site are contaminated with process wastes, including uranium, from the milling operations.

Status (January 1986): The Colorado State Health Department is currently reviewing the mill's application to renew its operating license. The State has filed a lawsuit against Union Carbide seeking recovery for damages to natural resources.

Status (June 10, 1986): This mining site is being placed on the NPL at this time because it is a noncoal site with mining operations that occurred after Aug. 3, 1977, the enactment date of the Surface Mining Control and Reclamation Act (SMCRA). Thus, it is neither regulated by SMCRA nor eligible for funds from the SMCRA Abandoned Mine Land Reclamation Program.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) ("Superfund")

HALBY CHEMICAL CO. New Castle, Delaware

Conditions at listing (September 1985): Halby Chemical Co. was a manufacturing facility whose primary product was ammonium thiocyanate. In the early 1970s, Witco Chemical Co. acquired the operation, then sold it to Brandywine Chemical Co. in 1977. Currently, Brandywine stores finished products for distribution on the site.

From the late 1940s to August 1977, a waste water lagoon was in use behind the plant near the Wilmington Marine Terminal in New Castle, New Castle County, Delaware. The lagoon was approximately 2 feet deep, covered 1.5 acres, and drained into the Lobdell Canal and the Christina River.

High levels of various organic and inorganic substances, including trichloroethylene, tetrachloroethylene, arsenic, cyanide, and lead, are present in water and sediment samples from the lagoon, according to EPA. EPA detected thiocyanate in the ground water underlying the site. Four municipal wells are part of an interconnected system that supplies approximately 150,000 people living 2 to 3 miles from the site.

Status (January 1986): EPA has assessed the site and determined that an immediate removal is not warranted at this time.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

DUBOSE OIL PRODUCTS CO. Cantonment, Florida

Conditions at listing (October 1984): Dubose Oil Products Co. recovered waste oil from early 1979 through November 1981 on a 20-acre site west of Cantonment, Escambia County, Florida. At the request of the State Department of Environmental Regulation (DER), EPA took water and sediment samples in April 1982. Analysis of the samples indicated the presence of elevated concentrations of numerous organic compounds. An estimated 2,400 people draw drinking water from wells within 3 miles of the site.

The State has completed a hydrogeologic assessment of the site. In January and February 1984, the State removed contaminated drums from the site. The State has filed a civil complaint against the company.

Status (January 1986): At the end of 1984 and the beginning of 1985, DER excavated about 40,000 cubic yards of contaminated soil and placed it in a lined vault on-site to prevent further contamination of ground water. Water from three contaminated ponds is being pumped out and treated to remove organic chemicals. In the spring of 1985, EPA, DER, and a group of parties potentially responsible for wastes associated with the site held a series of meetings. The parties formed a steering committee and hired a consultant to perform a remedial investigation to determine the type and extent of contamination at the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PEAK OIL CO./BAY DRUM CO. Tampa, Florida

Conditions at listing (October 1984): The Peak Oil Co./Bay Drum Co. Site covers 15 acres east of Tampa, Hillsborough County, Florida. From the late 1950s until the late 1970s, Peak Oil re-refined oil and disposed of wastes in an acid sludge pond measuring 82 feet x 100 feet x 10 feet. Bay Drum Co., which operated at about the same time as Peak Oil, recycled drums and disposed of wash water in a holding pond on the site.

Surface water, ground water, sediments, and sludges are contaminated with PCBs, pesticides, solvents, and heavy metals, according to analyses conducted by EPA. The Peak Oil/Bay Drum Site is located within 2 miles of the Brandon Well Field, which is part of the Hillsborough County Water Supply System. The system supplies drinking water to 57,000 people.

Status (January 1986): Ownership of Bay Drum Co. has changed hands, and EPA has sent the new owner a letter explaining his liabilities under CERCLA.

The Peak Oil and Bay Drum portions of the site are being handled separately for CERCLA remedial funding. Incineration of sludges at Peak Oil is scheduled to start early in 1986 using CERCLA emergency funds.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

YELLOW WATER ROAD DUMP Baldwin, Florida

Conditions at listing (September 1985): The Yellow Water Road Dump is in Duval County, 1 mile south of Baldwin and 18 miles west of Jackson-ville, Florida. The 15-acre site is 0.4 miles west of Yellow Water Road, Florida State Route 217, and is accessible by an unimproved road.

From 1981 to 1984, transformers, tanks, and drums filled with PCBs, waste oils, and solvents were transported to the site for disposal. The operation ended when the property was rezoned. By that time, approximately 63,000 gallons of oil and transformer fluid containing PCBs had leaked from containers, drums, and tanks, according to EPA. Soil on the site is contaminated with PCBs, according to analyses conducted by the city.

On Nov. 29 and Dec. 5, 1984, EPA issued Notice Letters under CERCLA section 104 providing potentially responsible parties the opportunity to take corrective action. None of the parties agreed, and in December 1984, EPA used CERCLA emergency funds to contain the hazardous wastes on the site. The containment work was completed in March 1985. However, there is still a potential threat to nearly 150 people drawing drinking water from shallow ground water. An unnamed recreational pond 2,000 feet north of the site is also threatened.

On June 14, 1985, EPA issued a unilateral Administrative Order under CERCLA section 106 to prevent the site owner from removing transformers from the site without prior approval from EPA.

Status (January 1986): EPA is considering various alternatives for the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NL INDUSTRIES/TARACORP LEAD SMELTER
Granite City, Illinois

Conditions at listing (October 1984): The NL Industries/Taracorp Lead Smelter covers approximately 25 acres in Granite City, Madison County, Illinois. Taracorp purchased the facility in August 1979 from NL Industries, which had operated it since 1928. Taracorp reclaims lead from battery cases and other scrap.

On the site is a waste pile approximately 20 feet high made up of 225,000 tons of broken batteries, blast furnace slag, and other lead waste. The pile appears stable, but run-off is evident. The State detected 140,000 to 300,000 parts per million lead in soil near the pile. Past and current air emissions associated with the smelting operations and the waste pile have contaminated off-site surface soils as far away as 0.5 miles, according to the State. Ground water contamination has not been documented to date.

About 15,000 people live within 1 mile of the site.

Status (January 1986): EPA and the State signed a Consent Order with NL Industries on March 11, 1985. The order calls for the company to conduct a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. A workplan and sampling plan are due shortly.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PAGEL'S PIT Rockford, Illinois

Conditions at listing (October 1984): Pagel's Pit in Rockford, Winnebago County, Illinois, is a former sand and gravel pit and dolomite quarry that has been operated by Winnebago Reclamation as a landfill since July 17, 1972. The pit covers approximately 60 acres and is lined with "blacktop," which has a coal tar sealer.

Records indicate that the site accepted a variety of wastes, including organics, solvents, and heavy metals, as well as mixed municipal refuse and sewage treatment sludge. About 120,000 gallons of liquid wastes, in addition to solid refuse, have been deposited on-site.

A shallow, fractured bedrock aquifer near the site is a source of drinking water for residents in the area. It is contaminated with several volatile organic compounds, in addition to arsenic, according to tests conducted by the Winnebago County Health Department, the State, and EPA. In 1981, the State Health Department tested drinking water supplies in response to complaints from residents. The results indicated high levels (517 parts per billion) of volatile organic chemicals. The contamination forced several homeowners near Pagel's Pit to use bottled water supplied by Winnebago Reclamation.

Status (January 1986): EPA is negotiating a settlement for a remedial investigation/feasibility study (RI/FS) with parties potentially responsible for wastes associated with the site. The RI/FS would determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PETERSEN SAND & GRAVEL Libertyville, Illinois

Conditions at listing (October 1984): Petersen Sand & Gravel operated a 1,000-acre quarry in Libertyville, Lake County, Illinois, from 1952 to 1958. The Lake County Forest Preserve District acquired the site in 1978 and planned to convert the quarry into a 170-acre recreational lake.

Several hundred drums of paints, solvents, and other industrial wastes were dumped into the quarry while it was owned by Petersen Sand. In 1977, the company removed 400 drums from the quarry. In 1983, the Lake County Forest Preserve District removed about 65 more drums. It is likely that some drums and contaminated soil still remain in the quarry.

The State and EPA detected volatile organic chemicals and heavy metals in wells that are used by about 15,000 nearby residents as a source of drinking water.

Status (January 1986): EPA and the Illinois Environmental Protection Agency have signed a cooperative agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. EPA has approved a statement of work. After the State selects a contractor, work will get underway.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

COLUMBUS OLD MUNICIPAL LANDFILL #1 Columbus, Indiana

Conditions at listing (September 1985): The Columbus Old Municipal Landfill #1 covers 10 to 12 acres on the East Fork of the White River in Columbus, Barthalomew County, Indiana. From the early 1950s through the late 1960s, the city operated the landfill, accepting municipal waste and about 3.5 million gallons of industrial wastes. It had no permits. According to a waste generator, Cummins Engine Co., the industrial wastes included solvents, acids, bases, paints, PCBs, and heavy metals. After closing the old landfill, Columbus opened a new landfill.

The old landfill is unlined and in permeable soils. It is covered with a permeable layer of sand and gravel on which grass has grown. Wastes were deposited on the surface, and the site forms a low barrier between the surrounding farmlands and the river. Ground water is contaminated with lead and chromium, according to tests conducted by EPA in August 1935. The geology and location of the site are such that area surface water is threatened.

About 31,000 people depend on wells within 3 miles of the site as a source of drinking water. The White River, 100 feet from the site, is a prime fishing stream.

The land is privately owned and is now leased to an individual who operates waste oil storage tanks on the site.

Status (January 1986): EPA is considering various alternatives for the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

FORT WAYNE REDUCTION DUMP Fort Wayne, Indiana

Conditions at listing (October 1984): The Fort Wayne Reduction Dump lies on a 35-acre site in Fort Wayne, Allen County, Indiana. National Recycling Corp. began operations at the site in 1967. Until 1976, it was used as a landfill with minimal recovery of wastes. Among the wastes accepted for disposal were volatile industrial liquids, 2,4-dimethylphenol, methylene chloride, arsenic, and sludges (sewage, paints, varnishes, etc.).

Ground water immediately adjacent to the site is contaminated with arsenic, benzene, chloroethane, ethylbenzene, and methylene chloride, according to tests conducted by EPA. The River Haven housing development (estimated population 400) is within 3 miles of the site. Maumee River runs immediately to the north. An estimated 1,100 people living south of the river use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

INTERNATIONAL MINERALS & CHEMICAL CORP. (TERRE HAUTE EAST PLANT)
Terre Haute, Indiana

Conditions at listing (October 1984): The International Minerals & Chemicals Corp. (IMC) Site covers 20 acres in Terre Haute, Virgo County, Indiana. Commercial Solvents Corp. manufactured the insecticide BHC (benzene hexachloride) at the site, known as the Terre Haute East Plant, from 1946 to 1954. IMC purchased Commercial Solvents in 1975. In 1980, IMC excavated 14,392 cubic yards of contaminated soil, piping, vegetation, and debris from the former BHC production area. Soil contaminated with BHC was also excavated at a former off-site disposal area. The excavated material was combined and deposited as a mound on 1.2 acres of East Plant property. The mound was capped with clay and fill.

Ground water at the site is contaminated with BHC isomers according to analyses conducted by the State and EPA. The public water system supplying 63,000 residents of Terre Haute uses wells within 3 miles of the site.

Status (January 1986): EPA is considering various alternatives for the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MIDCO II Gary, Indiana

Conditions at listing (October 1984): The Midwest Solvent Recovery Co., Inc., (MIDCO) II Site occupies approximately 7 acres across the highway from the airport in Gary, Lake County, Indiana. The area is primarily industrial. MIDCO II recycled solvents and disposed of industrial waste at the site using the following methods: temporary storage of waste and reclaimable material in tanks and drums and disposal of wastes via open dumping in trenches, sludge pits, and filter pits. The company operated until Aug. 17, 1977, when a fire burned most of the above—ground tanks and drums containing wastes. Following the fire, the company abandoned the site without cleanup. Several thousand drums containing burned residues were left on—site, along with several tanks. Soils, ground water, and possibly surface water are contaminated, according to tests conducted by EPA. About 479,000 people live within 3 miles of the site.

Status (January 1986): Between January and March 1985, EPA used CERCLA emergency funds to remove 85,500 drums and drum remnants, which cleared the site of surface wastes. In July and August, EPA excavated approximately 5,000 cubic yards of highly contaminated soil from a former sludge pit and filter bed and piled the solidified soil on-site.

On June 19, 1985, EPA reached a settlement with a group of parties potentially responsible for wastes at the site to reimburse the Government \$3.1 million for past costs and to perform a remedial investigation/feasibility study (RI/FS) to determine the type and extent of subsurface and off-site contamination and identify alternatives for remedial action. The Consent Decree became effective in August 1985.

All of the piles of contaminated soil have not been removed from the site because of difficulty in obtaining approval for disposal. Monitoring wells have been installed and sampling is underway on the RI/FS.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NEAL'S DUMP (SPENCER) Spencer, Indiana

Conditions at listing (October 1984): Neal's Dump is located 4 miles south of Spencer, Owen County, Indiana. In the late 1960s and early 1970s, rags, sawdust, and capacitors contaminated with PCBs were deposited to a depth of 20 feet in an area about 80 feet by 50 feet.

About 1,000 people draw drinking water from wells within 3 miles of the site. The nearest well is 750 feet from the site. There is the threat that contaminated run-off will drain to nearby White River.

On Nov. 4, 1980, EPA and the State inspected the facility, collecting both soil and ground water samples. In February 1981, EPA conducted further inspections and prepared a report regarding cleanup alternatives and possible costs. To determine the extent of ground water contamination, EPA installed monitoring wells in the summer of 1982. On Sept. 1, 1982, the State conducted an inspection to define the fill area more accurately.

In January 1983, the U.S. Department of Justice, on behalf of EPA, filed suit against Westinghouse Electric Corp. for cleanup of this site and Neal's Landfill in Bloomington, which was placed on the NPL in September 1983. The State of Indiana entered into this suit as an intervening plaintiff.

In December 1983, Westinghouse fenced the site and removed surface capacitors as part of a Stipulation and Order filed by EPA in December 1983.

Status (January 1986): In May 1985, EPA, the State, Monroe County, and Bloomington reached an agreement with Westinghouse to clean up Neal's Dump, along with three other NPL sites near the Bloomington area (Neal's Landfill, Lemon Lane Landfill, and Bennett Stone Quarry) and two sites not on the NPL. EPA estimates that the settlement is worth between \$75 million and \$100 million. In addition, Westinghouse will reimburse the Superfund trust fund for the \$1 million the Federal Government has spent for enforcement and cleanup.

Under the settlement, Westinghouse will remove contaminated materials from an area of about 0.5 acres, plus a 2-foot deep buffer zone. About 14,000 cubic yards will be removed. The site will be regraded, capped, and revegetated. Westinghouse will continue to maintain the security fence and surface drainage controls already in place. Westinghouse will also monitor ground water in the vicinity to determine if any PCBs are migrating off the site. Alternative water supplies will be provided to any resident within 1 mile of the site whose wells become contaminated with PCBs. An EPA on-scene coordinator will monitor activities at each site.

The materials removed from the six sites will be incinerated in a new incinerator Westinghouse will build. Westinghouse has agreed to obtain all permits necessary to construct and operate the incinerator in accordance with all Federal, State, and local requirements. The entire project could take up to 15 years to complete.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

TRI-STATE PLATING Columbus, Indiana

Conditions at listing (September 1985): The Tri-State Plating Site is on a lot measuring 100 by 100 feet in downtown Columbus, Barthalomew County, Indiana. Metal-plating operations were carried out at the site for over 40 years. Earlier operations were known as Hull Industries and Plating Services, Inc. The City of Columbus caused the facility to close in 1984 by blocking off the sewer and shutting off the water after numerous violations of city code and one spill that severely damaged the city's sewage treatment system.

Records of the Indiana State Board of Health indicate a small amount of soil was removed from the site during 1983. Plating sludges and wastes were dumped outside the building and into the sewers in 1983 and 1984, according to the Indiana State Board of Health, City of Columbus Utilities, and Barthalomew County Health Department.

Tests conducted in early 1983 by the Board of Health detected high levels of cadmium, chromium, cyanide, nickel, zinc, copper, lead, and manganese in soil on-site, thus threatening ground water. The site is 800 feet southwest of a municipal well field that serves over 30,000 people. Haw Creek, the nearest downslope surface water, is 800 feet to the east of the site and joins the East Fork of the White River (a recreational fishing stream) within 2.5 miles of the facility. The surrounding area is a residential neighborhood with some small businesses.

Status (January 1986): EPA is considering various alternatives for the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

LAWRENCE TODIZ FARM Camanche, Iowa

Conditions at listing (September 1985): The Lawrence Todtz-Farm is about 1 mile west of Camanche, Clinton County, Iowa. The site consists of 6.2 acres of abandoned gravel pits. Municipal solid waste and industrial solid and liquid waste were disposed of in the pits between 1958 and 1975.

Between 1972 and 1975, 4,300 tons of liquid waste from the Clinton, Iowa, cellophane plant operated by E.I. du Pont de Nemours & Co., Inc., were buried in the pits, according to information DuPont provided for a 1979 Congressional report on waste disposal sites (the "Eckhardt Report"). Wastes generated in the process contain plasticizers, resins, alcohols, and heavy metal salts.

State studies indicate that a residential well 400 feet south of the site is contaminated with two plasticizers, di-n-butylphthalate and bis (2-ethylhexyl) phthalate. The well draws from the Mississippi Alluvial Aquifer, the source of drinking water for 6,000 residents within 3 miles of the site.

Status (January 1986): EPA's Field Investigation Team will submit a report on this site shortly. The report will be reviewed to determine future response actions.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MIDWEST MANUFACTURING/NORTH FARM Kellogg, Iowa

Conditions at listing (September 1985): The Midwest Manufacturing/North Farm Site is in Jasper County near Kellogg, Iowa. Midwest has operated a manufacturing facility that includes an electroplating plant on the site since 1896. The plant occupies about 8 acres in south Kellogg in the floodplain of the North Fork Skunk River. The plant's operation primarily involves cadmium, zinc, and nickel. The North Farm portion of the site, 2.3 miles northeast of the plant, covers less than 1 acre. Both areas contain unlined trenches used for the disposal of an estimated 1,200 cubic yards of the plant's electroplating sludges. Because the two areas contain the same wastes and affect the same target population, they are considered one NPL site.

The City of Kellogg draws water from shallow wells downstream on the banks of the North Fork Skunk River. EPA detected zinc and copper in one city well within 500 feet of the Midwest Manufacturing plant. EPA also found that soils adjacent to the North Farm trench contain significant levels of cadmium.

About 700 people depend on wells located within 3 miles of the site as a source of drinking water. The site is located within a possible critical habitat of the Indiana bat, which is on the endangered species list of the U.S. Fish and Wildlife Service. Nearby surface waters are used for fishing.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

VOGEL PAINT & WAX CO.
Orange City, Iowa

Conditions at listing (October 1984): Vogel Paint & Wax Co. used a 10-acre sand and gravel pit for disposal of its paint and varnish production wastes. The pit, which the company owns, is located just outside Orange City, Sioux County, Iowa.

From 1967 to 1979, the pit received paint wastes containing lead, cadmium, chromium, mercury, toluene, xylene, and mineral spirits, which is a grade of naphtha. An estimated 43,000 gallons of organic compounds (aliphatic and aromatic hydrocarbons) and 6,000 pounds of mercury, lead, zinc, and chromium have been disposed of at the site.

The company has detected wastes, particularly volatile organics (toluene, xylene, and mineral spirits), from this site in off-site monitoring wells. About 3,200 people depend on wells within 3 miles of the site as a source of drinking water.

The State has issued an Administrative Order requiring the company to take remedial actions. The company has started to comply.

Status (January 1986): The company's consultant is conducting a remedial investigation to determine the type and extent of contamination at the site. The company and consultant have met with EPA and the State regarding requirements of the investigation under CERCIA and the Resource Conservation and Recovery Act (RCRA). EPA has received Part B of a RCRA permit application and returned its comments to the company. The Part B may be necessary to enable Vogel Paint to treat on-site waste from the cleanup.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

BIG RIVER SAND CO. Wichita, Kansas

Conditions at listing (October 1984): The Big River Sand Co. Site covers 80 acres in northwest Wichita, Sedgwick County, Kansas. During the early to mid 1970s, the previous owner/operator of the site allowed approximately 1,800 drums of paint-related wastes to be deposited on the property at the edge of a 5-acre sand pit lake.

In 1982, a county court order was issued requiring the previous owner to remove the drums and transfer them to his own property adjacent to the sand pit lake area. After approximately 200 drums had been transferred, the State, notified of the removal by the county, asked that the work cease because the workers lacked personal protective equipment. Later, the drums remaining at the sand pit lake area and their contents were either recycled or disposed of by the previous owner in a satisfactory manner. In August 1984, he removed 200 deteriorating drums from his property. The site includes both the sand pit lake area and the adjacent property where the remaining drums were located. Monitoring by the State in 1982 and 1984 detected solvents and heavy metals in nearby residential wells. About 1,000 people use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and to identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

STROTHER FIELD INDUSTRIAL PARK Cowley County, Kansas

Conditions at listing (October 1984): Strother Field Industrial Park covers roughly 2.3 square miles approximately 4 miles southwest of Winfield and 4 miles north of Arkansas City, Cowley County, Kansas. The park consists of about 20 industrial and commercial businesses, as well as two inactive solid waste landfills. The landfills probably also were used for the disposal of various industrial wastes.

Samples collected and analyzed by the State (as part of EPA's Synthetic Organic Chemical Survey) indicated the presence of chlorinated organic chemicals in several wells supplying Strother Field Industrial Park. The principal contaminants (trichloroethylene, 1,2-dichloroethylene, 1,1-trichloroethane, tetrachloroethylene, and 1,1 dichloroethylene) are common industrial solvents known to persist in ground water. The State collected a second series of samples from the Strother Field Public Water Supply wells, as well as samples from several private wells in the adjacent community of Hackney, the water distribution system, influents and effluents from the Strother Field waste water treatment plant, two monitoring wells on-site, and several off-site control locations (for comparison purposes). The Strother Field Public Water Supply was discontinued in June 1983. Additional ground water monitoring is underway to determine the source and off-site migration of the contamination. About 2,300 people use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): On April 9, 1985, the State issued an Administrative Order to General Electric Co., one of the parties responsible for wastes associated with the northern zone of the site. The order calls for the company to sample soil; monitor ground water; construct a ground water flow model and use it to help locate, construct, and operate withdrawal wells under the guidance of the State, and submit a plan for a treatment and disposal system. At this time, two wells and two air-stripping columns to remove volatile organic compounds are completed. The State is reviewing the company's plan for a permanent treatment and disposal system.

The Strother Field Commission, which owns the site, continues to pump two supply wells to create a cone of depression in an attempt to prevent off-site migration. The State is sampling off-site monitoring wells and private wells on a monthly basis.

The State issued another Administrative Order in the week of Jan. 13, 1986, to each of the four potentially responsible parties associated with the southern zone of the site. The four are: General Electric Co., Greif Brothers Corp., Cessna Aircraft, and Gordon-Piatt Energy Group, Inc. The order requires General Electric to treat the water from public supply well #8; each of the companies to drill monitoring wells on the south end of the field; and Greif Brothers Corp., Cessna Aircraft, and Gordon-Piatt Energy Group, Inc., to submit data on chemical use during the past 20 years.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MAXEY FLATS NUCLEAR DISPOSAL Hillsboro, Kentucky

Conditions at listing (October 1984): The Maxey Flats Nuclear Disposal Site is a 279-acre shallow land burial facility located in Fleming County, Kentucky, near Hillsboro. From 1963 to 1977, the site was privately operated under license by the State on State-owned land. The facility received 4.8 million cubic feet of waste containing low levels of radiation. According to tests conducted by the State, tritium levels in air exceed background levels, and radioactive contaminants are present in ground water. Wells are a source of drinking water for about 100 people in the area.

The State is monitoring water and air at the site.

Status (January 1986): EPA is nearing completion of a workplan for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SMITH'S FARM Brooks, Kentucky

Conditions at listing (October 1984): Smith's Farm is located approximately 1.5 miles southwest of Brooks, Bullitt County, Kentucky. The entire farm is about 500 acres and includes a 37.5-acre landfill permitted by the State to accept nonhazardous wastes. On the farm property and adjacent to the permitted landfill is an abandoned 30-acre dump containing an estimated 100,000 to 200,000 drums, many of which are buried or partially buried.

EPA and the State have observed numerous leachate streams at the site, most of which drain into an unnamed tributary to Bluelick Creek. Private residences located immediately downstream of the site use water from Bluelick Creek for drinking and other purposes. Some of the nearby residents also use well water. There is no alternate source of water. About 300 people are potentially affected.

Analyses conducted by EPA have detected elevated concentrations of phenols, PCBs, metals (mercury, nickel, lead, chromium, copper, and cadmium), and other organic chemicals in leachate, soil, sediment, and surface water.

In August 1984, using CERCIA emergency funds, EPA completed removal of 2,000 drums of waste from the surface of the dump.

Status (January 1986): The next step in site cleanup is a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

HAVERHILL MUNICIPAL LANDFILL Haverhill, Massachusetts

Conditions at listing (October 1984): The Haverhill Municipal Landfill is located adjacent to the Merrimack River in the City of Haverhill, Essex County, Massachusetts. The landfill consists of three parcels of land covering a total of about 73 acres. Prior to June 1981, two of the three tracts were reportedly used for disposal of municipal and commercial refuse, while the other reportedly received liquid wastes and sludges. In August 1981, the city contracted for a ground water study, an evaluation of the landfill's impact on the local environment, and development of closure and monitoring plans. The results of that study indicate that ground water in the vicinity of the landfill is contaminated with volatile organic chemicals such as benzene, toluene, and xylenes.

Two municipal wells, which had supplied drinking water to approximately 6,000 people until they were closed in 1979 due to volatile organic contamination, lie within 1 mile of the site. These wells are being investigated as part of work at the Groveland Wells Site, which was placed on the NPL in September 1983.

Status (January 1986): EPA is now reviewing existing analytical and hydrogeologic information preparatory to developing a workplan. The next step is a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NORWOOD PCBS Norwood, Massachusetts

Conditions at listing (October 1984): The Norwood PCBs Site is a privately-owned industrial site covering approximately 24 acres in a commercial/residential area of Norwood, Norfolk County, Massachusetts. The property was developed for industrial use in the 1940s and was occupied by several manufacturers of electrical components, including transformers that used PCBs as a dielectric fluid and coolant. In June 1983, EPA and the State identified PCBs in surface soils at the site and secured the area with guards. Also in June, EPA used \$200,000 in CERCIA emergency funds to excavate approximately 518 cubic yards of contaminated soil and transport it to an approved disposal site.

Other contaminants, including benzene, toluene, ethylbenzene, and trichloroethylene, have been found on the site in soils, surface water, ground water, and ambient air. Ground water in the area is used for municipal, private, and industrial water supplies, according to a report of the U.S. Geological Survey.

Status (January 1986): The present owners of the site have initiated a law suit against former owners and operators for site cleanup and damages. The lawsuit names EPA and the State as indispensable parties. In December 1985, the State completed the initial remedial measure of fencing the site and covering additional PCB-contaminated soil.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ROSE DISPOSAL PIT Lanesboro, Massachusetts

Conditions at listing (October 1984): The Rose Disposal Pit covers 1.5 acres in Lanesboro in Berkshire County, Massachusetts. From 1951 to 1959, a previous owner used the site to dispose of waste oils and solvents from the General Electric (GE) Co. plant in Pittsfield, Massachusetts. GE conducted a field investigation and concluded that 60,000 cubic yards of soil are contaminated with greater than 50 parts per million of PCBs and also that contaminated ground water is leaving the site in two plumes, traveling in easterly and southerly directions. Ground water is contaminated with 11 volatile organic compounds, including trichloroethylene, benzene, and vinyl chloride, according to analyses conducted by EPA.

In May 1984, EPA and the State issued a joint enforcement order under CERCLA. It requires GE to secure and fence the site; plan and schedule a temporary cover for the site; plan and schedule a way to pump out a free oil layer; and provide a permanent water supply to a restaurant and residence affected by the plumes.

Status (January 1986): In November 1984, EPA issued an Administrative Order under CERCLA which will require GE to conduct a feasibility study of remedial alternatives relevant to soil contamination and restoration of ground water at the site. GE is in compliance with the joint enforcement order, and is presently conducting the feasibility study.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SALEM ACRES Salem, Massachusetts

Conditions at listing (October 1984): The Salem Acres Site-consists of four unlined, uncovered disposal pits on 162 acres of land in the Town of Salem, Essex County, Massachusetts. The site operated from 1946 to 1969. Wastes disposed of on-site include sludge, grit, and grease from a waste water treatment plant, as well as tannery waste. PCBs, methylene chloride, arsenic, and chromium are present in soils on the site, according to analyses conducted by EPA.

One of the disposal pits is approximately 20 feet from Strongwater Brook. The site lies on the divide of two drainage basins that channel both surface water and ground water directly into two major aquifers. The site is bounded on the south and east by residential housing. The owner has erected a gate on one of the access roads leading to the site. Approximately 2,500 people reside within 1 mile of the site.

Status (January 1986): A party identified by the State as potentially responsible for wastes associated with the site erected a fence around the pits after receiving a Notice Letter from the State. EPA is searching for other potentially responsible parties. Late in 1985, EPA obliqued funds to develop a workplan for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SHPACK LANDFILL Norton/Attleboro, Massachusetts

Conditions at listing (October 1984): The Shpack Landfill formerly operated as a private landfill covering approximately 8 acres—5.5 acres within the Town of Norton, Bristol County, Massachusetts, the remaining 2.5 acres within the City of Attleboro. The site is currently fenced to restrict access. The site accepted wastes from the 1940s until 1965, when it was closed by court order.

A survey by the U.S. Department of Energy found radioactive contaminants, primarily radium and uranium, in soil on the site. In many cases, the radioactive contamination extends to ground water. In addition, dichloroethylene, trichloroethylene, and tetrachloroethylene are present in ground water on the site, according to tests conducted by the State.

About 35 private wells within 3 miles of the site serve about 130 people. The nearest well, located 150 feet away, is shallow. EPA is currently conducting additional monitoring on— and off-site to further characterize the site.

Status (January 1986): EPA is searching for parties potentially responsible for wastes associated with Shpack Landfill. In May 1985, EPA completed an assessment that summarized previous studies and identified data gaps which need to be addressed during a remedial investigation/ feasibility study (RI/FS). The State will soon implement a quarterly monitoring program of private wells within 0.5 miles of the site. The next step is the RI/FS, which will determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

KANE & LOMBARD STREET DRUMS Baltimore, Maryland

Conditions at listing (October 1984): The Kane & Lombard Street Drums Site is an 8.3-acre abandoned, unpermitted dump in Baltimore, Maryland. Approximately 1,000 drums are on the surface of the dump. The wastes include acrolein, benzene, ethylbenzene, xylene, lead, and chromium.

In September 1982, the State detected volatile organic compounds in air at the site. In June 1984, EPA and the State used \$500,000 in CERCLA emergency funds to remove surface drums and contaminants at the site, transport the materials to an approved disposal site, and stabilize the entire site.

Approximately 2,500 people live within 0.25 miles of the site.

Status (January 1986): In July 1985, EPA started to develop a workplan for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. A geophysical survey was conducted in October 1985. EPA received results of initial soil and ground water analyses in January 1986 from its contractor. The contractor is completing the preliminary evaluation of site contamination and beginning to revise the workplan.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MID-ATLANTIC WOOD PRESERVERS, INC. Harmans, Maryland

Conditions at listing (October 1984): Mid-Atlantic Wood Preservers, Inc., treats wood on a 3-acre site in Harmans, Anne Arundel County, Maryland. The plant, owned by Fort McHenry Lumber Co., produces lumber which is pressure treated with chromated copper arsenate to protect against water and insect damage.

In 1978, the State detected chromium and arsenic in on-site soil and ground water. The contamination appears to have resulted from tank overflows and drippings from storage of treated wood. In November 1980, on order of the State, the company removed 26 cubic yards of contaminated soil and transported it to an approved facility for disposal. The State also found that surface water draining from the site to Stony Run was contaminated with elevated levels of copper. About 75,000 people depend on wells within 3 miles of the site for drinking water.

Status (January 1986): In March 1985, EPA completed a search for parties potentially responsible for wastes associated with the site. In April 1985, EPA issued Notice Letters to the parties for their comment and review. EPA is negotiating with the parties to undertake a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SOUTHERN MARYLAND WOOD TREATING CORP.
Hollywood, Maryland

Conditions at listing (October 1984): The Southern Maryland Wood Treating Corp. Site is an inactive wood-preserving facility located on 25 acres in Hollywood, St. Mary's County, Maryland. The site is owned and was operated by Southern Maryland Wood Treating Corp., a wholly-owned subsidiary of L.A. Clarke & Son, Inc., of Fredericksburg, Virginia. L.A. Clarke recently emerged from reorganization proceedings under Chapter 11 of the Federal bankruptcy code.

Creosote, pentachlorophenol, benzene, lead, and by-product diethyl hexyl phthalate were disposed in six unlined lagoons on the site. EPA has detected these contaminants in ground water, surface water, and soil on the site. Approximately 260 persons depend on wells within 3 miles of the site as a source of drinking water.

Under a State Consent Decree entered in 1980, the company has excavated and treated part of the contaminated on-site soil.

Status (January 1986): In October 1984, December 1984, and January 1985, EPA took samples to characterize site conditions. Based on the analytical results, EPA started emergency measures under CERCLA in March 1985. The work called for studies to characterize the site, stabilize the site, and determine how to dispose of contaminants. In March 1985, EPA also started preparation of a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

In January 1986, EPA completed emergency measures. Contaminated soils from lagoons were excavated, consolidated, and stored on-site for future disposal. The former process area was capped with clay, and the site graded and seeded.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

AVENUE "E" GROUND WATER CONTAMINATION Traverse City, Michigan

Conditions at listing (October 1984): About 30 residential wells in the Avenue "E" area in East Bay Township, Traverse City, Grand Traverse County, Michigan, are contaminated with benzene, toluene, methyl ethyl ketone, xylene, and acetone, according to tests conducted by the State. The contamination is moving to the northeast, where an estimated 300 small commercial and residential properties are located.

The State has sued the U.S. Coast Guard as a source of contamination. The case is still in litigation. Other sources also may be contaminating the Avenue E wells.

Status (January 1986): The case is still in litigation.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

H. BROWN CO., INC. Grand Rapids, Michigan

Conditions at listing (April 1985): H. Brown Co., Inc., owned and operated a facility for reclaiming nonferrous metals on a 4-acre site in Grand Rapids, Kent County, Michigan, from 1961 through 1981 or 1982. The site lies within a 50-year floodplain of the Grand River.

The facility was used primarily to reclaim lead from wet-cell batteries. Between 1961 and late 1978, approximately 457,000 gallons of sulfuric acid containing lead, cadmium, iron, and zinc were poured directly onto the soil in an area covering 1,250 square feet.

The facility overlies a highly permeable glacial till and limestone bedrock. Therefore, there is a potential for ground water contamination. Approximately 3,000 people depend on wells within 3 miles of the site as a source of drinking water.

Grand River and Indian Creek are threatened by run-off from the site. During the summer, the Grand Rapids Water Department blends water from the river with Lake Michigan water to serve 239,000 customers. The Grand River intake is 5,000 feet downstream of the site. The river and creek are used for recreation.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MOTOR WHEEL, INC. Lansing, Michigan

Conditions at listing (October 1984): Motor Wheel, Inc., disposed of solvents, acids, and bases on a 25-acre site in Lansing, Ingham County, Michigan. Wastes were buried in containers and placed in seepage ponds from 1938 to 1979. Analyses conducted by the State indicate that the upper aquifer is contaminated with several hazardous substances. To date, contamination of the lower aquifer, which provides drinking water to Lansing, has not been documented, according to a study Motor Wheel conducted under a consent agreement with the State. About 167,000 people depend on wells within 3 miles of the site as a source of drinking water.

Motor Wheel has removed a number of containers of wastes from the site, but contaminated soils still remain.

Status (January 1986): The State is negotiating with B.F. Goodyear, a party potentially responsible for wastes associated with the site, regarding a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NORTH BRONSON INDUSTRIAL AREA Bronson, Michigan

Conditions at listing (October 1984): The North Bronson Industrial Area consists of five industries in north Bronson in Muskegon County, Michigan. From 1965 to 1980, several nickel and chromium plating companies deposited wastes in two seepage lagoons on the site. The lagoons, which are no longer used for waste disposal, contain an estimated 3,000 to 5,900 cubic yards of dewatered metal hydroxide sludges.

On-site monitoring wells are contaminated with heavy metals, trichloroethylene, and other volatile organic compounds, according to analyses conducted by the State.

About 3,000 people use wells within 3 miles of the site as a source of drinking water.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ROTO-FINISH CO., INC. Kalamazoo, Michigan

Conditions at listing (October 1984): Roto-Finish Co., Inc., operates a plant on a 7.5-acre site in Kalamazoo, Kalamazoo County, Michigan. The plant produces equipment and materials to debur castings, mechanical parts, and similar objects. In its operations, Roto-Finish uses 4,4'-methylene-bis (2-chloroaniline), a curing agent for plastic. This chemical, commonly called MOCA, is a suspected carcinogen, according to the State. Three lagoons on the site were used to hold over 83,000 gallons of sludge containing heavy metals and MOCA. The company has excavated the lagoons.

Ground water at and near the site is contaminated with heavy metals, according to analyses conducted by the State. The cities of Kalamazoo (population 80,000) and Portage (population 25,000) get drinking water from wells within 3 miles of the site, as do a small number of private homes.

Status (January 1986): The site owner has conducted a cleanup operation and implemented a ground water monitoring program. The Michigan Department of Natural Resources is reviewing the ground water monitoring program.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SOUTH MACOMB DISPOSAL AUTHORITY (LANDFILLS #9 AND 9A)
Macomb Township, Michigan

Conditions at listing (October 1984): The South Macomb Disposal Authority operated Landfills #9 and 9A in Macomb Township, Macomb County, Michigan, from 1969 to 1974. The landfills, which cover 153 acres, accepted general refuse and may have also received industrial wastes. The site is not adequately covered, lined, or fenced. Leachate seeps are visible.

Two residential wells in the area have been contaminated with zinc and perhaps others metals and toxic organic chemicals (including methyl ethyl ketone), according to analyses conducted by a consultant to the authority. The landfills are the suspected source of the contamination.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

THERMO-CHEM, INC. Muskegon, Michigan

Conditions at listing (October 1984): Thermo-Chem, Inc., formerly operated on a site of about 10 acres in Muskegon, Muskegon County, Michigan. Until August 1980, the company reclaimed solvents such as trichloroethylene and methylene chloride, paint wastes, and antifreezes. Waste sludges and residues from the process were incinerated on-site, and waste waters were discharged to a clay-lined lagoon and two seepage lagoons. At one time, 3,500 drums of waste solvents and a 20,000-gallon tank of liquid waste contaminated with C-66 (a pesticide residue) were present on-site, but the company removed them.

Soil-qas surveys conducted by the State at the site indicated the presence of methylene chloride, tetrachloroethylene, carbon tetrachloride, and 1,1,1-trichloroethane.

About 10,000 people use wells within 3 miles of the site as a source of drinking water.

The operation received Interim Status under the Resource Conservation and Recovery Act (RCRA) when the owner filed Part A of a permit application for storage tanks.

Status (January 1986): Since the ground water may be contaminated with compounds present at the site, the State requested that the company perform a hydrogeological survey. The company has dissolved and claims not to have assests to undertake the survey.

This site is being placed on the NPL at this time because the owner or operator is in bankruptcy and may not be financially able to take appropriate remedial action. Thus, the site meets one of the requirements of EPA's policy for placing RCRA-related sites on the NPL.

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Hazardous waste site listed under the Comprehensive Environmental Response. Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

TORCH LAKE Houghton County, Michigan

Conditions at listing (October 1984): Torch Lake is in Houghton County in the upper peninsula of Michigan. Copper mining companies dumped tailings into the 2,660-acre lake from the 1890s to as recently as 1969. About 20 percent of the original lake volume has been filled with wastes, causing contamination of the lake sediments with copper. In 1972, cupric ammonium carbonate spilled into the lake from storage vats.

Cancerous growth has been documented in two fish species. The public health department has issued a health advisory on fish consumption.

Status (January 1986): EPA is considering various alternatives for the site.

Status (June 10, 1986): This mining site is being placed on the NPL at this time because the State of Michigan does not have an approved program under the Surface Mining Control and Reclamation Act of 1977 (SMCRA) and so is not eligible for SMCRA reclamation funds.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WASTE MANAGEMENT OF MICHIGAN (HOLLAND LAGOONS)
Holland, Michigan

Conditions at listing (October 1984): The Waste Management of Michigan lagoons cover 160 acres north of Holland, Ottawa County, Michigan. From 1971 to 1980, the company deposited liquid industrial wastes (including metal hydroxides and vinegar production wastes) and waste water treatment sludge into seepage lagoons at the site. In February 1979, all surface wastes were removed from the site.

One residential well in the area has been contaminated with up to 67 parts per billion trichloroethylene, according to tests conducted by the Michigan Department of Natural Resources. This residence is now served by municipal water.

Operations of Southwest Ottawa County Landfill, located to the north and west of the former lagoon area, have contaminated ground water, according to the State. Ground water moves to the southwest, passing directly through the former lagoon area. It is difficult to identify sources for any contamination downgradient of the lagoons because many of the dewatered sludges from the lagoon area, as well as other industrial solids of a similar nature, were disposed of at the county landfill. The State, Ottawa County, and the company have installed approximately 60 monitoring wells in the area.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ADRIAN MUNICIPAL WELL FIELD Adrian, Minnesota

Conditions at listing (October 1984): The municipal well field supplying water to the 11,000 residents of Adrian, Nobles County, Minnesota, is contaminated with volatile halogenated and nonhalogenated organic chemicals, according to tests conducted by the State. The source is unknown. The State has closed the two most highly contaminated city wells because of the health risk of benzene and cis-1,2-dichloroethane. The city is now using two uncontaminated wells previously slated to be abandoned due to age and low capacity.

The State is conducting a study to determine the source of contamination and develop a long-term solution to the problem.

Status (January 1986): Under a cooperative agreement with EPA, the State is planning for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

The city has installed one new well upgradient of the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

AGATE LAKE SCRAPYARD Fairview Township, Minnesota

Conditions at listing (October 1984): The Agate Lake Scrapyard covers about 2 acres in a rural area in Fairview Township, Cass County, Minnesota. The area is used mostly for recreation. The privately-owned site operated from 1951 to 1983. The wastes of concern are solvents and wastes oils that could percolate to ground water and run off into surface water. Tests conducted by the State detected PCBs and carbon tetrachloride in soil.

In January 1983, the Burlington Northern Railroad and the Crow Wing County Electrical Coop removed the wastes for which they believed they were responsible. The State is planning further ground water and soil sampling to determine the extent of the contamination.

About 1,100 people use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): Under a cooperative agreement with EPA, the State is planning for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

EAST BETHEL DEMOLITION LANDFILL East Bethel Township, Minnesota

Conditions at listing (September 1985): The East Bethel Demolition Landfill covers about 60 acres in East Bethel Township in north central Anoka County, Minnesota. The surrounding area is populated with farms and new single-family homes. Approximately 3,400 people live within 3 miles.

In the late 1960s, the landfill operated as a dump. In October 1971, the Minnesota Pollution Control Agency (MPCA) issued a permit to the Sylvester Brothers Development Co. to operate a sanitary landfill on the site. In recent years, the landfill has accepted only demolition waste. MPCA files indicate that the equivalent of approximately 4,400 drums of hazardous industrial wastes and contaminated soils were buried in the landfill in 1974. MPCA is currently updating the landfill's permit. Waste also has been deposited in wetlands associated with Neds Lake.

The landfill is located on the Anoka Sand Plain, a shallow sand aquifer which provides drinking water to a few residents in the area. The aquifer is contaminated with organic compounds, including chloroform and 1,1,1-trichloroethane, as well as arsenic, according to analyses conducted by a consultant to East Bethel Demolition Landfill. The majority of residents use a deeper aquifer. A relatively impermeable material is between these two aquifers, which are approximately 1,000 feet south of the landfill.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

FREEWAY SANITARY LANDFILL Burnsville, Minnesota

Conditions at listing (September 1985): Freeway Sanitary Landfill covers 126 acres in the City of Burnsville, Dakota County, Minnesota. Dakota County permitted this landfill in 1971 to accept 1,962 acre-feet of household, commercial, demolition, and nonhazardous industrial waste. The permit prohibits disposal of liquids and hazardous wastes. However, local industries have told the Minnesota Pollution Control Agency (MPCA) that heavy metals (including lead), acids, and bases were accepted by the facility.

Richard B. McGowan Co. owns and has been the sole permittee of the Freeway Sanitary Landfill. On Aug. 24, 1979, the company applied for a permit for a 3-million-cubic-yard vertical expansion of this landfill. The application is still outstanding, and the currently permitted area is nearing capacity. The State has delayed action on the application to study the possible effects of the landfill on Burnsville's wells located 4,000 feet to the south. The well field serves about 36,000 people. In October 1984, volatile organic chemicals were detected in on-site monitoring wells.

A second concern about operations of the landfill is the possible effects of leachate, which contains metals, on a proposed barge slip (now an active quarry) located 125 feet west of the landfill. The State is also assessing the hydrogeologic changes expected under the landfill caused by construction of the barge slip.

A third concern is the active quarry south of Freeway Sanitary Landfill which is dewatered and creates an artificial ground water sink. The State is assessing the effects of leachate generation at Freeway Sanitary Landfill if the dewatering operations are discontinued in the quarry.

A fourth concern is the possible effects of Freeway Sanitary Landfill on the Minnesota River, 400 feet north of the site, both from indirect discharge through the soil and the proposed barge slip, and from direct discharge through the drainage way east of the landfill. Additional investigation of the surface water and bottom sediments of the Minnesota River may be necessary.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

KOCH REFINING CO./N-REN CORP.
Pine Bend, Minnesota

Conditions at listing (October 1984): The Koch Refining Co./N-Ren Corp. Site covers 50 square miles in the Pine Bend area (cities of Inver Grove Heights and Rosemount) in Mille Lacs County, Minnesota. In 1972, the State made an extensive investigation of wells in and near the site, which is now an industrial park. The investigation indicated that persistent seepage from holding ponds, lagoons, and spent bauxite piles on property owned by Koch and N-Ren was contaminating ground water with lead and phenols. Koch and N-Ren have now either closed or upgraded and obtained proper State permits for their operations.

About 1,600 people, as well as a school serving 2,600 students daily, use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): On Oct. 22, 1985, the State entered into a Consent Agreement with Koch Refining Co. to conduct a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

KUMMER SANITARY LANDFILL Bemidji, Minnesota

Conditions at listing (October 1984): The Kummer Sanitary Landfill, in Bemidji, Beltrami County, Minnesota, accepted municipal wastes while it was in operation from 1971 to 1984. There is no evidence that this privately—owned sanitary landfill accepted liquid and hazardous waste.

Monitoring wells on the property and nearby residential wells are contaminated with chlorinated organic compounds. Analyses conducted by the State show that chloroform, trichloroethylene, methylene chloride, and other chemicals are present in shallow ground water wells. An estimated 14,700 people use wells from two sand aquifers for drinking water. A layer of sandy clay that may be permeable separates the aquifers, which are within 3 miles of the site. Hence, there is a potential for wells into the deeper aquifer to be affected.

Status (January 1986): In May 1985, under a cooperative agreement with EPA, the State began a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. In July 1985, the cooperative agreement was amended to fund the design and construction of an alternate water supply for residents of the northern townships. The alternate water supply is currently being designed.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

KURT MANUFACTURING CO. Fridley, Minnesota

Conditions at listing (October 1984): The Kurt Manufacturing Co. Site occupies about 10 acres in Fridley, Anoka County, Minnesota, approximately 1 mile east of the Mississippi River. The site is in an industrial, commercial, and residential area. Over 163,000 people live within 3 miles of the site. Since 1960, the company has manufactured precision computer components on the property.

Soil, monitoring wells, and a production well on-site are contaminated by tetrachloroethylene, cis-1,2-dichloroethylene, and trichloroethylene, according to tests conducted by the State. The St. Peter Sandstone, Jordan Sandstone, and other neighboring aguifers are not known to be contaminated at this time. The source of contamination is believed to be a shavings bin collection pit beneath a loading dock on the site.

On April 23, 1984, the State issued a Request for Response Action under Minnesota Superfund to Kurt Manufacturing. The action requires the company to conduct a remedial investigation and a feasibility study, as well as to develop a remedial action plan and implement it.

Status (January 1986): Kurt is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The final remedial investigation report was approved in October 1985.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

LONG PRAIRIE GROUND WATER CONTAMINATION
Long Prairie, Minnesota

Conditions at listing (October 1984): Various private and municipal wells in Long Prairie (population 2,900) in Todd County, Minnesota, are contaminated with solvents (dichloroethylene, 1,1,2-trichloroethane, trichloroethylene, and tetrachloroethylene), according to tests conducted by the State in late 1983 during routine testing of municipal wells. The State has sampled the wells since then. Ground water contamination is limited to an area of about 40 acres downgradient from the central downtown area. The State is conducting a hydrogeologic study to help pinpoint the source of contamination.

Status (January 1986): Under a cooperative agreement with EPA, the State is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

OAK GROVE SANITARY LANDFILL Oak Grove Township, Minnesota

Conditions at listing (October 1984): The Oak Grove Sanitary Landfill covers 158 acres in Oak Grove Township in the north central portion of Anoka County, Minnesota. The surrounding area is populated with single-family homes and farms. The privately-owned landfill accepted hazardous wastes from local industries while operating between 1968 and 1984. It had a permit from the State to accept such wastes.

The shallow Anoka Sand Plain is contaminated with heavy metals and halogenated and nonhalogenated organic compounds, according to tests conducted by the Minnesota Pollution Control Agency. A wetland south of the landfill is similarly contaminated. Surface water bodies in the area include wetlands, lakes, streams, and a river.

There are three aquifers in the area: the deepest, the Franconia Formation, a fine-grained sandstone; a buried sand aquifer; and the shallowest, another sand aquifer, the Anoka Sand Plain. About 4,250 area residents obtain drinking water from the two deeper aquifers. The Anoka Sand Plain is not known to be used as a domestic water supply. A relatively impermeable clay till layer lies below the contaminated Anoka Sand Plain, possibly protecting the two deeper aquifers.

Status (January 1986): Under a cooperative agreement with EPA, the State is planning for a remedial investigation/feasibility study to determine the type and intent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

OLMSTED COUNTY SANITARY LANDFILL
Oronoco, Minnesota

Conditions at listing (October 1984): The Olmsted County Sanitary Landfill covers 50 acres near Oronoco in Olmsted County, Minnesota. The municipal landfill, which has been in operation since 1972, has accepted industrial wastes. Monitoring wells contain solvents (methyl ethyl ketone, trichloroethylene, tetrachloroethylene, and others) and cadmium, according to tests conducted by the State. Since the aquifer is of dolomite/limestone, which is permeable, movement of contaminants is likely. Thus, nearby wells serving 1,200 people are threatened. Leachate has been observed in run-off from the surface of the landfill. An intermittent stream which runs through the site to the Zumbro River could carry contaminants during heavy rains.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PINE BEND SANITARY LANDFILL Dakota County, Minnesota

Conditions at listing (October 1984): The Pine Bend Sanitary Landfill cover about 232 acres west of the Mississippi River in Dakota County, Minnesota. It is owned by Browning Ferris Industries and operated by its Phoenix, Inc., subsidiary. Operation of the landfill has produced a leachate containing arsenic, halogenated and nonhalogenated organic compounds, and various chlorides. The leachate has severely contaminated on-site surface water and ground water with these materials, according to analyses conducted by the State and EPA.

This site was first proposed for listing under the name "Pine Bend Sanitary Landfill/Crosby American Demolition Landfill."

Various nearby residential wells are contaminated with heavy metals and volatile chlorinated and nonchlorinated organic compounds, according to analyses conducted by the State and EPA. The residences, farms, and industry of the area depend on wells for drinking water. About 3,500 people are affected.

Status (January 1986): On April 23, 1985, the State entered into an agreement with Pine Bend Sanitary Landfill and the adjacent Crosby American Demolition Landfill to conduct a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. A report on the remedial investigation is expected shortly.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

UNIVERSITY OF MINNESOTA (ROSEMOUNT RESEARCH CENTER)
Rosemount, Minnesota

Conditions at listing (October 1984): The University of Minnesota formerly operated a 4-acre disposal site in Rosemount, a rural area in Dakota County, Minnesota. Between 1960 and 1973, the University buried or incinerated gaseous, liquid, and solid chemical laboratory wastes on the site. In 1972, the University detected volatile organic chemicals and heavy metals in monitoring wells and soil on the site.

New monitoring data collected by the State in July 1984 indicate that the contamination is spreading. As a result, the State is beginning an enforcement action against the University.

Due to the contamination, the State is supplying bottled water to 28 families in Rosemount. About 9,600 people use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): Under State order, the University is starting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The order also calls for removal of contaminated soil and monitoring of ground water.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WAITE PARK WELLS Waite Park, Minnesota

Conditions at listing (September 1985): The municipal wells of Waite Park, Stearns County, Minnesota, supply drinking water to 3,500 residents. The wells are contaminated with 1,1-dichloroethylene, tetrachloroethylene, and other chlorinated solvents, according to analyses conducted by the Minnesota Department of Health. Waite Park residents are temporarily obtaining drinking water from the St. Cloud municipal system.

No one facility has been identified as the source of the contamination. From 1973 through 1978, Electric Machinery and then Turbodyne dumped approximately 137,280 gallons of solvents, xylene, and other chemicals into a pit in back of their property, according to records of the Minnesota Pollution Control Agency (MPCA). The property is within 1 mile of the municipal wells. More solvents were dumped when Brown Bavaria Turbomachinery purchased the property from Turbodyne in 1978. Later, Brown filled the pit, placed pieces of concrete on the wastes, and landscaped the area.

MPCA is conducting a remedial investigation to define the extent and source of ground water contamination and a feasibility study to select the most appropriate alternative for a long-term municipal water supply.

Status (January 1986): Activities continue on the remedial investigation.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WINDOM DUMP Windom, Minnesota

Conditions at listing (October 1984): The Windom Dump covers 30 acres in Windom, Cottonwood County, Minnesota. Between 1957 and 1974, the City of Windom operated the site as a municipal dump and also accepted solvent and heavy metal wastes. Wastes were burned and the residues buried on-site. Monitoring wells at the site are contaminated with volatile organic chemicals, according to tests conducted by the State. To date, municipal and residential wells are not contaminated. The monitoring and municipal wells continue to be sampled by the city and the State.

About 5,900 people use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): The State has completed a preliminary investigation and identified several parties potentially responsible for wastes associated with the site.

The city is monitoring ground water on and off the site under the supervision of the State. Recent samples from on-site monitoring wells contained high levels of benzene.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

BEE CEE MANUFACTURING CO. Malden, Missouri

Conditions at listing (October 1984): Bee Cee Manufacturing Co. formerly manufactured aluminum storm windows and doors on a 1- to 3-acre site in the City of Malden Industrial Park located in Malden, Dunklin County, Missouri. The company went bankrupt in 1983. Four shallow wells and two deep wells in Malden supply drinking water for 11,500 people; one shallow well is approximately 1,000 feet southwest of the site.

As part of its operations, Bee Cee discharged chromium-contaminated waste water onto the ground without any treatment. An area approximately 50 feet by 100 feet is visibly affected, possibly as deep as 1 to 2 feet. Because local soil is sandy, contamination may have reached at least the shallow aquifer.

On July 27, 1981, the State advised Bee Cee that it was in violation of the Missouri Clean Water Law because it was discharging a chromium-based waste water onto the ground without a permit. Bankruptcy proceedings ended efforts by the State to have Bee Cee install a waste water treatment system.

Another company now leases the former Bee Cee building. The City of Malden is believed to own the contaminated ground.

Status (January 1986): A multisite cooperative agreement between EPA and the State covering five sites, including Bee Cee Manufacturing, was approved on Sept. 9, 1985. Initial funding is for planning activities.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

LEE CHEMICAL Liberty, Missouri

Conditions at listing (October 1984): The Lee Chemical Site is near the southern edge of Liberty, Clay County, Missouri. During a drinking water study in 1980, EPA sampled the city's water wells, which serve about 23,000 people. Analyses indicated the presence of trichloroethylene (TCE). Since then, the most contaminated wells have not been used for drinking water. The water from the remaining wells is treated to remove TCE.

Investigations by the city and the State identified the source of the TCE contamination as the abandoned Lee Chemical Site, which is within 2,300 feet of the wells. Lee Chemical packaged a variety of chemicals on the site from about 1966 to 1974. As a result of bad housekeeping practices, soil in an area of less than 1 acre is contaminated with TCE.

The city, which owns the property, has removed the building and visible chemicals from the site and taken soil samples. The analyses indicate TCE is still on-site.

The State anticipates the need to excavate soil, as well as purge the aquifer.

Status (January 1986): A multisite cooperative agreement between EPA and the State covering five sites, including Lee Chemical, was approved on Sept. 9, 1985. Initial funding provides for planning activities. The City of Liberty is pumping the most contaminated well and disposing of the contaminated water under a permit issued by the State under the National Pollutant Discharge Elimination System.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NORTH-U DRIVE WELL CONTAMINATION Springfield, Missouri

Conditions at listing (October 1984): The North-U Drive Wells are north of Springfield, Greene County, Missouri. In November 1983, the State received complaints that private drinking water wells on North-U Drive were contaminated by organic chemicals. An initial investigation by the State indicated that seven separate wells at five locations had chemical tastes and odors. Analysis of the well water detected various combinations of volatile organic chemicals. The State undertook additional sampling in April 1984 to determine the areal extent of contamination, the levels of contamination, and the presence of any other contaminants. The Greene County Civil Defense is trucking in water for about 20 households.

The site is located in an area of highly permeable formations. The contaminated wells are about 1,500 feet west of Fulbright Spring, a major water source for the City of Springfield (population 133,000).

Status (January 1986): EPA, in cooperation with Greene County and the Greene County Civil Defense, used CERCLA emergency funds to extend a city waterline to the site, provide service connections to area residences, and permanently plug many private wells in the contaminated area.

A multisite cooperative agreement between EPA and the State covering five sites, including North-U Drive Well Contamination, was approved Sept. 9, 1985. Initial funding is for planning activities.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

QUALITY PLATING Sikeston, Missouri

Conditions at listing (October 1984): The Quality Plating Site covers about 5 acres in Sikeston, Scott County, Missouri. The site consists of a 1-acre unlined lagoon and the manufacturing plant. From 1978 until the facility was destroyed by fire on Feb. 12, 1983, Quality Plating was engaged in contract electroplating of common and precious metals, which included cadmium, lead, chromium (in the highly toxic hexavalent form), copper, nickel, and zinc. Untreated waste water originating from the flow-through rinse tanks, as well as acid, alkaline, and metal-plating batch solutions, was continuously discharged into the lagoon at a rate of at least 10,000 gallons per day. The State detected elevated levels of chromium and lead in an on-site well. The State has also repeatedly cited the company for discharging untreated plating waste to subsurface waters of the State, in violation of the company's permit under the National Pollutant Discharge Elimination System.

The site is located in a rural setting. The present owner raises hogs and calves on the former property of Quality Plating. Six residences within 0.25 miles of the site obtain drinking water from shallow wells.

Status (January 1986): A multisite cooperative agreement between EPA and the State covering five sites, including Quality Plating, was approved Sept. 9, 1985. Initial funding is for planning activities.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SOLID STATE CIRCUITS, INC. Republic, Missouri

Conditions at listing (October 1984): The Solid State Circuits, Inc., Site covers about 1-acre in Republic, Greene County, Missouri. During a drinking water study, EPA detected trichloroethylene (TCE) in the raw drinking water of one municipal well. The contaminated well has since been shut down. Further investigations by the city and the State identified the source of the TCE contamination as the property formerly owned by Solid State Circuits. The company once manufactured printed circuit boards at the site. Less than 1-acre of soil on the site is contaminated with TCE.

During its investigation, the State learned that after a fire occurred at the plant, Solid State Circuits buried the debris and collapsed the building into the basement of the structure, where there was an unplugged well.

The State has issued an Administrative Order requiring Solid State Circuits and the present property owner to take remedial action. Solid State excavated material from the basement, installed three monitoring wells, and then took no further action. The State then started to take initial remedial measures at the site by pumping out the aquifer. The State anticipates the need to excavate any remaining drums and/or contaminated soil as well as plug the abandoned well. Republic's water wells, which serve about 7,800 people, are within 500 feet of the site.

Status (January 1986): On March 6, 1985, EPA issued a CERCLA section 106 Administrative Order to Solid State and its parent company, Paradyne Corp. The two companies issued an injunctive complaint challenging the order on March 14, 1985.

In April 1985, EPA used CERCLA emergency funds to excavate the basement, the soil underneath the basement, and the debris. The removal action was completed in October 1985 with the installation of two wells to extract contaminated ground water. The State has taken the lead at the site, and the responsible parties have submitted a workplan for a remedial investigation to determine the type and extent of contamination at the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

VALLEY PARK TCE Valley Park, Missouri

Conditions at listing (April 1985): The Valley Park TCE Site is in Valley Park, a densely populated urban area of St. Louis County, Missouri. The site is underlain by a plume of contaminated ground water in the Meramec River alluvial aquifer, which supplies water to about 36,000 people in the cities of Valley Park and Kirkwood. In July 1982, Missouri Department of Natural Resources (MDNR) and EPA testing detected trichloroethylene, tetrachloroethylene, 1,1,1-trichloroethane, and a number of other volatile organic chemicals in the city's drinking water. Follow-up sampling indicated all three city wells were contaminated.

Possible sources of contamination include the large number of industries located in Valley Park, railroad spills which reportedly occurred years earlier, and discharges/dumping that may have occurred in the vicinity of the site.

The city is studying methods of improving treatment of the contaminated water to reduce contaminant levels. When the study is completed and funds are available, the city plans to install the necessary treatment facilities.

Status (January 1986): MDNR is developing the criteria for selection of eligible contractors to perform work at the site. The contractor will develop a scope of work and complete the design study. This preparation phase, including development of the criteria, requests for proposals, and selection of a contractor, is expected to be completed by the end of May 1986.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NEWSOM BROTHERS/OLD REICHHOLD CHEMICALS, INC. Columbia, Mississippi

Conditions at listing (October 1984): The Newsom Brothers/Old Reichhold Chemicals, Inc., Site covers 80 acres in Columbia, Marion County, Mississippi. Since the 1940s, the site has been used by several owners, including the present owner, Newsom Brothers, and a former owner/operator, Reichhold Chemicals, Inc., for the manufacture of naval stores.

In March 1984, EPA used \$160,000 in CERCLA emergency funds to remove approximately 500 drums of chemical wastes. EPA's analyses of the drums detected elevated levels of phenols and chromium. An unknown number of buried drums remain on the site. On-site soil is contaminated with organic chemicals. To date, private wells in the immediate area are not contaminated.

Columbia's wells, which supply water to 11,500 people, are located approximately 1,250 feet from the site and are less than 100 feet deep.

Status (January 1986): EPA has completed a search for parties potentially responsible for wastes associated with the site, identifying Newsom Brothers and Reichhold Chemicals, Inc. Both declined to take part in a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action.

In November 1985, EPA obligated funds for the U.S. Corps of Engineers to select a contractor to perform the RI/FS.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

IDAHO POLE CO. Bozeman, Montana

Conditions at listing (October 1984): Idaho Pole Co. treats wood products with pentachlorophenol (PCP) on a 10-acre site in Bozeman, Gallatin County, Montana. The pole yard has been in operation since 1946. Ground water is very shallow and flows to the north/northwest, where it discharges into Rocky Creek. About 1,250 people use ground water within 3 miles of the site as a source of drinking water.

Any hazardous material leaking onto the ground during the wood-treatment process could contaminate ground water due to highly permeable soils and shallow ground water. A greater concern is that waste water discharged onto the surface at the facility could rapidly infiltrate the shallow ground water. The facility has a history of surface water problems associated with its discharges.

In 1978, the State investigated a complaint concerning PCP in Rocky Creek. At that time, a ditch, originating at the Idaho Pole plant and running from the plant for about 200 to 300 yards before entering Rocky Creek, contained large quantities of PCP. While minute quantities were noted at the mouth of the ditch and running into Rocky Creek, large quantities had collected on the rocks and vegetation along and in the ditch. Stains high on the sides of the ditch and on vegetation indicated that discharge had been much greater in the past.

Following the investigation, the State issued a compliance order in 1984 requiring Idaho Pole to take measures to eliminate discharges into Rocky Creek and to prevent the future placement of wastes in locations where they were likely to pollute State waters. Idaho Pole started work to comply with the State's order. However, because of leaking pipes, leaking tanks, and a deteriorated main pumphouse sump, soil contamination at the facility was more extensive than plant personnel realized. Therefore, working in conjunction with the State, Idaho Pole constructed an interceptor trench running the length of the property boundary to halt the movement of PCP into ground water.

In August 1983, EPA collected samples at the old Bozeman Landfill, including the trench running the length of the Idaho Pole property. The results showed that a considerable amount of PCP was migrating from the Idaho Pole plant. A State sample showed even higher PCP concentrations.

Status (January 1986): Idaho Pole has analyzed samples from approximately 15 ground water monitoring wells it installed at the site under order of the State Water Quality Bureau (WQB). Idaho Pole has submitted a report of the data collected and is developing alternatives for cleanup. WQB is evaluating the data. Idaho Pole recently applied for a permit under the Montana Pollutant Discharge Elimination System for the PCP-contaminated water currently discharged to the stream.

EPA will continue to monitor the WQB enforcement action. EPA's Technical Assistance Team inspected the site in December 1985 and will issue a report regarding the potential for an immediate removal in early 1986.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MOUAT INDUSTRIES Columbus, Montana

Conditions at listing (October 1984): The Mouat Industries Site is near Columbus, Stillwater County, Montana. In the late 1950s and early 1960s, the site was leased to Mouat Industries for the processing of chromium ore to high-grade sodium dichromate. The process produced wastes containing sodium chromate and sodium dichromate. In 1973, the Anaconda Minerals Co. removed the waste pile and treated the area to remove hexavalent chromium remaining in the soil. Anaconda performed this work in exchange for Mouat Industries' mineral rights at another location. In early 1975, gravel was imported and placed on the site to a depth of 6 inches to 3 feet. By late 1976, yellow mineral deposits containing chromium were evident on top of the ground.

Hexavalent chromium is present in soils on-site, as well as in ground water and surface water both on-and off-site, according to analyses conducted by EPA and Anaconda. EPA has also detected elevated concentrations of arsenic in surface water sediments downstream of the site. An estimated 270 people draw drinking water from private wells within 3 miles of the site.

Ownership history of the site is now being investigated.

Status (January 1986): EPA's Technical Assistance Team recently visited the site to determine the need for an immediate removal.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

BYPASS 601 GROUND WATER CONTAMINATION Concord, North Carolina

Conditions at listing (October 1984): The Bypass 601 Ground Water Contamination Site is in Concord, Cabarrus County, North Carolina. An estimated 3,000 residents of this rural community on a bypass to State Highway 601 depend exclusively on ground water for drinking and other household uses.

EPA recently detected high concentrations of heavy metals in monitoring wells near Martin Scrap & Recycling, Inc., which has reclaimed batteries in the area since 1966.

Status (January 1986): In July 1985, EPA completed a search for parties (in addition to Martin Scrap) potentially responsible for wastes associated with the site. None of the parties chose to participate in cleaning up the site. EPA has obligated funds to start work preparatory to a remedial investigation/ feasibility study to determine the extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

CELANESE CORP. (SHELBY FIBER OPERATIONS)
Shelby, North Carolina

Conditions at listing (October 1984): Celanese Corp. manufactures synthetic fibers in a plant in Shelby, Cleveland County, North Carolina. Between 1970 and 1978, the company used a 3-acre area on the plant for the temporary storage of drums of waste chemicals and solvents. During the 1960s, combustible materials, including oils and solvents, were burned in the open in a smaller area on the plant.

Monitoring wells on the plant are contaminated with organic chemicals in the parts-per-million-range, according to tests conducted by Celanese. Within 0.25 miles of the site are 47 private drinking water wells; the closest is approximately 1,500 feet downgradient of the monitoring well with the highest levels of organic chemicals. The site is located approximately 3,500 feet from Buffalo Creek, the source of the plant's drinking water.

Status (January 1986): Celanese has submitted a workplan to EPA for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. EPA has approved the workplan and is discussing future activity at the site with Celanese.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

JADCO-HUGHES FACILITY Belmont, North Carolina

Conditions at listing (October 1984): The Jadco-Hughes Facility covers about 6 acres in Belmont, Gaston County, North Carolina. Chemical wastes were received from industries and reprocessed to recover whatever could be resold. The residues remaining were deposited in a landfill on the site.

About 8,000 to 10,000 drums had accumulated by August 1975, when the company stopped operating. The drums were stacked at several locations and were in various states of deterioration. Several large storage tanks were also on-site.

Analyses conducted by EPA revealed the presence of cyanide, arsenic, copper, lead, methylene chloride, and toluene in soil samples taken from the site. It appears likely that the contaminants will migrate into ground water since the landfill was unlined and approximately 6 feet above the water table. Approximately 4,700 people use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): In July 1985, EPA identified over 30 parties potentially responsible for wastes associated with the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NORTH CAROLINA STATE UNIVERSITY (LOT 86, FARM UNIT #1)
Raleigh, North Carolina

Conditions at listing (October 1984): A 1.5-acre site to the north of Carter-Finley Stadium in Raleigh, Wade County, North Carolina, referred to as Lot 86, Farm Unit #1, was used by the science laboratories and agricultural research facilities of North Carolina State University as a waste disposal area. From 1969 to 1980, solvents, pesticides, heavy metals, acids, and bases were buried in containers in 10-foot trenches. The site is completely fenced.

The University's Department of Marine, Earth, and Atmospheric Sciences has extensively monitored the site since 1981. One background and three downgradient wells were drilled to a depth of about 10 feet below the water table. Analyses of ground water indicate the presence of high levels (in the parts-per-million range) of chloroform, bromoform, 1,1,1-trichloroethane, and methylene chloride.

An estimated 3,900 people in surrounding communities use private wells and have no other source of drinking water.

Status (January 1986): EPA is considering various alternatives for the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

HASTINGS GROUND WATER CONTAMINATION Hastings, Nebraska

Conditions at listing (October 1984): Hastings (population 23,580) is in Adams County, Nebraska. Preliminary sampling of municipal wells in 1983 by the State detected contaminants in the ground water beneath the old Hastings business district. Locally high concentrations of volatile organic chemicals were detected. Past waste disposal practices, possibly dating to the 1920s, may have contributed to the contamination. The Nebraska Department of Environmental Control installed monitoring wells in Hastings in 1984.

Status (January 1986): The city has shut down the most heavily contaminated municipal wells. Privately owned public water supply wells located east of Hastings are also contaminated with organic solvents and have been taken out of service.

EPA has prepared a workplan for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. As part of this effort, EPA is sampling the monitoring wells on a quarterly schedule.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) ("Superfund")

WAVERLY GROUND WATER CONTAMINATION Waverly, Nebraska

Conditions at listing (October 1984): Waverly (population 1,700) is on a terrace of Salt Creek in Lancaster County, Nebraska. In the summer of 1982, the State, in cooperation with EPA, sampled the city's municipal wells. Wells #1 and #3 were contaminated with chloroform, carbon tetrachloride, and 1,2-dichloroethane. Further study is needed to identify the source or sources responsible.

The city has discontinued use of wells #1 and #3. Because the source of the contaminants migrating into ground water is currently unknown, the remaining uncontaminated wells could be threatened. The city has drilled a new well #4 to replace the most heavily contaminated well #1.

Status (January 1986): In August 1985, EPA started a remedial investigation/feasibility study (RI/FS) to determine the source and extent of ground water contamination at Waverly and identify alternatives for remedial action. Initial site evaluation and sampling analysis are underway to develop a RI/FS workplan. In January 1986, EPA started a soil gas survey.

Hazardous waste site listed under the Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

COAKLEY LANDFILL North Hampton, New Hampshire

Conditions at listing (October 1984): The Coakley Landfill covers 20 acres in a residential area in North Hampton, Rockingham County, New Hampshire. The landfill border extends into and along the towns of Greenland to the northwest and Rye to the northeast.

Prior to being permitted by the State as a sanitary landfill on April 21, 1971, the site was a sand and gravel operation. Under an agreement made in 1972, the owner was to be responsible for compaction and cover material at the landfill, and the City of Portsmouth was to manage the disposal of incinerator ash from the Portsmouth Refuse-to-Energy Project at the landfill.

The State is presently investigating the landfill as a potential source of ground water and surface water contamination in the area. The site is located in an area of permeable sands and gravels. Both surface water and ground water leave the site in more than one direction.

The presence of volatile organic solvents has forced closing of 13 private residential wells to the north, east, and south of the landfill. The Town of North Hampton extended a municipal water line to the residents. The year-round population supplied by wells within 3 miles of the site is 79,300. The State has set up an early warning system to detect well contamination in the entire area.

In March 1983, the State issued a Consent Order requiring the owner to accept only incinerator ash from the Refuse-to-Energy Project. In addition, the owner was ordered to conduct a full-scale hydrogeologic investigation of the landfill area. The State is presently working with the owner and other potentially responsible parties to develop a workplan for the investigation.

Status (January 1986): The State completed work on the hydrogeologic investigation it began in the fall of 1984. The results of this investigation are being incorporated into the workplan for the remedial investigation. Efforts to get the owner and other potentially responsible parties to conduct a full scale hydrogeologic investigation of the landfill area were not successful. Therefore, in the spring of 1985, the State applied to EPA for a cooperative agreement to conduct a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and to identify alternatives for remedial action. EPA awarded the cooperative agreement in August 1985, and negotiations with contractors to perform the RI/FS are underway.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

TIBBETTS ROAD Barrington, New Hampshire

Conditions at listing (April 1985): The Tibbetts Road Site occupies approximately 1.9 acres in the Town of Barrington, Stafford County, New Hampshire. It is in a residential area upgradient from Swains Lake, which is used for recreation. The site was used for surface storage of 336 deteriorating drums collected from 1946 to 1958. PCBs, benzene, acetone, toluene, and other solvents were present in the drums, according to EPA. Soil and ground water, including residential drinking water wells serving approximately 20 people, are contaminated with benzene, trichloroethylene, toluene, methyl ethyl ketone, and xylenes, according to tests conducted by the New Hampshire Water Supply and Pollution Control Commission. About 2,100 people depend on wells within 3 miles of the site for drinking water. No alternative source is available. A wetland is less than 1 mile from the site.

In April 1984, EPA used CERCLA emergency funds to remove all drums containing hazardous substances from the site and dispose of them at an approved disposal site.

Status (January 1986): During the summer of 1985, EPA and the State conducted a hydrogeologic study to determine the need for additional removal activities. During the study, low levels of dioxin were detected in the soil. Additional removal response is planned.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

CINNAMINSON TOWNSHIP (BLOCK 702) GROUND WATER CONTAMINATION Cinnaminson Township, New Jersey

Conditions at listing (October 1984): The Cinnaminson Township (Block 702) Ground Water Contamination affects that portion of the Raritan Magothy Aquifer located in the vicinity of Grinding Balls Road between Taylor Lane and Union Landing Road, Cinnaminson Township, Burlington County, New Jersey. Contamination of the aquifer with chloroform, benzene, and other organics was discovered during an August 1983 study conducted by a consultant for the owners of a nearby landfill. The aquifer is a source of drinking water for 52,000 people.

<u>Status (January 1986)</u>: EPA is conducting a remedial investigation/ feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

FRIED INDUSTRIES East Brunswick Township, New Jersey

Conditions at listing (October 1984): Fried Industries formulates industrial cleaners and cleaning agents on a 26-acre site in a rural-suburban area in East Brunswick Township, Middlesex County, New Jersey. The area was previously a clay pit.

In December 1983, EPA, under a search warrant, found that hazardous wastes were improperly stored on-site and that soil was contaminated with organic chemicals (including tetrachloroethylene and chloroform) and copper. In a limited excavation, EPA found deteriorated buried drums. The total number is unknown. There is a strong potential for the site to contaminate ground water and surface water. About 33,000 people in the surrounding area draw drinking water from wells. In a limited air survey, EPA detected above-background levels of organic vapors on-site.

Status (January 1986): East Brunswick Township has provided hook-ups to a public water supply to those residents whose wells have low-level contamination.

Using CERCLA emergency funds, EPA is emptying two storage tanks and one impoundment area which is threatening to overflow onto the surface surrounding the site.

EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

GLEN RIDGE RADIUM SITE Glen Ridge, New Jersey

Conditions at listing (October 1984): The Glen Ridge Radium Site is in a residential neighborhood in Glen Ridge, Essex County, New Jersey. Radioactive material, believed to be radium-processing waste, was used as fill, resulting in unacceptable levels of radon gas and its decay products in a number of private residences. Approximately 25,000 cubic yards of contaminated material are scattered throughout a neighborhood of about 0.50 square miles.

Several years ago, the State started to investigate a radium-processing facility in Orange that had ceased operation in the 1920s. The possibility of off-site disposal of processing waste prompted an aerial survey of surrounding areas for gamma radiation. In July 1983, the survey identified a number of homes with high levels of radon gas. About 60 people are immediately affected.

In December 1983, EPA started a major field investigation to define the perimeter of contamination and identify additional problem homes. Using CERCLA emergency funds, EPA installed ventilation systems in affected homes as a temporary corrective measure.

Status (January 1986): In September 1985, EPA completed a remedial investigation/feasibility study. About 60 homes were identified as being affected in the site area. The results were announced at a public meeting in November 1985. EPA is scheduled to make its final decision on the remedy selected in April 1986.

This site, along with the Montclair/West Orange Radium Site, was added to the NPL on Feb. 14, 1985, because it involves a serious problem that required taking immediate remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MONITOR DEVICES, INC./INTERCIRCUITS, INC.
Wall Township, New Jersey

Conditions at listing (April 1985): Monitor Devices, Inc. (also known as Intercircuits, Inc.) operated a metal-plating business from 1977 to 1981 in an industrial park adjacent to the Monmouth County Airport, Wall Township, New Jersey. The site, which was leased from the owner, covers about 2 acres. In 1981, the company closed operations at this site and moved to a new location.

Process waste waters containing heavy metals, solvents, and corrosive acids were discharged behind the building onto the ground via three pipes. State officials observed these discharges in March and April of 1980. A small unlined ponded area (25 feet by 15 feet and 6 to 8 inches deep) was noted at the rear of the building.

Subsequent sampling by the State revealed significant contamination of on-site soil and ground water with heavy metals and volatile organic chemicals. Two municipal wells serving 24,000 people are less than 2 miles from the site.

In June 1980, the State issued an Administrative Order relating to the company's discharge of waste water onto the ground without a permit. The order required the company to pay a penalty, install monitoring wells, sample the wells, and take remedial action as necessary. The company has not fully complied with the order.

In March 1983, Monmouth County filed criminal charges against the company for violating State and Federal environmental laws.

<u>Status (January 1986)</u>: EPA is considering various alternatives for this site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MONTCLAIR/WEST ORANGE RADIUM SITE Montclair/West Orange, New Jersey

Conditions at listing (October 1984): The Montclair/West Orange Radium Site is in two residential neighborhoods in Montclair and West Orange in Essex County, New Jersey. Radioactive material, believed to be radium-processing waste, was used as fill, resulting in unacceptable levels of radon gas and its decay products in a number of private residences. Approximately 50,000 cubic yards of contaminated material are scattered throughout a neighborhood covering about 1.0 square miles.

Several years ago, the State started to investigate a radium-processing facility in Orange that had ceased operation in the 1920s. The possibility of off-site disposal of processing waste prompted an aerial survey of surrounding areas for gamma radiation. In July 1983, the survey identified a number of homes with high levels of radon gas. About 80 people are immediately affected.

In December 1983, EPA started a major field investigation to define the perimeter of contamination and identify additional problem homes. Using CERCLA emergency funds, EPA installed ventilation systems in affected homes as a temporary corrective measure.

Status (January 1986): In September 1985, EPA completed a remedial investigation/feasibility study. About 160 homes were identified as being affected in the site area. The results were announced at a public meeting in November 1985. EPA is scheduled to make its final decision on the remedy selected in April 1986.

This site, along with the Glen Ridge Radium Site, was added to the NPL on Feb. 14, 1985, because it involves a serious problem that required taking immediate remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

POMONA OAKS RESIDENTIAL WELLS Galloway Township, New Jersey

Conditions at listing (October 1984): The Pomona Oaks Residential Wells serve approximately 200 single-family homes in a rural residential area of Galloway Township, Atlantic County, New Jersey. The lots range from 0.25 to 0.5 acres in size. The wells average 50 to 60 feet deep.

The State's analyses of the wells and of air in showers at several homes detected the following volatile organic chemicals: benzene, 1,2-dichloroethane, methylene chloride, and 1,1,2-trichloroethane. Approximately 8,000 people living within 3 miles of the site could be affected by the contaminated ground water. The State advised residents to seek alternate sources of drinking water. Furthermore, the State strongly suggested that some residents cease using their well water for bathing purposes. Since there are no municipal wells in the area, affected residents have resorted to carting water from various other sources.

The State is monitoring the impact of volatile organics inside the homes and has contracted for a study to fully evaluate and recommend alternate water supplies. The Atlantic County Department of Health is continuing its investigations to determine the source of contamination.

Status (January 1986): Using CERCLA emergency funds, EPA sampled 67 homes, some of which showed low levels of volatile organic chemicals. EPA then began to distribute bottled water to the affected homes. The local water supplier, New Jersey Water Co., extended water lines, and the distribution system was installed to serve the affected homes. This system is reported to be incapable of meeting peak water supply demands. Galloway Township is continuing efforts to secure the land for siting a new production well. EPA has terminated the distribution of bottled water.

The State is preparing a cooperative agreement application to EPA for a remedial investigation/feasibility study to determine the type and extent of ground water contamination and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WALDICK AEROSPACE DEVICES, INC.
Wall Township, New Jersey

Conditions at listing (October 1984): Waldick Aerospace Devices, Inc., has operated a metal-electroplating business on a 2-acre site in Wall Township in Monmouth County, New Jersey, since 1979.

Waste waters containing heavy metals, acids, and volatile organic chemicals were discharged into the ground on a daily basis prior to 1982, according to a former employee. In 1982, Monmouth County and the State inspected the site. The inspections and subsequent sampling revealed significant levels of cadmium, chromium, and tetrachloroethylene in the soil. Monitoring wells on the site are contaminated with the same compounds. Nearby public and private wells serving about 28,000 people are threatened.

In March 1984, Waldick Aerospace Devices, Inc., was tried in Superior Court for criminal violation of Federal and State environmental laws. KLS Industries, one of the parties potentially responsible for wastes at this facility, agreed to take remedial action at the site under the supervision of the Monmouth County Board of Health. Highly contaminated soil was excavated to depths of 1 to 2 feet on three sides of the main building and was removed from the site.

Status (January 1986): Despite continued legal action, no further corrective measures have been taken by the officers of the two companies. By January 1985, Waldick Aerospace Devices, Inc., KLS Industries, and the company officers had all filed for bankruptcy.

In May and June of 1985, EPA conducted limited sampling of soils, ground water, surface water, and air. These samples documented the contamination of soils and ground water. Surface water and private wells in the area are all upgradient from the site.

EPA has started a remedial investigation/feasibility study to determine the type and extent of contamination at the site and to identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ANCHOR CHEMICALS Hicksville, New York

Conditions at listing (October 1984): Anchor Chemicals has operated on a 0.9-acre site in Hicksville, Nassau County, New York, since 1964. The facility blends and packs chemicals for the graphic arts industry. In 1978, Anchor Chemicals was purchased by Chessco Industries. The new company is known as AnchorLith Kem Ko.

Below the concrete floor of the building on the site are 17 storage tanks with capacities ranging from 1,000 to 2,000 gallons. A number of the tanks leaked during various pressure tests performed from 1981 through January 1983 by the Nassau County fire marshall and AnchorLith Kem Ko.

The company has installed three monitoring wells at the site. Analyses by the company indicate that the wells are contaminated with volatile organic chemicals similar to those contained at various times in the storage tanks.

About 90,000 people draw drinking water from wells within 3 miles of the site.

Status (January 1986): EPA is considering various alternatives for the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

APPLIED ENVIRONMENTAL SERVICES Glenwood Landing, New York

Conditions at listing (October 1984): The Applied Environmental Services (AES) Site covers 3.7 acres in Glenwood Landing, Nassau County, New York. The site is on the north shore of Long Island. It slopes down to Hempstead Harbor on the west and Mott Cove on the south. The property to the north is operated by a fuel oil distributor, and the property to the east is owned by a country club.

The site consists of 2 one-story buildings, 7 underground tanks, and 11 above-ground tanks. Seven of the above-ground tanks are on an earthen wall that rises approximately 30 feet above grade.

In November 1980, AES started recovering fuels from hazardous wastes. Prior to that, the site was leased and operated by Mattiace Petrochemicals. Several spills occurred during Mattiace's operation, including approximately 3,000 gallons of toluene from an overturned tank trailer. After toluene was found seeping into Hempstead Harbor, the company installed a trench that recovers an average of 500 gallons of organic chemicals each month.

In several recent inspections, the State and EPA observed leaking barrels, tanks of solvents, and an oil sheen in Mott Cove. The State has taken samples and plans further studies. Shore Realty, the current owner of the site, evicted AES on Jan. 5, 1984. In June 1984, the New York State Attorney General brought suit against Shore Realty in Federal court to require the firm to take several remedial actions.

About 20,000 people draw drinking water from wells within 3 miles of the site.

Status (January 1986): As a result of a court order, Shore Realty removed all the drums from the site in November 1985. The State is using its own Superfund monies to clean out the storage tanks.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

BYRON BARREL & DRUM Byron Township, New York

Conditions at listing (October 1984): The Byron Barrel & Drum Site covers 5 acres in an old gravel and sand pit area in Byron Township, Genesee County, New York. It is adjacent to farm land used for raising vegetables. About 200 55-gallon drums have been abandoned on the property. Based on affidavits of several former employees, there may be an area where about 200 damaged drums are buried.

The State collected random samples from 11 of the drums at the site; the results indicate the presence of various organic compounds, including toluene, methyl ethyl ketone, and methylene chloride. EPA sampled all the drums at the site and found PCBs in several of them in concentrations up to 236 parts per million.

EPA issued an Administrative Order requiring the property owner to take immediate corrective actions to clean up the site. The owner has not complied with the order.

About 20 people draw drinking water from wells within 3 miles of the site.

Status (January 1986): Using CERCIA emergency funds, EPA removed all the drums, sampled soils, and installed a monitoring well. The results of the sampling indicate that both soil and ground water are contaminated with volatile organic compounds.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

BEC TRUCKING Town of Vestal, New York

Conditions at listing (October 1984): The BEC Trucking Site is a 3.5-acre vacant lot in the Town of Vestal, Broome County, New York. The site was formerly owned by the Binghamton Equipment Co., a truck manufacturer. After the firm declared bankruptcy in 1982, COGS, Inc., purchased the property at public auction.

A State inspection discovered about 40 drums of waste machine oils and unknown materials improperly stored at the site. Many of the drums are rusted and leaking. The soil nearby is oil-soaked. The remainder of the site is littered with empty drums, trash barrels, and other debris.

There is a potential to contaminate ground water and surface water near the site. A Vestal Water District Well Field is about 4,500 feet north-northeast of the site and serves approximately 3,700 people. Two Vestal wells were placed on the NPL in September 1983.

The State is negotiating with COGS, Inc., for further monitoring and remedial action.

Status (January 1986): EPA is considering various alternatives for this site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

CLAREMONT POLYCHEMICAL Old Bethpage, New York

Conditions at listing (October 1984): Claremont Polychemical produced materials for coloring plastic in Old Bethpage, Nassau County, New York, from August 1966 through October 1980. The site consists of a 1-story building covering 40,000 square feet situated on an 8-acre lot. On March 13, 1975, the State issued a Pollutant Discharge Elimination System permit to the company. In November 1975, the Nassau County Department of Health (NCDH) inspected the site and found approximately 1,500 drums scattered about, some uncovered and others leaking or lying on their sides. The drums contained inks, polyethylene, polyvinyl chloride resins, and organic solvents.

From May to September 1980, the company sorted and removed drums from the site. An inspection by NCDH on Sept. 26, 1980, revealed the soil was contaminated with inks and solvents. NCDH directed Claremont to excavate contaminated soils. On Oct. 27, 1980, counsel to Claremont told NCDH that the company was in receivership and that funds for the cleanup were no longer available. Conditions have not changed since October 1980. In August 1984, the State and the company signed an Administrative Order on Consent requiring the company to undertake a remedial investigation/ feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

About 47,000 people draw drinking water from wells within 3 miles of the site. The nearest public supply well is 3,500 feet northwest of the site.

Status (January 1986): The measures called for by the August 1984 order are underway.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

CLOTHIER DISPOSAL
Town of Granby, New York

Conditions at listing (October 1984): The Clothier Disposal Site covers about 10 acres in the Town of Granby, Oswego County, New York. The site is bounded on the north by a dirt road and on the south by Ox Creek. Generally, it consists of wooded areas and wetlands.

Until 1974, the site owner accepted between 500 and 1,500 barrels of waste from Pollution Abatement Services (which was placed on the NPL in September 1983) in nearby Oswego. Inspections conducted by the State indicated that many barrels were in poor condition and leaking; solvent odors were noted. PCBs are present in soil samples, according to analyses conducted by the State. The contamination threatens ground water and surface water. Nearby residents use private or municipal wells. The site drains into a marsh area that drains north into Ox Creek and then to the Oswego River, which is used for recreation.

The State brought suit against the owner in November 1976 for operating without a permit. As a result, the State granted the owner a temporary permit and a period of 1 year to clean up the site. In 1977, the materials dumped on the site were covered; in the process, barrels were broken open and drained. However, the case was dismissed in January 1978.

Status (January 1986): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

COLESVILLE MUNICIPAL LANDFILL Town of Colesville, New York

Conditions at listing (October 1984): The Colesville Municipal Landfill is owned and operated by Broome County in the Town of Colesville, Broome County, New York. The 30-acre site was owned and operated by the Town of Colesville from 1965 until 1969, when ownership was transferred to Broome County. The site is located in a rural setting. About 240 residents of the area obtain their drinking water from private wells and springs.

Records indicate that the landfill accepted large quantities of industrial wastes from 1973 to February 1975. These wastes included organic solvents, dyes, and various metal wastes containing cadmium and lead.

Ground water and surface water around the site are contaminated, according to tests conducted by Broome County. Some private wells and springs in the area of the landfill have been contaminated with volatile organic compounds, including vinyl chloride, trichloroethane, l,l-dichloroethane, and benzene. Broome County is providing these residents with bottled water.

The State is negotiating with Broome County for further monitoring and remedial action.

Status (January 1986): The county is supplying either bottled water or carbon filtration units to approximately 13 homes.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

CORTESE LANDFILL
Village of Narrowsburg, New York

Conditions at listing (October 1984): The Cortese Landfill covers approximately 17 acres in the Delaware River floodplain in the Village of Narrowsburg, Town of Tusten, Sullivan County, New York. The former operator of the landfill is the John Cortese Construction Corp. The company owns a portion of the property. The town owns the rest.

The landfill received municipal wastes from the Town of Tusten at a rate of 3,000 cubic yards per year from 1972 to 1982. In addition, significant quantities of industrial wastes were buried at the landfill.

The State has documented the release of organic chemicals and metals to surface water and ground water at or near the site. The nearest known water supply (800 feet to the northwest) is the auxiliary well for the Narrowsburg water supply. To date, no significant impacts on water supplies have been detected.

The State initiated a lawsuit under CERCLA against several parties in Federal District Court in August 1983.

Status (January 1986): In April 1985, the State signed a Consent Order with SCA Services, Inc., which had transported wastes to the site. The Consent Order requires SCA to undertake a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. The work began in the summer of 1985. The RI is scheduled to be completed in September 1986.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ENDICOTT VILLAGE WELL FIELD Village of Endicott, New York

Conditions at listing (October 1984): The Endicott Village Well Field is in the Village of Endicott, Town of Union, Broome County, New York. The village operates four wells which provide water for approximately 45,000 people. The Ranney Well, which supplies approximately 47 percent of the total capacity of the system, has operated continuously since 1950. It is located on the north bank of the Susquehanna River between En-Joie Golf Course and Grippen Park in the Village of Endicott.

In May 1981, EPA detected vinyl chloride and other organic chemicals in the Ranney Well. In February 1982, EPA confirmed vinyl chloride in the well. Samples taken by the State in 1982 and 1983 also showed the presence of 1,1-dichloroethane, trans-1,2-dichloroethylene, and trichloroethylene in the Ranney Well and other points in the distribution system. The village has installed aeration equipment to remove vinyl chloride from the water and is presently sampling the Ranney Well and various distribution points in the system on a weekly basis. Low levels of vinyl chloride (1 to 3 parts per billion) are still being detected in the well water.

The State has undertaken a comprehensive investigation of the contamination of the Endicott Village Well Field. It has installed 10 monitoring wells on the En-Joie Golf Course and sampled some existing upgradient wells. Preliminary sampling has revealed that a portion of the well field is more heavily contaminated than was indicated in the Ranney Well samples. A number of potential vinyl chloride sources are being investigated. So far, no source has been conclusively identified.

Status (January 1986): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

FMC CORP. (DUBLIN ROAD LANDFILL)
Town of Shelby, New York

Conditions at listing (October 1984): FMC Corp.'s Dublin Read Landfill covers 6 acres in the Town of Shelby, Orleans County, New York. FMC acquired the site from Niagara Sprayer and Chemical Corp. in 1943 and used it to dispose of wastes from repackaging and production of various chemicals. According to FMC, the chemicals included lead, mercury, arsenic, and a variety of phenolic compounds and pesticides (DDT, DDD, and DDE). The quantity of hazardous wastes is unknown. Past investigations and sampling by a consultant to FMC documented the release of contaminants to ground water and surface water in the vicinity of the site.

Several hundred people draw drinking water from private wells within 3 miles of the landfill. The nearest well is within 1,500 feet of the landfill.

The State has issued an Order on Consent requiring FMC to undertake further field investigations, monitor the migration of contaminants, and take necessary remedial action.

Status (January 1986): FMC has conducted further studies, and the reports are currently under review by the State.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

GOLDISC RECORDINGS, INC. Holbrook, New York

Conditions at listing (October 1984): Goldisc Recordings, Inc., (formerly Sonic Recording Products) in Holbrook, Town of Islip, Suffolk County, New York, produced phonographic records from January 1968 to June 1983. The facility occupies approximately 150,000 square feet on 7 acres of commercially-zoned property. Wastes generated at the site include large quantities of nickel plating wastes and hydraulic oil, and lesser quantities of solvents. On several occasions, the Suffolk County Department of Health discovered chemical wastes in storm drains, holding ponds, and an on-site dump located in the recharge basin of an aquifer. In 1981, the county detected excessive levels of solvents, nickel, and oil in sanitary and storm drains. An area between the two buildings on the site is paved, and there is a large paved area on the southern portion of the site. Sanitary and storm drains, two above-ground tanks, and some 55-gallon drums are located between the two buildings. A large holding pond is located on the north side of the site.

A grassy wooded area surrounds the property. The site is relatively flat to the south and west, with variable topography to the north and east. Residential and commercial areas are largely to the west and south, and relatively undeveloped land lies adjacent to the site to the north and east. Many surface water bodies, including lakes and basins that recharge ground water, are downgradient.

An estimated 130 wells within 3 miles of the site serve a minimum population of 71,000. A public supply well is 1,000 feet downgradient (south) of the site. Other public and private supply wells are also downgradient. Ground water is the only source of water supply in the area.

The State issued a number of Consent Orders to Goldisc between 1979 and 1981 for numerous violations of Article 12 of the Suffolk County Sanitary Code and the State's Environmental Conservation Law.

Status (January 1986): The present owner, First Holbrook Co., has cleaned the leaching pools and installed monitoring wells. On Dec. 20, 1985, the Electrosand Group, Inc. (present occupants of the site) and the present owner entered into a Consent Order with the State to undertake a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

HAVILAND COMPLEX
Town of Hyde Park, New York

Conditions at listing (October 1984): The Haviland Complex covers several blocks in the Town of Hyde Park, Dutchess County, New York. The site consists of a group of apartments and a shopping center with an old dry cleaner, a car wash, a laundromat, and offices. At least seven private wells nearby and two Haviland Complex water supply wells serving about 2,000 people have been contaminated with trichloroethylene, perchloroethylene, vinyl chloride, chlorobenzenes, and other volatile organic chemicals, according to tests conducted by the county. The shallow aquifer is contaminated, and the bedrock aquifer is threatened. No alternate water supply is readily available.

Status (January 1986): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. Homeowners in the area are currently buying their own bottled water. The apartment complex has installed an aeration system to remove volatile organic chemicals from its wells.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

HERTEL LANDFILL
Plattekill, New York

Conditions at listing (October 1984): The Hertel Landfill covers 80 acres in Plattekill, Ulster County, New York. It is situated in the valley of a tributary to Black Creek and is surrounded by wetlands. The privately—owned landfill accepted an unknown quantity of commercial and industrial waste from approximately 1963 to April 1976, when the Ulster County Department of Health revoked its permit for a variety of violations.

Tests conducted by the State detected chromium in ground water. About 1,800 people draw drinking water from wells within 3 miles of the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

HOOKER CHEMICAL & PLASTICS CORP./RUCO POLYMER CORP. Hicksville, New York

Conditions at listing (October 1984): The Hooker Chemical & Plastics Corp./Ruco Polymer Corp. Site covers 72 acres in an industrial park area of Hicksville on Long Island, Nassau County, New York. The surrounding area is highly urbanized. Hooker/Ruco manufactures plastics, latex, and esters on the site.

Hooker/Ruco discharged liquid wastes into dry wells from 1951 to 1975. The wells for Plant 2, which manufactured polyvinyl chloride (PVC) and latex, received approximately 2 million gallons per year of waste water from 1956 to 1975. The primary materials were 0.1 percent PVC resin solids, 0.1 percent vinyl chloride, trichloroethylene, and vinyl acetate. In addition, unknown amounts of styrene and butadiene were discharged from latex processing. The well for Plant 1, which manufactured esters, received waste water containing "considerable" amounts of mixed glycols and alcohols, according to the Nassau County Health Department. The waste water also included tetrachloroethylene, methanol, and organic acids such as adipic, trimellitic, maleic, and phthalic.

From 1975 through 1980, the Health Department verified contamination of industrial wells at the neighboring Grumman Aerospace Corp. with high levels of vinyl chloride and other chlorinated organic compounds. The maximum level was 50 parts per billion. The Health Department determined that Hooker/Ruco was the only producer and user of vinyl chloride on Long Island. There are 4 public supply wells within 1 mile of the site; more than 24 are within 3 miles, of which one, Hicksville Water District, serves 58,000 persons.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

JOHNSTOWN CITY LANDFILL
Town of Johnstown, New York

Conditions at listing (October 1984): The Johnstown City Landfill covers 68 acres in the Town of Johnstown, Fulton County, New York. After operating the site as an open dump from 1947 to 1960, the City of Johnston converted it to a sanitary landfill. The landfill is still owned and operated by the city.

The landfill accepted industrial waste from local tanneries until mid-1977. From 1973 to April 1979, about 20,000 cubic yards of sludge from the Gloversville-Johnstown sewage treatment plant were deposited in piles in the landfill. The sludge contains high concentrations of chromium, lead, and iron.

EPA and the State have documented that monitoring wells and private wells in the immediate vicinity of the site are contaminated with heavy metals. The City of Johnstown Well Field, approximately 4,500 feet southeast of the landfill, is used only on an auxiliary basis because of high chloride, turbidity, and iron attributed to the landfill.

The State is presently negotiating with the City of Johnstown for the closure of the landfill, additional monitoring, and remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

KATONAH MUNICIPAL WELL Town of Bedford, New York

Conditions at listing (October 1984): The Katonah Municipal Well in the Town of Bedford, Westchester County, New York, is a part of the Bedford Water and Storage Distribution District. This well had provided nearly 50 percent of the drinking water for 6,150 persons on public supply systems in Katonah and Bedford Hills. It is adjacent to the Muscoot Reservoir, which supplies water to New York City.

The County Health Department first discovered tetrachloroethylene, dibromochloromethane, bromodichloromethane, and bromoform in the Katonah Well in December 1978, at which time it was taken out of service. By January 1979, the possible sources of the problem had been traced to four nearby dry cleaning establishments that were served by septic systems. The county worked with the owners to correct the problems and remove the sources.

Several attempts at pumping the well to remove the contamination from the aquifer have proved unsuccessful. In addition, the floodgates of the Muscoot Reservoir were closed to raise the water level of the reservoir in the hopes that water pressure would impact the well field and dilute the concentration of contaminants. However, after an initial drop, contaminant levels rose when the well was pumped to simulate normal operations.

The county and State will continue to work with the Town of Bedford on a plan to reduce the concentration of contaminants in the well.

Status (January 1986): The Town of Bedford has installed new wells to provide the water district with an adequate supply of water. EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

KENMARK TEXTILE CORP. Farmingdale, New York

Conditions at listing (October 1984): Kenmark Textile Corp. has conducted operations involving manufacturing screens and handling and washing fabric in a light industrial area in Farmingdale, Suffolk County, New York, since 1971. The 5-acre site, which is largely paved, is fairly flat. Over 500 residences are within 0.25 miles of the site, the nearest 650 feet away.

An engineering report completed in 1973 by a consultant to Kenmark documented that ground water at the site was in violation of ground water standards due to elevated levels of chromium. Wells are the only source of drinking water for more than 10,000 people in the area. It was known in 1973 that wastes were being discharged to leaching pits on site. The wastes contained calcium, iron, zinc, copper, chromium, nickel, and varying amounts of inks and dyes.

In 1979, the State issued a permit requiring Kenmark to treat its waste water before discharging it to the municipal sewer. Kenmark is not meeting the discharge levels, and waste water contaminated with heavy metals is discharged to leaching pools on-site.

In 1981, the Suffolk County Department of Health temporarily closed the company for illegal storage of drums of hazardous waste. More than 50 drums containing hydroxide sludge are currently stored on-site.

The State is negotiating with Kenmark to treat its wastes properly, discharge them into the municipal sewer system, and remove drums containing hazardous wastes.

Status (January 1986): Susquehanna Textile, a tenant at the site, has removed some of the contaminated materials from the surface.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

LIBERTY INDUSTRIAL FINISHING Farmingdale, New York

Conditions at listing (October 1984): The Liberty Industrial Finishing Site covers less than 0.1 acres in Liberty Industrial Park in Farming-dale, Nassau County, New York. The site is surrounded on three sides by residential areas, the nearest within 1,000 feet. The site consists of three buildings, three acid vats, a sludge-drying lagoon, two leaching basins, a number of finishing vats, and a basin for holding storm water. From 1948 through 1972, the company carried out electroplating, anodizing, and painting operations at the site.

In 1977, the State found that Liberty Industrial was violating its permit by discharging plating wastes containing heavy metals to leaching basins. The leaching basins were contaminated with chromium and cadmium, according to tests conducted by the county.

In September 1978, Liberty Industrial entered into a Consent Agreement with the State to clean up the site. It did not do so. On Sept. 21, 1984, Four J's Co. acquired title to the site from Liberty Industrial. The State is now trying to bring the new owner into compliance with the Consent Agreement.

The site is underlain by sand and gravel to a depth of 95 feet, which allows contaminants on the surface to seep into ground water. About 90,000 people draw drinking water from wells within 3 miles of the site.

Status (January 1986): On April 12, 1985, the State and Four J's entered into a Consent Order requiring the company to undertake a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NEPERA CHEMICAL CO., INC. Maybrook, New York

Conditions at listing (October 1984): The Nepera Chemical Co., Inc., Site covers 23 acres southwest of Maybrook, Orange County, New York. Between 1953 and 1968, Nepera used the site to dispose of a portion of the industrial wastes generated by its plant in Harriman, New York. The plant manufactured a variety of organic chemical compounds. In 1953, the State issued Nepera a "permit to discharge sewage or wastes into the waters of the State." Waste disposal started with two lagoons and expanded to six lagoons, each measuring 160 feet long, 70 feet wide, and 6 feet deep. The discharge started at 50,000 gallons per week and declined to about 7,000 gallons per week in 1967.

State inspections detected leakage from the lagoons in 1958 and 1960. Nepera and EPA detected contaminants, including arsenic, copper, zinc, dichloromethane, and di-n-butylphthalate, in on-site test wells.

Due to the State's continuing concern about proper containment of the waste and the threat to the Maybrook Well Field 800 feet away, which served 2,500 people, Nepera discontinued operation of the lagoons in 1968. The last lagoons were filled in 1974.

On Aug. 17, 1984, the State entered into an Administrative Order on Consent with Nepera to conduct a remedial investigation to determine the type and extent of contamination at the site.

Status (January 1986): The results of the investigation were due early in 1986.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NORTH SEA MUNICIPAL LANDFILL North Sea, New York

Conditions at listing (October 1984): The North Sea Municipal Landfill covers 110 acres in North Sea, Town of Southampton, Suffolk County, New York. Owned by the Town of Southampton, the landfill has been accepting refuse, construction debris, and septic system wastes since 1963.

The site is located in eastern Long Island near the southern shore of Little Peconic Ray in an area with extensive ponds, coves, and wetlands. Soils in the area are sands and gravels, and ponds in the area are surface expressions of ground water. The site is unlined, allowing rapid movement of contaminants.

There is a plume of ground water contaminated with heavy metals in an aquifer designated by EPA as a sole source of drinking water for more than 10,000 people in the area. Monitoring by the town and State has established that the plume is moving northwest of the site and has resulted in closure of several private wells. Public water supplies have been extended to serve residents of the area. Ground water in this area ultimately discharges to Fish Cove of the Peconic Bay. The Peconic Bay system is a major recreational resource in this region.

The town has been cooperating with the Suffolk County Health Department to provide alternative drinking water supplies in areas where ground water has been contaminated.

Status (January 1986): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PASLEY SOLVENTS & CHEMICALS, INC.
Hempstead, New York

Conditions at listing (October 1984): The Pasley Solvents & Chemical, Inc., Site covers about 0.5 acres in Hempstead, Nassau County, New York. Barlo Equipment Co. leased the property and subsequently subleased it to Pasley Solvents. Pasley operated as a chemical distribution facility from 1969 through mid-1982 and reportedly stored various organic chemicals, including aliphatic naphthas, aromatic solvents, and ketones. Prior to 1969, the site was occupied by Commander Oil, a distributor of fuel oil and gasoline. The site consists of a large one-story building, a tin shed, a small building, and 12 above-ground tanks.

In June 1981, the Nassau County Health Department collected soil samples beneath the tanks at depths of 6 inches to 36 inches. Analyses of the samples indicated that the soil was contaminated with halogenated and nonhalogenated organic compounds. Five monitoring wells were installed at the site in August 1981. Analyses of soil and ground water from wells 2, 4, and 5 detected halogenated and nonhalogenated organic compounds, as well as constituents of fuel oil and gasoline. The nearest well is less than 0.5 miles from the site. About 12,000 people draw drinking water from wells within 3 miles of the site.

Nassau County has cited both Commander Oil and Pasley Solvents for various violations but without any resulting follow-up action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PREFERRED PLATING CORP. Farmingdale, New York

Conditions at listing (October 1984): Preferred Plating Corp. conducted plating operations on a 0.5-acre site in Farmingdale, Town of Babylon, Suffolk County, New York, for more than 20 years, before going out of business in 1976. Since then, several firms have occupied the site. None conducted similar operations to Preferred Plating. An automobile repair shop now occupies the site.

From 1955 to 1976, the Suffolk County Department of Health made numerous tests of waste materials contained in open pits. The pits were severely cracked and leaking, allowing discharges into ground water. In 1975, the county identified four major contaminants—copper, chromium, cadmium, and hexavalent chromium. About 15,000 people draw drinking water from wells within 3 miles of the site.

The county has taken various court actions through the years to upgrade on-site treatment facilities. The court mandates were never accomplished. In 1976, Preferred Plating filed for bankruptcy.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ROBINTECH, INC./NATIONAL PIPE CO.
Town of Vestal, New York

Conditions at listing (October 1984): The Robintech, Inc./National Pipe Co. Site is an inactive filled lagoon, approximately 1-acre in size, in a primarily industrial area of the Town of Vestal, Broome County, New York. The site was owned by Robinson Technical Products from September 1966 to 1970; Robintech, Inc., from 1970 to December 1982; and National Pipe Co. from December 1982 to the present. The facility manufactures polyvinylchloride (PVC) pipe from inert PVC resin and assembles plastic-coated cable.

The lagoon was used from 1968 to 1974 for disposal of chromic acid plating solution, caustic reverse plating etch, machine cutting oils, and toluene. More than 1,500 gallons of liquid waste were dumped into the lagoon, which had been a small swamp. It has been almost completely filled with clean dirt and paved or covered with gravel. It is now used as a storage yard for PVC pipe.

The site is situated at the southern edge of an area that is an active gravel pit on the southern bank of a meander of the Susquehanna River. The area immediately north of the site is marshy, with a small stream running through it that receives drainage from the Roundtop Hill area. The Town of Vestal Water District No. 4 is on the Susquehanna floodplain about 2,500 feet north-northwest of the site. Well 4-2 was placed on the NPL in September 1983.

Status (January 1986): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SARNEY FARM Amenia, New York

Conditions at listing (October 1984): The Sarney Farm is in Amenia, Dutchess County, New York. The site is an open dump in farmland, with several small villages close by. A former owner used a 35-acre section of the property as a dump for municipal and industrial wastes. The operation had no permit. The site received drums of ethylene dichloride, cleaning solvents, inks, acids, water-base glue, and machine oil between 1965 and 1969, according to the county. Some drums are on the surface, and others are buried.

Contamination of both ground water and surface water is of concern.

About 4,500 people draw drinking water from wells within 3 miles of the site.

The site is 500 feet from Cleaver Swamp, which in the past provided water for farm livestock.

Status (January 1986): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and to identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SUFFERN VILLAGE WELL FIELD Village of Suffern, New York

Conditions at listing (October 1984): The Suffern Village Well Field consists of four wells in the Village of Suffern, Rockland County, New York. Approximately 11,000 residents are served at an average rate of 1.5 million gallons per day from the well field, which is immediately adjacent to the Ramapo River in the northwest corner of the village limits. In September 1978, Rockland County Health Department detected over 100 parts per billion (ppb) of the solvent 1,1,1-trichloroethane in Well Number 4. Three wells (numbers 1, 2, and 4) have been forced out of operation due to the contamination.

During an investigation in 1979, the Health Department identified Tempcon Corp. as a likely source of the solvent contamination. Tempcon has since removed its suspected dry well and no longer uses 1,1,1-trichloroethane in its operations. Unfortunately, these remedial actions have not reduced the levels of 1,1,1-trichloroethane at the well field.

During the summer of 1979, the village took remedial action of its own by constructing a \$190,000 pretreatment aeration system to remove volatile organic chemicals from the ground water and by pumping upgradient Well Number 4 and discharging the effluent. These two remedial measures control the concentration of 1,1,1-trichloroethane in Well Number 3 to below 50 ppb, which allows the well to be used. The State has studied the Ramapo Valley outwash deposit, the 8,000-foot long aquifer tapped by the wells. The State plans further studies of the site.

Status (January 1986): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SMS INSTRUMENTS, INC.
Deer Park, New York

Conditions at listing (October 1984): SMS Instruments, Inc., overhauled military aircraft components in Deer Park, Town of Babylon, Suffolk County, New York, between 1971 and 1983. The site consists of a one-story building occupying 34,000 square feet on a 1.5-acre lot that is largely paved. Industrial wastes generated from degreasing and other refurbishing operations were routinely discharged to a leaching pool on-site. In 1979-80, the Suffolk County Department of Health detected solvents in the pool. The county installed monitoring wells, which proved to be contaminated with 1,1,1-trichloroethane. Ground water is the only water supply source in the area. A public well field and pump station are less than 1 mile south, the general direction of ground water flow. Over 10,000 people draw drinking water from wells within 3 miles of the site.

In March 1980, the county issued a modified Consent Order to SMS. Violations at the site included effluent discharges in excess of ground water standards and criteria, improper storage and disposal of hazardous wastes, and failure to apply for a State Pollutant Discharge Elimination System permit. Subsequent investigations at the site during 1981 revealed 70 drums stored outdoors unprotected, some showing evidence of corrosion and leakage. Also in 1981, an underground 6,000-gallon jet fuel tank failed a pressure test, suggesting an additional threat to ground water.

The site is 75 feet above sea level. Topography is generally flat with the exception of a steep embankment leading to a large basin 50 feet from the eastern property line. The basin recharges ground water. The headwaters of Sampawams Creek, which feeds into Guggenheim Lakes, lie l mile southeast. Belmont Lake State Park is less than 2 miles south—southwest. The immediate vicinity is light industrial, but predominant land use in the surrounding area is commercial and residential. Approximately 5,000 residences are within 1 mile of the site. Several schools are to the south.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

TRONIC PLATING CO., INC. Farmingdale, New York

Conditions at listing (October 1984): Tronic Plating Co., Inc. occupies 0.5 acres in Farmingdale, New York. The site is in southwestern Suffolk County, approximately 1.5 miles east of the Nassau County line. Tronic occupies the southeast corner of a long building in an industrial park area. The site consists of the building, two inside above-ground storage tanks, four below-ground leaching pools, and a storm drain in the paved area to the northeast of the building. Tronic has provided electroplating and anodizing services to the electronics industry since July 1968.

State and county authorities have determined that hazardous wastes, consisting primarily of heavy metals, were discharged from storage tanks and leaching pools on the site. The State issued a Pollutant Discharge Elimination System permit to Tronic on April 1, 1980. In June 1980, the State issued a Consent Order to Tronic for discharging industrial wastes to ground water from leaching pools. Tronic agreed to obtain a permit and clean out the leaching pools.

Tests conducted by the State on one of the leaching pools detected copper, silver, iron, zinc, lead, and cadmium. Heavy metals also were detected in the storm drain.

The site is in a generally flat area with an average slope of less than 3 percent. There is no surface water in the vicinity. The surrounding area is paved, and run-off flows to existing storm drains. The site is surrounded by manufacturing and commercial facilities. Large cemeteries are located to the south and east.

Wells provide drinking water to about 16,000 people and are the only water supply in the area.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

VOLNEY MUNICIPAL LANDFILL Town of Volney, New York

Conditions at listing (October 1984): The Volney Municipal Landfill covers 58 acres in the Town of Volney, Oswego County, New York. The surrounding area is rural. About 200 residents are served by private wells. Currently, the site is owned by Oswego County and operated by the Oswego County Highway Department. Before the county purchased the landfill in 1975, it was privately owned and served the Towns of Granby and Volney and the Village of Fulton. In 1974, approximately 8,000 barrels of wastes from Pollution Abatement Services, Oswego, New York, which was placed on the NPL in September 1983, were buried at the site. A significant leachate problem exists. Ground water is contaminated with benzene, lead, and phenols, according to tests conducted by the State.

The State has entered into a Consent Order with Oswego County for control of the leachate problem and closure of the site. The State is now reviewing the county's closure plan.

Status (January 1986): EPA is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

The State approved the county's closure plan, and the landfill was closed in the fall of 1985.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ALSCO ANACONDA Gnadenhutten, Ohio

Conditions at listing (October 1984): The Alsco Anaconda Site is an inactive sludge disposal lagoon on Alsco plant property adjacent to the Tuscarawas River in Gnadenhutten, Tuscarawas County, Ohio. The 0.3-acre lagoon is in permeable soils and is not lined. From 1971 to 1978, the company disposed of the equivalment of 18,000 drums of waste in the lagoon. Lagoon sludge contains chromium and cyanide, according to analyses conducted by Alsco Anaconda's contractor.

City and private drinking water wells serving 3,100 people draw ground water from aquifers within 3 miles of the Alsco Anaconda Site. There are no alternative sources of drinking water.

Status (January 1986): In March 1985, the company, under the supervision of the Ohio Environmental Protection Agency, began a study to determine the extent of contamination at the site.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

INDUSTRIAL EXCESS LANDFILL Uniontown, Ohio

Conditions at listing (October 1984): The Industrial Excess Landfill covers 30 acres in Uniontown, Stark County, Ohio. While in operation (from about 1959 to 1980), the privately-owned and -operated landfill accepted residential and commercial wastes, as well as approximately I million gallons of industrial wastes. The landfill is capped with a rather permeable material and is on sand and gravel soils. All residents in the immediate area (about 19,000) use private wells for drinking water.

In 1983, area residents complained to the State about contamination of ground water, surface water, and air, as well as numerous health effects. Analyses by the State confirmed contamination. In 1983, the State detected slight impacts on on-site surface water from leachate generated within the landfill. Analyses of residential wells showed low levels of organic chemicals.

Status (January 1986): In February 1985, the Ohio State Court ordered the owner of the landfill to control the migration of methane gas. EPA prepared a plan for action at the site involving an active control system. However, the State allowed installation of a passive control system with monitoring to determine its effectiveness. The system was evaluated by the State and EPA and determined to be inadequate. In November 1985, EPA recommended an immediate removal action to control methane migration. Using CERCLA emergency funds, EPA is installing an active control system.

EPA negotiated with parties potentially responsible for wastes at the site to conduct a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action.

On June 11, 1985, negotiations failed, and EPA undertook the RI/FS with Federal funds. On-site activities began in August 1985.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

REPUBLIC STEEL CORP. QUARRY Elyria, Ohio

Conditions at listing (October 1984): Republic Steel Corp. disposed of waste pickling liquor (acids) in a 5-acre quarry in Elyria, Lorain County, Ohio, from 1950 to 1972. Water from the quarry discharges to the West Branch of the Black River, which is adjacent to the site. Whether wastes from the quarry have contaminated the river is not known at this time. The wastes in the quarry are in direct contact with a sandstone formation that may be a minor aquifer in the area.

The site, although fenced, is still accessible. The City of Elyria is the present owner.

An estimated 60,000 people live within 3 miles of the site. Two residential wells are within 1 mile of the site. Nearby surface waters are used for recreation.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SANITARY LANDFILL CO. (INDUSTRIAL WASTE DISPOSAL CO., INC.)
Dayton, Ohio

Conditions at listing (October 1984): The Sanitary Landfill Co., which is owned by Industrial Waste Disposal Co., Inc., operated a 40-acre landfill near Dayton, Montgomery County, Ohio, from 1965 to 1980. The landfill reportedly accepted municipal wastes and various types of industrial wastes, including solvents. The landfill is located above gravel deposits. About 110,000 people draw drinking water from wells within 3 miles of the site. The wells are drilled into a deeper aquifer, which may be connected to the shallow gravel deposits, according to a study conducted by the U.S. Geological Survey. Thus, there is a potential for contamination of public water wells.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

VAN DALE JUNKYARD Marietta, Ohio

Conditions at listing (October 1984): The Van Dale Junkyard covers about 10 acres 1.5 miles northeast of Marietta, Washington County, Ohio. It is on a ridge near Duck Creek, a tributary to the Ohio River. The owner was licensed by the county to receive junk for salvage. In addition, the owner accepted hundreds of drums containing waste dyes and organic chemicals. As a result of the facility's geology and poor management practices, the creek, sediments, and an adjacent marshy area are contaminated with organic chemicals and metals, according to tests conducted by EPA and the State. Additionally, the potential exists for contamination of local private wells serving about 20 people.

The Chio Attorney General filed a suit against the owner/operator of the facility on Jan. 13, 1984. On Feb. 29, 1984, the owner/operator agreed to a Preliminary Injunction enjoining the facility from accepting solid and hazardous waste, and from filling, grading, excavating, or burning wastes.

The site was originally proposed for the NPL in December 1982. In September 1983, it was dropped from consideration because, on the basis of the data then available, its score on the Hazard Ranking System did not qualify it for the NPL. On the basis of new data gathered by the State since September 1983, the site's score is high enough to warrant proposing it again for the NPL.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SAND SPRINGS PETROCHEMICAL COMPLEX Sand Springs, Oklahoma

Conditions at listing (September 1983): The Sand Springs Petrochemical Complex covers about 235 acres in Sand Springs, Tulsa County, Oklahoma, adjacent to the Arkansas River. The site consists of all the former Sinclair Oil Refinery south of Adams Road, including the Wynn area and the old Sinclair refinery acid pits. The Wynn area is a waste oil and spent solvents recycling, storage, and disposal facility covering about 6 acres adjacent to the Arkansas River levee. Groups of operators are involved in the Wynn area: (1) the Wynn Group (various companies, but chiefly Vacuum & Pressure Tank Truck Services, Inc.) and (2) the Recyclon Group (Recyclon Corp., Resource Recovery & Refining Corp., and various individuals who control and operate those entities).

The acid pits date to when the refinery was in operation (1930-1944). Several thousand cubic yards of sulfuric acid sludge containing heavy metals, including lead and chromium, are stored in two unlined pits, perhaps as deep as 20 feet. Over the years, sludge seeped into the Arkansas River levee, releasing contaminants to the river. The pits probably also contaminate ground water.

Several additional industries leased portions of the refinery property. Hazardous substances were stored or disposed of in drums, tanks, and unlined pits, or were simply buried on-site. These substances include volatile and nonvolatile organics, acids, caustics, chlorinated solvents, and sludges containing heavy metals. Poor operations have contaminated local ground water, according to EPA tests, and there is the potential for contaminants to leave the site in run-off.

Status (June 1984): EPA and the State are preparing a cooperative agreement for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and to identify alternatives for remedial action. EPA issued two Administrative Orders concerning an immediate removal in the Wynn area. The orders were issued on March 2 and March 13, 1984, to Recyclon Corp., Resource Recovery & Refining Corp., Vacuum & Pressure Tank Truck Services, Inc., Vacuum Refining, Inc., Solvents Recovery, Inc., Sand Springs Home, Inc., and certain individuals who control and operate or are involved with these entities. In the immediate removal, EPA removed and disposed of approximately 400 drums of hazardous substances, repaired a fence, and sampled and analyzed the pits, on-site soil, and on-site monitoring wells. Further action may be required depending upon sampling results from the remedial investigation.

EPA is deferring rulemaking on this site because appropriate scoring documents were not in the public docket and so were not available during the comment period. Thus, EPA is providing an additional comment period for this site.

Status (January 1986): On-site sampling under the cooperative agreement began in May 1985. The Oklahoma State Department of Health is overseeing the drilling activities. The Tulsa City County Health Department will sample air, surface water, and sediments through September 1986.

Status (June 10, 1986): No comments were received during the additional comment period. Hence, EPA is adding the Sand Springs Petrochemical Complex to the NPL at this time.

U.S. Environmental Protection Agency/Remedial Response Program

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MARTIN-MARIETTA ALUMINUM CO. The Dalles, Oregon

Conditions at listing (October 1984): Martin-Marietta Aluminum Co. produces aluminum on a site covering less than 350 acres in The Dalles, Wasco County, Oregon. Cyanide is present in both the shallow and deep aquifers underlying the site, according to tests conducted by the State and Martin-Marietta. Cyanide appeared in one production well and several monitoring wells, and also in surface run-off and in leachate from a cathode waste pile. Cyanide is known to be present in spent cathode potliners.

Under State order, the company removed an old waste pile of 75,000 tons of spent cathodes potliners to a new approved area on the site. An on-site landfill contains approximately 4,600 tons of spent cathodes.

Ground water provides drinking water to 14,000 people in The Dalles and Chenoweth. The wells are also used in the immediate vicinity for industrial purposes. The nearest well is approximately 2,000 feet from the waste pile. The company has constructed several monitoring wells around the site to detect and document the contamination.

Status (January 1986): Martin-Marietta hired a contractor to conduct a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. The company has submitted a workplan for the RI/FS to EPA for review and comment. On Sept. 12, 1985, EPA and the company signed a Consent order covering the RI/FS.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

AMBLER ASBESTOS PILES Ambler, Pennsylvania

Conditions at listing (October 1984): Two asbestos piles — the Plant Pile and the Locust Street Pile — cover about 15 acres in a residential area of Ambler, Montgomery County, Pennsylvania. In 1867, Keasbey & Mattison Co., manufacturers of asbestos products, began dumping its waste next to its Ambler plant. In 1962, the plant was divided and purchased by Nicolet, Inc., and CertainTeed Corp., also manufacturers of asbestos products. Nicolet pumped waste water containing asbestos from settling ponds into diked areas, creating wet asbestos piles which gradually dried as new diked areas were constructed and filled. CertainTeed dumped predominately broken wallboard and asbestos pipe products, which were periodically further broken by compaction with tractors. The total volume of asbestos—contaminated waste in the piles is estimated to exceed 1.5 million cubic yards.

In 1971, Nicolet applied for a permit from the State to continue using the Locust Street Pile for waste disposal. In 1972, CertainTeed applied for a permit for a portion of the Plant Pile which was on its property. In 1974, the State denied the permit applications and issued orders to both companies to cease dumping and to stabilize and cover the piles. CertainTeed signed a Consent Order and agreed to follow the State's order. Nicolet refused to comply.

In 1983, EPA found asbestos in the soil and on equipment in the Locust Street playground, which is adjacent to Nicolet's pile. The U.S. Centers for Disease Control and the Pennsylvania Department of Health certified the pile as presenting an immediate threat to the public. In 1983-84, EPA committed \$935,670 in CERCLA emergency funds to cover Nicolet's piles with soil and to establish vegetation. EPA obtained a court order for entry onto the site. Work has been completed except for installation of a drainage system and reseeding.

Status (January 1986): EPA completed its emergency activities at the site in May 1985.

EPA is developing a workplan for an enforcement-lead remedial investigation/feasibility study to determine the extent of contamination at the site and identify alternatives for remedial action. The workplan should be completed in February 1986. Nicolet will then decide if it wants to perform the remedial investigation/feasibility study.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

BROWN'S BATTERY BREAKING Shoemakersville, Pennsylvania

Conditions at listing (October 1984): The Brown's Battery Breaking Site is an abandoned battery recycling facility which operated in a rural area near Shoemakersville, Berks County, Pennsylvania, from 1961 to 1971. About 25,000 cubic yards of battery casings were found on the site, either whole or in pieces. In some instances, small pieces were used as a substitute for road gravel in the area.

The State detected lead in air near the site, in surface and subsurface soils on the site, and downstream in the Schuylkill River, which adjoins the site. The State found elevated blood lead levels in children living on the site.

Approximately 1,000 people use wells within 3 miles of the site as drinking water.

In 1983-84, EPA spent \$1.4 million in CERCLA emergency funds to fence the site, excavate, consolidate, and cap contaminated soils on-site, and regravel the driveway leading into the site.

Status (January 1986): In March 1985, EPA filed a complaint in the Eastern District Court of Pennsylvania against General Battery Corp. and another potentially responsible party for costs incurred during the emergency operations.

The State is developing a final workplan for a remedial investigation/ feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

CROYDON TCE Croydon, Pennsylvania

Conditions at listing (September 1985): The Croydon Trichloroethylene (TCE) Site involves the presence of TCE and other volatile organic compounds in ground water and surface water in an industrialized area of Croydon, Bucks County, Pennsylvania. EPA detected contamination in monitoring wells, private wells, and the West and East Branches of Hog Run near where they meet. Hog Run flows into the Delaware River, which reverses its flow in the area because of tidal influences. About 18,000 people depend on water from the Delaware River within 3 miles upstream of the site for drinking water. About 200 people depend on shallow private wells within 3 miles.

To date, no source of the contamination has been positively identified. However, data collected by EPA in April 1985 have identified areas in need of additional investigation.

Status (January 1986): EPA is currently investigating the source of the contamination by surveying local industries, contacting citizens, and reviewing State/county files.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

HUNTERSTOWN ROAD Straban Township, Pennsylvania

Conditions at listing (October 1984): The Hunterstown Road Site covers 3 acres on both sides of Hunterstown Road, Straban Township, Adams County, Pennsylvania. From 1970 to 1984, the owner of the property apparently disposed of wastes generated by several local corporations. The operation had no permit. The majority of the waste, consisting of paint sludges and various solvents, was dumped on the ground. Ground water and surface water are contaminated with various volatile organic compounds, according to tests conducted by the State and EPA. Trichloroethylene (TCE) is the predominant chemical found on the site. About 9,500 people use wells within 3 miles of the site for drinking water.

In April 1984, Westinghouse Electric Corp., a generator of wastes disposed there, excavated a waste lagoon and contaminated soil on the site and transported the materials to an approved disposal site under an Administrative Order EPA issued under section 106 of CERCLA. As an emergency action, EPA constructed a fence around the lagoon area. However, soils, ground water, and a small stream on the site still are contaminated, according to EPA analyses.

Status (January 1986): In January 1985, EPA and the Pennsylvania Department of Environmental Resources signed a multisite cooperative agreement which provides CERCLA funds to the State for various sites, including Hunterstown Road. The funds are to start work preparatory to a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action.

In April 1985, EPA completed a search for parties potentially responsible for wastes associated with the site. Also in April, EPA took on-site and off-site soil and water samples.

A final workplan for the RI/FS is due shortly. The State will then begin to negotiate with potentially responsible parties for the RI/FS.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

LANSDOWNE RADIATION SITE Lansdowne, Pennsylvania

Conditions at listing (April 1985): The Lansdowne Radiation Site is a duplex structure located on approximately 0.5 acres in Lansdowne, part of the metropolitan area of Philadelphia, Pennsylvania. From 1924 to 1944, a chemistry/physics professor used the basement of the 105 E. Stratford Avenue residence as a laboratory. The operation was predominately the manufacture of radium sources for medical radiation therapy. The professor died in the mid-1940s, and the ownership of 105 E. Stratford has changed twice, first in the late 1940s and then in the early 1960s. The 107 E. Stratford residence has not changed ownership.

Two radiological studies of the site were completed in 1984, the first by EPA and the State, the second by Argonne National Laboratory. Both detected excessive levels of radium, radon gas, and radon decay products. The U.S. Department of Energy estimates that 800 to 1,200 cubic yards of contaminated soil are on the site.

Residents of the duplex are immediately affected by the contamination. The surrounding suburban residential area could be affected should the structure catch fire and spread contamination via smoke.

On Sept. 10, 1984, using CERCLA emergency funds, EPA and the Federal Emergency Management Agency temporarily relocated both residents and most of their uncontaminated personal belongings. In addition, an extent-of-contamination and radiological assessment have been completed for both properties. A proposed workplan and safety protocols are being developed. A fire/burglar alarm has been installed, and a fire sprinkler system is being installed.

On Feb. 12, 1985, EPA proposed amendments to the National Contingency Plan (NCP), the Federal regulation by which CERCLA is implemented, to allow placing a site on the NPL if the Agency for Toxic Substances and Disease Registry (ATSDR) of the U.S. Department of Health and Human Services has issued a health advisory and if the site meets certain other criteria. On March 5, 1985, ATSDR issued an advisory warning that radiation levels within the duplex made it unsafe:

Status (September 1985): On Sept. 16, 1985, EPA revised the NCP to allow placing such sites on the NPL and placed Lansdowne Radiation Site on the NPL.

EPA has concluded that the best way to remove permanently the health hazard at Lansdowne is to remove the structure. Accordingly, EPA and the Federal Emergency Management Agency are negotiating to purchase the two homes. The structure will be dismantled and transported to a licensed facility in Hanford, Washington. EPA will develop a plan for monitoring the site to ensure that radiation levels are not excessive. The total cost is estimated at \$3.5 million.

A recent Argonne interim report indicates that radioactive contamination has migrated off-site to soil at the edge of E. Stratford Avenue and to the sewer in the avenue. Also, the estimate of the volume of contaminated materials on-site has been increased to approximately 2,000 cubic yards.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MIDDLETOWN AIR FIELD Middletown, Pennsylvania

Conditions at listing (October 1984): The Middletown Air Field covers 36 acres in Middletown, Dauphin County, Pennsylvania. The site is adjacent to the Susquehanna River, and the Swatara Creek is located nearby. Until 1966, the Federal government owned the site and operated it as Olmsted Air Force Base. Various Air Force operations resulted in solvents and other wastes being disposed of on the site. The current owner, the State of Pennsylvania, operates the site as Harrisburg International Airport. The site includes the airport properties, the Mead Heights area, and several industrial properties.

Dichlorobenzene, trichloroethylene, and tetrachloroethylene are present in ground water at the site, according to analyses conducted by the State and EPA. The State, EPA, and the Air Force are currently studying the site. As part of its effort, the Air Force has completed a search of records for information on past disposal activities at Olmsted Air Force Base. In 1984, the State removed all sludge and liquids in Building 267, closed the fire training pits, and removed all materials from the location. That same year, the Air Force removed some drums from the Mead Heights area. All these actions have been voluntary.

About 19,500 people obtain their drinking water from wells within 3 miles of the site.

Status (January 1986): In October 1985, EPA completed a search for parties identified as potentially responsible for wastes associated with the site, and in January 1986 issued Notice Letters to them. Negotiations are expected to begin in February 1986.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MODERN SANITATION LANDFILL Lower Windsor Township, Pennsylvania

Conditions at listing (October 1984): Modern Sanitation Landfill covers 72 acres in Lower Windsor Township, York County, Pennsylvania. The landfill operation is leased from a local farmer. In September 1984, Waste Management Inc. (WMI) purchased the landfill operation from SCA Services, which had purchased the operation in September 1980 from Modern Trash of York. The landfill reportedly received hazardous wastes between 1976 and 1979.

Toxic organic and inorganic chemicals contaminate ground water underlying the landfill, according to analyses conducted by the State and EPA. Similar contaminants have been detected in springs adjacent to the landfill.

The State and WMI are working on remedial measures to collect and treat the contaminated ground water on the western perimeter of the landfill.

Between 1,000 and 3,000 people use wells within 3 miles of the site as their source of drinking water.

In September 1984, the State and WMI signed a Consent Order and Agreement requiring WMI to operate and upgrade a leachate collection system on the western perimeter of the landfill, investigate ground water contamination on the northern and eastern perimeters, and develop a treatment for this contamination.

Status (January 1986): WMI is conducting the activities required by its agreement with the State.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MW MANUFACTURING Valley Township, Pennsylvania

Conditions at listing (October 1984): The MW Manufacturing Site covers about 20 acres in the center of Valley Township, Montour County, Pennsylvania. Copper is recovered from scrap wire on the site. MW Manufacturing, the original operator, used both mechanical and chemical processes. The company went bankrupt in the early 1970s. The second (and present) operator uses a mechanical process. The waste accumulation on the site consists of a surface impoundment of 6 acres, 400,000 cubic feet of finely divided metal wire scraps ("fluffs"), about 50 drums, a 6,000-gallon tank, and a landfill holding 20,000 cubic feet of wastes.

The site was first proposed for listing under the name "Domino Salvage Yard."

Spent chlorinated organic solvents apparently were dumped on the site. EPA sampling and analyses revealed that lead is present in high concentrations in nearby drinking water wells. About 1,500 people use wells within 3 miles of the site as a source of drinking water.

The State has investigated the site since the late 1960s and issued orders for cleanup since 1971. At present, there is a Consent Order to clean up the site. The present owner, Warehouse 81 Limited Partnership, has removed and disposed of some of the hazardous waste and processed some of the fluff, but has not removed the amount specified in the State order.

Status (January 1986): EPA plans to conduct a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SHRIVER'S CORNER Straban Township, Pennsylvania

Conditions at listing (October 1984): The Shriver's Corner Site is comprised of two areas covering about 10 acres along Route 394 in Straban Township, Adams County, Pennsylvania. Both areas have accepted drums of liquid wastes from the Westinghouse Elevator Co. plant in Cumberland Township. (The Westinghouse plant was also proposed for the NPL in October 1984). Drums of 1,1,1-trichloroethane, toluene, xylene, and other solvents were disposed of on the property north of Route 394. The southern property was reportedly used for the disposal of paint sludges, solvents, and 1,1,1-trichloroethane.

Ground water is contaminated with various organic compounds, according to tests conducted by EPA and the State. About 5,000 people use wells within 3 miles of the site as a source of drinking water. In April 1984, under a CERCLA section 106 order issued by EPA, Westinghouse removed about 80 surface drums and 250 cubic yards of contaminated soils and sent the materials to an approved disposal site. Westinghouse has provided carbon filters for some residential wells.

Status (January 1986): In January 1985, EPA and the Pennsylvania Department of Environmental Resources signed a multisite cooperative agreement which provides CERCLA funds to the State for various sites, including Shriver's Corner. The funds are to start work preparatory to a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedal action.

In April 1985, EPA completed a search for parties potentially responsible for wastes associated with the site.

A final workplan for the RI/FS is due shortly. The State will then begin to negotiate with potentially responsible parties for the RI/FS.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WESTINGHOUSE ELEVATOR CO. PLANT Cumberland Township, Pennsylvania

Conditions at listing (October 1984): Westinghouse Elevator Co. manufactures elevators on an 85-acre site in Cumberland Township, Adams County, Pennsylvania. The manufacturing procedure involves paint and degreasing using chlorinated solvents. In August 1983, the Pennsylvania Department of Environmental Resources (PA DER) detected trichloroethylene (TCE) in nearby surface water. Further investigation by the State and EPA found that private wells were also contaminated.

Under a CERCLA section 106 order issued by EPA, Westinghouse supplied 15 homes along Route 34 with an alternate water supply and initiated a hydrogeological study of the site to determine the extent of the contamination and cleanup alternatives.

Status (January 1986): In January 1985, EPA and PA DER signed a multisite cooperative agreement which provides CERCLA funds to the State for various sites, including the Westinghouse Elevator Co. Plant. The funds are to start work on a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WHITMOYER LABORATORIES Jackson Township, Pennsylvania

Conditions at listing (October 1984): Whitmoyer Laboratories formerly manufactured animal pharmaceuticals on a 17.5-acre site in Jackson Township, Lebanon County, Pennsylvania. The facility produced and stored aniline and soluble arsenic compounds. Arsenical wastes were disposed of in concrete vaults, holding tanks, and unlined lagoons.

Whitmoyer Laboratories operated from 1934 to July 1984, when it became a subsidiary of Rohm & Haas. Rohm & Haas sold the facility in early 1978 to Beecham, Inc., which subsequently sold it to Stafford Laboratories of Phoenix, Arizona.

After EPA and the State detected arsenic and various organic chemicals in ground water and surface water on and off the site, Whitmoyer Labs supplied bottled water to nearby residents from the mid-1960s until March 1982. At that time, some residents received a cash settlement. Then, in June 1984, the company filed for bankruptcy and stopped supplying bottled water. About 4,700 people use wells within 3 miles of the site as a source of drinking water.

Whitmoyer received Interim Status under the Resource Conservation and Recovery Act (RCRA) when it filed Part A of a permit application.

Status (January 1986): In January 1985, EPA and the Pennsylvania Department of Environmental Resources signed a multisite cooperative agreement which provides CERCLA funds for various sites, including Whitmoyer Labs. The funds are to start work preparatory to a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Status (June 10, 1986): This site is being placed on the NPL at this time because the owner or operator is in bankruptcy and may not be financially able to take appropriate remedial action. Thus, the site meets one of the requirements of EPA's policy for placing RCRA-related sites on the NPL.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

CENTRAL LANDFILL
Johnston, Rhode Island

Conditions at listing (October 1984): Central Landfill covers 133 acres in Johnston, Providence County, Rhode Island. The owner, RI Solid Waste Management Corp., has a State license to operate the site as a municipal waste landfill. According to records provided by the State, at least 1.5 million gallons of hazardous wastes were received at the site during 1978 and 1979. Wells adjacent to the site are contaminated with organic solvents, according to analyses conducted by the State. Over 4,000 people live within 3 miles of the site. Adjacent wetlands may also be at risk.

The owner has entered into a Consent Order with the State to close the areas where hazardous wastes were disposed of. A citizen's suit has been filed in the U.S. District Court against the owner seeking injunctive relief and closure of the landfill. EPA has issued an Administrative Order to require the owner to conduct all appropriate studies to determine the nature and extent of contamination posed by the landfill.

Status (January 1986): Recent surveys indicate that the solid waste covers 154 acres.

The owner has closed the areas where hazardous wastes were disposed of in accordance with the State Consent Order.

In October 1985, the owner submitted a workplan for conducting a remedial investigation at the site as required by the EPA Administrative Order.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

DAVIS (GSR) LANDFILL Glocester, Rhode Island

Conditions at listing (April 1985): The Davis Glocester Sanitary Regional (GSR) Landfill covers 58 acres in the town of Glocester, Providence County, Rhode Island. It is across the town line and across the street from the Davis Liquid Waste Site in Smithfield, which was placed on the NPL in September 1983.

Between 1974 and 1976, the landfill, which was privately owned and permitted by the State to accept municipal wastes, accepted such wastes from Glocester, Smithfield, Warwick, and Providence. In January 1978, the State did not renew the permit. Following numerous legal actions to close the site, the State Supreme Court ruled in favor of the State in April 1982. The site was then officially closed, although it has not been properly capped or stabilized.

Among the contaminants detected at the site are toluene, chloroform, benzene, 1,1-dichloroethane, and 1,1,1-trichloroethane. The State found contamination of both surface water and ground water on-site. EPA confirmed off-site contamination. According to the State, contaminated ground water is moving toward Waterman Reservoir, which is used for recreation. About 3,800 people use private wells within 3 miles of the site for drinking water. No municipal supplies are readily available.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

AMERICAN CREOSOTE WORKS, INC. (JACKSON PLANT)

Jackson, Tennessee

Conditions at listing (October 1984): The American Creosote Works, Inc., Site is a 60-acre wood-preserving facility in Jackson, Madison County, Tennessee. From 1930 to 1981, it used creosote and pentachlorophenol (PCP) in its operations. At one time, this facility consisted of four large waste water lagoons, two sand filters, four treatment tanks, two 20,000-gallon tanks, various piles, and drip yards. Numerous spills also occurred on the site. The wood-treatment process causes water pollution through two routes—the treatment process itself and run-off from the site. In the 1970s, the company constructed a berm to control run-off and installed a new waste water treatment system. In June 1983, EPA approved \$860,000 in CERCIA emergency funds to dewater the site, remove and bury sludge, and cap certain areas with clay.

This site was originally proposed for listing under the name "American Creosote Works, Inc."

Analyses conducted by EPA indicate that soil and shallow ground water are contaminated with creosote and PCP constituents. The facility is located less than 0.25 miles from the South Fork of the Forked Deer River, where shallow ground water is believed to discharge. Wetlands lying along both sides of the river support a large variety of wildlife species. Several public and private wells are located within 3 miles of the site. A well field for the City of Jackson (population 49,000) lies approximately 1.5 miles east of the site.

The plant received Interim Status under the Resource Conservation and Recovery Act (RCRA) when the company filed Part A of a permit application.

American Creosote, which owns the site, is under reorganization in the U.S. Bankruptcy Court.

Status (January 1986): In November 1985, EPA obligated funds for the U.S. Army Corps of Engineers to select a contractor to perform a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Status (June 10, 1986): This site is being placed on the NPL at this time because the owner or operator is in bankruptcy and may not be financially able to take appropriate remedial action. Thus, the site meets one of the requirements of EPA's policy for placing RCRA-related sites on the NPL.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) ("Superfund")

BAILEY WASTE DISPOSAL Bridge City, Texas

Conditions at listing (October 1984): The Bailey Waste Disposal Site covers 10 acres north of the Neches River, about 2 miles southwest of Bridge City, Orange County, Texas. From the late 1950s through the mid-1960s, Bailey Waste Disposal buried about 72,000 cubic yards of industrial wastes, consisting generally of benzenes, phenols, pyridenes, naphthalenes, anthracenes/phenanthrenes, and chlorinated organic chemicals, at the site. Analyses conducted by the State detected chloroform, phthalates, trichloroethylene, and other compounds in surface water, ground water, and soils on the site.

About 7,600 people use wells within 3 miles of the site as their primary source of drinking water.

Status (January 1986): Under a cooperative agreement with EPA, the State will conduct a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The State selected a contractor, and field activities began in January 1986.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

CRYSTAL CITY AIRPORT Crystal City, Texas

Conditions at listing (October 1984): The Crystal City Airport covers about 100 acres in Crystal City, Zavala County, Texas. Aerial applicator companies that are no longer in business have contaminated several large areas at the airport with a variety of pesticides.

The city brought the site to the attention of the State in April 1983. In its initial inspection, the State found at least 50 drums in various stages of decomposition. Analyses of soil samples detected high levels of chlordane, DDT, methyl and ethyl parathion, toxaphene, 2,4-D, and 2,4,5-T.

Beginning in October 1983, EPA spent \$60,000 in CERCIA emergency funds to remove the drums, soil around the drums, and soil with the highest concentrations of pesticides. High concentrations of pesticides are still on-site, so there is a potential for hazardous substances to become airborne. One of the primary drinking water wells for Crystal City is near the site.

Status (January 1986): Under a cooperative agreement with EPA, the State received funds in September 1985 to conduct a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The State is selecting a contractor.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

KOPPERS CO., INC. (TEXARKANA PLANT)
Texarkana, Texas

Conditions at listing (October 1984): Koppers Co., Inc., operated a 62-acre wood-processing plant in Texarkana, Bowie County, Texas, between 1939 and 1961. Wood-processing operations began at the site in 1903. The processes used by the Koppers plant involved creosote, pentachlorophenol (PCP), and zinc. The site is currently owned by the Bruce Kennedy Sand & Gravel Co., the Mt. Zion Missionary Baptist Church, and about 78 homeowners in the Carver Terrace subdivision. Until recently, gravel and sand were mined at the site. Open gravel pits filled with ground water remain in the southern portion. Oil stains and seeps have been observed in these pits, which drain directly to Cowhorn Creek. Test borings and analysis of samples by the State and Koppers have confirmed contamination of soils and ground water on and off the site with PCP, zinc, and polynuclear aromatic hydrocarbons.

About 150 people depend on wells within 0.5 miles of the site as a source of drinking water.

Status (January 1986): In October 1984 and February 1985, EPA used CERCLA emergency funds to sample on-site surface soils. Based on results of these samples and under Administrative Orders on Consent signed by EPA and Koppers Co., Inc., in December 1984 and July 1985, Koppers fenced the southern half of the site and placed a "protective barrier" in the yards of about 18 of the residences.

EPA completed a workplan for a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. EPA and Koppers signed an Administrative Order on Consent in March 1985 for Koppers to conduct the RI/FS with EPA oversight.

All pre-field activities have been completed to EPA specifications, and Koppers is presently conducting the field phase of the RI/FS.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NORTH CAVALCADE STREET Houston, Texas

Conditions at listing (October 1984): The North Cavalcade Street Site covers approximately 23 acres in Houston, Harris County, Texas. The site is in an industrial area on the north side of Cavalcade Street. Houston Creosote occupied the site from 1946 until the early 1960s, when the company ceased operations. Based on a review of aerial photography and a contamination survey, EPA concluded that a filled-in creosote pit is located within the site. Contaminants at the site consist of polynuclear aromatic compounds associated with creosote and pentachlorophenol, in addition to contaminants from metal wood-treating (wolmanizing) processes. Analyses conducted by a consultant to the City of Houston indicate that soils (both on and below the surface) and shallow ground water on the site are contaminated with chrysene, fluoranthene, anthracene, and wood-treating metals.

About 10,000 people use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): The parties potentially responsible for wastes associated with the site have declined to conduct a remedial investigation/feasibility study (RI/FS). Consequently, EPA has undertaken a RI/FS to determine the type and extent of contamination at the site and identify alternatives for remedial actions. Field work began in November 1985 and is expected to be completed in early March 1986.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ODESSA CHROMIUM #1 Odessa, Texas

Conditions at listing (October 1984): The Odessa Chromium #1 Site is a 20-acre portion of an aquifer near 44th Street and Brazos Avenue in Odessa, Ector County, Texas. An abandoned facility at 44th and Brazos has been operated in the past by several metal-plating companies. The aquifer is the source of water for about 20 people who live outside the city limits and do not have access to the city water system. Of 32 private domestic wells, 7 have concentrations of hexavalent chromium in excess of the drinking water standard, according to tests conducted by the State.

There are approximately 200 private wells within 0.5 miles of the site and 29 municipal wells within 3 miles of the site. Water from the municipal wells is blended with surface water during the summer for the Odessa water supply.

Status (January 1986): Under a cooperative agreement with EPA, the State is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The State hired a contractor in June 1985. Field work started in September 1985 and was completed in January 1986. Of the 200 wells sampled during the investigation, 10 exceeded drinking water standards for hexavalent chromium. The State is developing a plan for providing an alternate drinking water supply for the persons affected.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

ODESSA CHROMIUM #2 (ANDREWS HIGHWAY)
Odessa, Texas

Conditions at listing (October 1984): The Odessa Chromium #2 Site consists of a 20-acre portion of an aquifer contaminated with chromium in the area of Andrews Highway, just northwest of the city limits of Odessa in Ector County, Texas. Suspected as possible sources are several local industries that generate or generated chromium-contaminated waste water from plating of metals, cleaning of radiators, and/or disposal of cooling water.

The first public complaint was filed in May 1970 when a residential well was found to be contaminated. In September 1977, the State investigated the area and found chromium in three local wells. Subsequent investigations in 1977 and 1978 determined that 10 of 34 private wells in the area had detectable concentrations of chromium. There are 32 municipal wells within 3 miles of the site, and 400 private wells within 0.5 miles. Water from the municipal wells is blended with surface water for the Odessa water supply.

Status (January 1986): Under a cooperative agreement with EPA, the State is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The State hired a contractor in June 1985. Field work started in September 1985 and was completed in Jaunary 1986. Of the 400 wells sampled during the investigation, 10 exceeded drinking water standards for hexavalent chromium. The State is developing a plan for providing an alternate drinking water supply for the persons affected.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PESSES CHEMICAL, CO. Fort Worth, Texas

Conditions at listing (October 1984): The Pesses Chemical Go. Site is an abandoned facility in Fort Worth, Tarrant County, Texas. The facility formerly recycled nickel-cadmium sludge, copper-cadmium sludge, off-specification batteries, and spent batteries. Prior to processing, these batteries were stored on the 4.6-acre site in 55-gallon containers and other containers. The residues from recycling were dumped and spilled onto the ground. When the facility closed in 1981, 2,000 drums remained on the site. The company, which also did business as Metcoa, is in bankruptcy.

In March 1983, there was a fire at the site, and a fireman was hospitalized after inhaling toxic fumes. In April 1983, using \$338,000 in CERCIA emergency funds, EPA removed the drums, containers, contaminated debris, and some contaminated soil from the site, and also put a temporary clay cap on the site.

Analyses conducted by EPA indicate that there is extensive contamination of on-site soils with lead, cadmium, and copper. Also, there is the potential for hazardous substances to leave the site via wind-blown particles and surface run-off. A housing project and a playground are within 0.25 miles of the site. Children often cross unsecured portions of the site.

Status (January 1986): A public meeting was held on Feb. 26, 1985, to discuss a remedial investigation/feasibility study, which will determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PETRO-CHEMICAL SYSTEMS, INC. (TURTLE BAYOU)
Liberty County, Texas

Conditions at listing (October 1984): The Petro-Chemical Systems, Inc. (Turtle Bayou) Site covers 312 acres approximately 7 miles north of Interstate 10 in Liberty County, Texas. In 1971, Liberty Trash Service and French, Ltd. delivered waste oils and at least 4,000 cubic yards of other netrochemical sludges to the site. Additional materials were applied as road oil to the dirt road in the vicinity of the site. In 1971, Petro-Chemical Systems, Inc., was issued a permit by the State to dispose of waste at the site. Subsequently, a court injunction negated the authority of the permit. In 1974, the permit was revoked.

Drinking water for about 200 people in this rural area comes from 51 shallow wells approximately 25 feet deep.

According to analyses conducted by the State, soil is contaminated with a number of toxic organic chemicals.

Status (January 1986): Under a cooperative agreement with EPA, the State is planning a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The State's contractor submitted a workplan, which the State and EPA approved on July 22, 1985. Field work for the off-site portion of the site is underway.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SOUTH CAVALCADE STREET Houston, Texas

Conditions at listing (October 1984): The South Cavalcade Street Site covers approximately 69 acres in Houston, Harris County, Texas. The site, located in an industrial area on the south side of Cavalcade Street, has a history of wood-treating operations dating to 1911. Contaminants at the site consist of polynuclear aromatic compounds associated with creosote, in addition to other similar contaminants. EPA's analysis of historical aerial photographs indicates there are at least three waste pits on the site that have been filled or paved over. Analyses conducted by EPA indicate widespread on-site contamination of soil (both on and below the surface) and shallow ground water with benzopyrene, chrysene, fluoranthene, and anthracene.

About 10,000 people use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): In March 1985, Koppers Co., Inc., which has been identified as potentially responsible for wastes associated with the site, signed an Administrative Order on Consent with EPA. The order covers a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. EPA has completed a work plan for the RI/FS. All prefield activities have been completed to EPA specifications, and Koppers is presently conducting the field phase of the RI/FS.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

STEWCO, INC. Waskom, Texas

Conditions at listing (October 1984): Stewco, Inc., formerly owned, operated, and maintained a fleet of trucks on a 2.5-acre site on Texas Farm Market Road 9, about 0.5 miles south of Interstate 20 in Waskom, Harrison County, Texas. The company contracted with the oil and gas industry to haul glue, resin, gasoline, diesel fuel, jet fuel, and creosote. The tank trucks were steam-cleaned between loads with an alkaline solution. The wash water was routed to Pond 1 to evaporate. The overflow from Pond 1 went to Pond 2, in which a spray evaporation system was installed and sometimes operated. The overflow from Pond 2 was to be trucked to a third pond on another site.

The ponds are unlined and in poor condition. Drainage from the parking area around the truck terminals flows into the ponds, causing them to overflow. The ponds were to be skimmed to minimize the oil layer on the surface. EPA has found no record of the ponds ever being skimmed. Thus, when the ponds overflowed, the surface layer of oil moved with the overflow onto surrounding drainage areas.

According to analyses conducted by EPA, on-site soil, surface water, and ground water are contaminated with tetrachloroethane, methylene chloride, naphthalene, bis(2-ethylhexyl) phthalate, toluene, phenanthrene, DDT, arsenic, mercury, lead, and cadmium.

In May 1984, under a CERCIA Administrative Order, EPA used emergency funds to remove the liquids and sludges in the ponds, transport the material to an approved disposal facility, and fill in the ponds.

About 3,100 people use wells within 3 miles of the site as a source of drinking water.

Status (January 1986): A public meeting was held on May 22, 1985, to discuss a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

TEXARKANA WOOD PRESERVING CO. Texarkana, Texas

Conditions at listing (April 1985): Texarkana Wood Preserving Co. operated a wood-processing plant on a site of about 25 acres in Texarkana, Bowie County, Texas. Operations started in 1961 and ended in July 1984. Creosote and pentachlorophenol were used in a steam/vacuum/pressure treatment. Approximately 793,000 gallons of hazardous waste are stored on-site in pressure vessels, steel baffle tanks, retention ponds, surge tanks, and three evaporation ponds. All units have been heavily contaminated with creosote and pentachlorophenol. The evaporation ponds contain dibenzofuran, naphthalene, anthracene, phenanthrene, pentachlorophenol, and other contaminants, according to tests conducted by the Texas Department of Water Resources (TDWR) and EPA. Heavy rains continue to cause ponds to overflow, eventually discharging to Days Creek.

The plant is 1,200 feet from the nearest residence. The site is unfenced. Approximately 190 people live within 3 miles. Contamination may be entering ground water, which is only 4 to 8 feet below the surface. Ground water is used for domestic, irrigation, industrial, and agricultural purposes. The plant is 800 feet from Days Creek, the nearest downstream surface water.

The plant received three citations from the State for unauthorized discharges of process waste water into the Days Creek drainage system. Since the company ceased operations, State enforcement actions ceased and the project was turned over to Superfund for cleanup. On Dec. 4, 1984, after heavy rains, a contractor for the TDWR Emergency Spill Response Section pumped water from the flooded process area to a less full evaporation pond.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MONTICELLO RADIOACTIVELY CONTAMINATED PROPERTIES
Monticello, Utah

Conditions at listing (October 1984): The Town of Monticello (population about 2,000) in San Juan County in southeastern Utah is the site of a mill that processed vanadium and uranium ore from 1942 to 1960. Contractors operated the mill for the U.S. Department of Energy (USDOE). Prior to the mid-1970s, radioactive tailings were widely dispersed throughout the town. Some appear to have been used as fill material and as aggregate for mortar and concrete, while others appear to have been carried from the mill by wind and water. Recently, residents have indicated that some of the radioactive materials may have also originated at another mill in Dry Valley, approximately 25 miles northeast of Monticello.

Various agencies, including EPA, the State Health Department, and USDOE, have conducted radiological surveys of town properties. Above-background levels of radioactivity were detected during each survey. USDOE has authorized cleanup of 15 properties and is studying several more for inclusion in its Site Restoration Program. However, USDOE may lack the authority to clean up properties contaminated by materials brought in from the mill in Dry Valley.

Status (January 1986): USDOE studies are underway, and remedial work has begun at some properties. The USDOE program is expected to extend through 1987.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

PORTLAND CEMENT CO. (KILN DUST SITES 2 & 3)
Salt Lake City, Utah

Conditions at listing (October 1984): The Portland Cement Co. of Salt Lake City, Salt Lake County, Utah, has disposed of kiln dust and old kiln bricks since sometime before 1983 at five locations in the greater Salt Lake City area. The dust, an alkaline by-product of cement manufacturing collected in bag houses from kiln stacks, has high concentrations of lead and arsenic. The old kiln bricks contain high levels of heavy metals, including hexavalent chromium. The kiln dust and bricks are in piles on the surface at Sites 2 and 3. There is no way to restrict public access to the site, which is in a mixed commercial, industrial, and residential area. Disposal at Sites 2 and 3 ceased in December 1983. Since July 1980, the City/County Health Department has cited Portland Cement for numerous dust violations.

Ground water in the vicinity of the site is contaminated with chromium, lead, and arsenic, according to tests conducted by the State. About 100,000 people live within 3 miles of the site.

Status (January 1986): Under a Consent Agreement with the State, Portland Cement Co. is conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

AVTEX FIBERS, INC. Front Royal, Virginia

Conditions at listing (October 1984): A 340-acre site on the Shenandoah River in Front Royal, Warren County, Virginia, has been operated as a rayon-manufacturing complex by American Viscose (1940-1963), FMC Corp. (1963-1977), and Avtex Fibers, Inc. (1977 to the present). Various wastes have been disposed of in unlined basins, landfills, and open piles. In 1974, FMC received a National Pollutant Discharge Elimination System permit to discharge waste water effluent into the South Fork of the Shenandoah River.

Ground water under the site contains excessive levels of carbon disulfide, phenol, and arsenic, according to analyses conducted by the State. Ground water directly across the river from the site contains excessive levels of carbon disulfide and phenol. About 1,300 people use wells from the contaminated aquifer within 3 miles of the site as a source of drinking water. The South Fork of the Shenandoah River does not appear to be affected by discharges from the plant at this time.

Status (January 1986): Avtex Fibers, Inc., is preparing a scope of work to perform a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The company is pumping and treating ground water under the direction of the State.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

L.A. CLARKE & SON Spotsylvania County, Virginia

Conditions at listing (October 1984): L. A. Clarke & Son is the owner and operator of a wood-preserving facility on 10 acres located on the outskirts of Fredricksburg, Spotsylvania County, Virginia. L.A. Clarke & Son recently emerged from reorganization proceedings under Chapter 11 of the Federal bankruptcy code.

Spills, poor housekeeping, dripping from treated wood, and other possible sources have contaminated soil, ground water, and surface water at the facility with polynucleated aromatic compounds derived from the wood-preserving agent creosote and with heavy metals, according to analyses conducted by EPA and the State.

In 1982, L.A. Clarke & Son consented to a court order requiring remedial actions specified by the State. The company was recently held in contempt of that order.

Waste piles and a surface impoundment on the property acquired Interim Status under the Resource Conservation and Recovery Act (RCRA) when the company filed Part A of a permit application.

Status (January 1986): In December 1985, EPA began a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Status (June 10, 1986): This site is being placed on the NPL at this time because the potentially responsible party declined to initiate work, and CERCLA-funded remedial activities are underway. Thus, the site meets one of the requirements of EPA's policy for placing RCRA-related sites on the NPL.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

RHINEHART TIRE FIRE DUMP Frederick County, Virginia

Conditions at listing (October 1984): The Rhinehart Tire Fire Dump Site originally served as a storage area for 5 to 7 million tires. The 4.5-acre site is located in an agricultural area on the outskirts of Winchester, Frederick County, Virginia. The tires caught fire in October 1983. Subsequently, EPA spent \$1.74 million of CERCLA emergency funds to control and collect 800,000 gallons of oily wastes, conduct environmental monitoring, and perform associated activities.

According to EPA analyses, a variety of hazardous substances have been released to the air. In addition, monitoring by the State has indicated local ground water contamination from similar hazardous substances, including benzene. About 150 people use the contaminated aquifer within 3 miles of the site as a source of drinking water.

In February 1984, the site owner consented to a CERCLA section 106 order which required surface run-off controls specified by EPA. These measures were taken in August 1984.

Status (January 1986): In March 1985, EPA obligated funds to the U.S. Army Corps of Engineers for a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. The workplan for the RI/FS is due in March 1986.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MICA LANDFILL
Mica, Washington

Conditions at listing (October 1984): Mica Landfill covers 180 acres near Mica in Spokane County, Washington. Since 1971, the county has disposed of municipal and industrial wastes at the site. A monitoring well at the landfill has shown contamination with 1,1,1-trichloroethylene, chloroform, and several other organic compounds, according to analyses conducted by a consultant to Spokane County. The extent of ground water contamination is unknown at this time.

The county has sampled all domestic and agricultural wells within 1 mile and reviewed its records to identify the quantities and types of waste known or suspected of being buried at the landfill. About 425 people depend on wells within 3 miles of the site as a source of drinking water. Eight irrigation wells are within 3 miles of the site.

Status (January 1986): Spokane County has completed additional ground water monitoring. No contamination of domestic water wells has been documented to date.

The county plans to upgrade the landfill to comply with all solid waste disposal requirements of the Resource Conservation and Recovery Act. The county is now operating a leachate collection system to control off-site migration of leachate.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

MIDWAY LANDFILL Kent, Washington

Conditions at listing (October 1984): Midway Landfill covers 60 acres in Kent, King County, Washington. From January 1966 to October 1983, this landfill, which is on privately owned land, was operated by the City of Seattle. It was the repository of nonputrescible wastes and some industrial sludges from the Seattle area. The landfill is unlined and is in an old gravel quarry.

Data collected by the Seattle-King County Health Department and the State from on-site monitoring wells indicate that an aquifer is contaminated with lead, toluene, xylene, arsenic, and other compounds. More than 10,000 draw their drinking water from the aquifer within 3 miles of the site.

The City of Seattle is preparing a plan for closing the landfill in accordance with all solid waste disposal requirements of the Resource Conservation and Recovery Act. The plan calls for drilling several monitoring wells to define the direction of ground water flow relative to several major municipal wells nearby. Soil samples will also be taken.

Status (January 1986): The City of Seattle has installed the new monitoring wells. Anomalies found during the drilling indicate a need for some additional wells.

Under a cooperative agreement with EPA, the State of Washington Department of Ecology is reviewing the city's work. The State is directing a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Combustible gas has been found in the soils under residential and commercial areas adjacent to the site, requiring temporary relocation of 11 families. In January 1986, the city began operating a gas extraction system on-site in an effort to control off-site migration of methane. The city and State are developing an additional off-site extraction well system to remove methane trapped in the ground off-site. A special gas sampling program was initiated to deal with the gas problem.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NORTHSIDE LANDFILL Spokane, Washington

Conditions at listing (October 1984): Northside Landfill covers 240 acres in Spokane, Spokane County, Washington. Since 1930, the city has operated the landfill for disposal of municipal wastes. Several nearby domestic water wells have been contaminated with organic solvents (including tetrachloroethylene, trichloroethylene, chloroform, and 1,1,1-trichloroethane), according to tests conducted by the city and its consultant.

The landfill sits atop the aguifer that is the sole source of drinking water for the City of Spokane (population 170,000). The city has connected approximately 150 residents with contaminated wells to the municipal water system.

The city is regularly monitoring on-site wells and a number of offsite wells to determine the location and direction of flow of the plume of contaminated ground water. The city is also investigating remedial measures to control the source of contamination.

Status (January 1986): The city has completed seven new monitoring wells and is assessing the data collected. Under a cooperative agreement with EPA, the Washington State Department of Ecology is working with the city to review and implement a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NORTHWEST TRANSFORMER Everson, Washington

Conditions at listing (October 1984): Northwest Transformer's salvage yard covers 1.2 acres about 2 miles south of Everson, Washington, a rural community in Whatcom County. The site was used for storage and salvage of transformers, which involved dismantling and draining, as well as incineration operations. Waste transformer fluids were stored in a tank on-site. PCBs, a component of some transformer fluids, were detected in private domestic wells near the site in tests conducted by the Whatcom County Health Department. Although the levels of PCBs were near detection limits (0.05 to 0.11 parts per billion), no other source of PCBs has been identified near the wells. Subsequent sampling showed no PCBs. Further sampling is planned.

Wells within 3 miles of the site are the source of drinking water for 2,700 people.

Status (January 1986): In an extensive soil sampling effort, EPA detected high concentrations of PCBs at certain locations. The highest was 31,000 parts per million (ppm). In May 1985, EPA used CERCLA emergency funds to remove PCB-containing materials from the site. Five transformers containing greater than 500 ppm were drained and cleaned. About 500 transformers were either already clean (less than 46 ppm) or, if containing 46 to 500 ppm, were drained, rinsed, and cleaned on-site. Contaminated soil (1,360 cubic yards) and waste liquid (5,500 gallons) containing 10 ppm or more were also removed. All wastes were taken to a disposal site meeting the requirements of the Resource Conservation and Recovery Act and the Toxic Substances Control Act.

EPA is working with the U.S. Army Corps of Engineers to develop a plan for a remedial investigation/feasibility study to determine the type and extent of contamination at the site and develop alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SILVER MOUNTAIN MINE Loomis, Washington

Conditions at listing (October 1984): Silver Mountain Mine covers 5 acres in Loomis, a remote area of Okonogan County, Washington. In 1980 and 1981, the mine used cyanide in its processing operations. Approximately 1,100 gallons of cyanide were poured over silver tailings, which had been placed on top of a plastic liner, in an effort to extract gold. The water running off the pile was collected in a basin, also lined with plastic. The site contains more than 2,500 tons of contaminated tailings and 20,000 gallons of contaminated liquid. At one time, the liquid contained 1,100 parts per million (ppm) cyanide, according to analyses conducted by the State. In November 1983, the State treated the liquid, reducing cyanide levels to 9 ppm. Contamination of ground water in the area is considered probable. Although the site is located in a remote area, the concentrations of cyanide present a potential health hazard.

Status (January 1986): The State of Washington Department of Ecology stabilized the site in June 1985. This activity included: (1) draining the leachate and removing it for off-site treatment, (2) covering the site with a 3/4-inch cotton liner and a plastic liner, (3) securing the liners with tires, (4) removing drums that previously contained hazardous materials, (5) removing a wooden structure that appeared insecure, and (6) fencing the site with barbed wire. The life of the liner is estimated at 20 years. The State concluded after this operation that the site "will not get worse, yet further study is warranted...to determine if contaminants have reached the ground water, and to determine appropriate and cost-effective means to decontaminate the ore heap." The State plans to visually inspect the site every couple of months to ensure security of the liner and fence.

Status (June 10, 1986): This mining site is being placed on the NPL at this time because it is a noncoal site with mining operations that occurred after Aug. 3, 1977, the enactment date of the Surface Mining Control and Reclamation Act (SMCRA). Thus, it is neither regulated by SMCRA nor eligible for funds from the SMCRA Abandoned Mine Land Reclamation Program.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

TOFTDAHL DRUMS
Brush Prairie, Washington

Conditions at listing (October 1984): The Toftdahl Drums Site covers 15 acres in Brush Prairie, Clark County, Washington. Up to 200 drums of unknown material may have been buried at the site in the late 1960s or early 1970s. Many drums reportedly have been removed from the site since that time, but it is unclear how many may still remain buried, or how much of the contents may have spilled into the ground.

In July 1983, EPA excavated and sampled the remains of six drums. High concentrations of metals and organic contaminants were detected in the material in the drums and adjacent soil. Three private wells near the site contain low levels of some of these contaminants. The State has said that no health threat exists at this time to the residents using these wells. Recent discussions between the property owner and the State have resulted in the identification of several other areas on this property (and one not on the property) where the contents of the drums may have been spilled on the ground. Recent sampling by the State has detected no contamination in these areas, but additional sampling is planned.

The State is planning to conduct a remedial investigation and excavate the known drum burial area to remove the remaining drums.

Status (January 1986): In June 1985, the State excavated the remains of 13 drums from the known drum burial area. It is believed that all the drums now have been removed from the site.

Under a cooperative agreement with EPA, the State of Washington Department of Ecology is currently conducting a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

FADROWSKI DRUM DISPOSAL Franklin, Wisconsin

Conditions at listing (October 1984): The Fadrowski Drum Disposal Site covers 40 acres in Franklin, Milwaukee County, Wisconsin. From 1970 through 1981, Ed's Masonry and Trucking was licensed by the State to operate a transportation and collection service on the site.

Early in 1983, Menard, Inc., purchased a portion of the site and began construction of a home building materials store. Excavation turned up buried drums. The contents were analyzed by the State and found to be hazardous as defined by the State. Little is known about the amounts or types of wastes disposed at the site, which was not authorized to accept hazardous wastes.

The area is semirural; nearby communities are expanding their residential development. About 18,000 people depend on wells within 3 miles of the site as a source of drinking water. The soils consist of sediments and clays. A creek flows through the western edge of the property.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

LEMBERGER LANDFILL, INC. Whitelaw, Wisconsin

Conditions at listing (September 1985): The Lemberger Landfill, Inc., Site covers 21 acres on Hempton Lake Road near the Village of Whitelaw, Manitowoc County, Wisconsin. The Township of Franklin used the site, an old gravel pit, as an open dump from about 1940 to 1970. Lemberger Landfill, Inc., operated the site as a sanitary landfill under a license from the Wisconsin Department of Natural Resources (WDNR) from about 1970 to 1976. The State permit allowed accepting hazardous waste.

This site was originally proposed for listing under the name "Lemberger Fly Ash Landfill."

From early 1976 to 1977, Wettencamp and Brunner Excavating Co. transported fly ash from Manitowoc Public Utilities to the Lemberger facility. An estimated 1,750 to 2,500 cubic yards of fly ash were disposed of monthly. Past WDNR inspections showed that Lemberger used fly ash and bottom ash as cover instead of burying them along with the refuse. Lemberger placed a second cap on the landfill in May 1981. Leachate seeps are a problem of long standing.

In 1984, EPA sampled monitoring wells and leachate at the site. The analyses showed appreciable concentrations of vinyl chloride, methylene chloride, and trans-1,2-dichloroethene. Other contaminants identified were ethylbenzene, toluene, tetrachloroethane, trichloroethane, dichloroethane, arsenic, barium, total xylenes, chromium, cadmium, and lead. In addition, some of the same contaminants were present in residential wells in the vicinity of the site, according to tests conducted by WDNR in 1984-85. Potentially impacted water resources include the unconsolidated and bedrock aquifers near the site. About 2,300 people depend on public and private wells within 3 miles of the site as a source of drinking water. The Branch River located 0.5 miles west of the site is also potentially impacted. It is used for recreation. A marsh borders the southwestern portion of the site.

In 1982, Lemberger signed a Consent Order with WDNR that required the identification of the source of leachate and the implementation of leachate controls, followed by ground water monitoring. Some drilling and testing were completed, but further investigation came to a halt when the owner filed for bankruptcy in 1983.

Status (January 1986): EPA mailed Notice Letters and information requests to 26 potentially responsible parties in December 1985. Another site, Lemberger Transport & Recycling, Inc., Landfill (added to the NPL in September 1984), is located approximately 2,000 feet south of the Lemberger Landfill, Inc., Site. In November 1985, EPA similarly notified 21 potentially responsible parties associated with the earlier NPL site. EPA is negotiating with the parties to have them fund a remedial investigation/ feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. Negotiations between EPA and the parties will concentrate on incorporating the two sites into a single study. Negotiations are expected to conclude by April 15, 1986.

U.S. Environmental Protection Agency/Remedial Response Program

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

NATIONAL PRESTO INDUSTRIES, INC. Eau Claire, Wisconsin

Conditions at listing (October 1984): National Presto Industries, Inc., has manufactured artillery projectiles in Eau Claire, Chippewa County, Wisconsin, since 1955. The plant operates on a standby status for the Department of Defense.

The company has a waste water permit from the State for two ponds (1.9 acres and 14 acres) and two seepage lagoons (each 3 acres) on its property. Process wastes flowed through the ponds, where metal particles and oils were removed, to the seepage lagoons, where the waste water was discharged to ground water. The sludge remaining in the ponds is contaminated with heavy metals and traces of volatile organic compounds, according to tests conducted by the Wisconsin Department of Natural Resources. The presence of the sludge and its improper treatment violate the State waste water permit.

The toxic nature of the sludge and hydrogeologic studies conducted by the State indicate a potential threat to the Eau Claire Well Field, which serves 57,500 people.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

SHEBOYGAN HARBOR AND RIVER Sheboygan, Wisconsin

Conditions at listing (September 1985): The Sheboygan Harbor and River Site extends 8 miles through the communities of Sheboygan Falls, Kohler, and Sheboygan in Sheboygan County, Wisconsin. According to tests conducted by EPA in July 1985, some river sediments contain high levels of PCBs, some as high as 190 milligrams per kilogram (mg/kg). Concentrations in the Sheboygan Harbor basin and turning basin are generally lower than 5 mg/kg but do exceed 50 mg/kg in spots within the U.S. Army Corps of Engineers' official navigation dredging channel. The channel has not been dredged since 1973.

In early 1975, the Wisconsin Department of Natural Resources (WDNR) detected PCBs during routine sampling of fish. Every year since then, PCBs have been detected in fish, water, and sediments in the harbor and river. In April 1978, WDNR and the Wisconsin Department of Health and Social Services advised residents not to eat fish from the Sheboygan River and two tributaries, the Mullet and Onion Rivers, because PCBs in all samples analyzed exceeded the U.S. Food and Drug Administration's temporary tolerance level of 5 micrograms/gram. The ban is still in effect in some places.

WDNR investigated to find the sources of PCBs. The highest concentrations were detected in sediments immediately downstream from Tecumseh Products Co.'s die-casting plant in Sheboygan Falls. Concentrations declined further downstream from the plant. After discovering PCB wastes on the plant property, WDNR ordered the company on May 12, 1978, to stop disposing of solid waste on its property. On June 21, 1978, WDNR issued a second order requiring the company to excavate, collect, and store properly all materials likely to contain PCBs. The company excavated contaminated soils and disposed of them off-site. On Aug. 15, 1978, WDNR issued a letter to the mayor of Sheboygan Falls and the Tecumseh plant manager indicating that the June 21, 1978, order had been satisfied.

A March 1980 report of the U.S. Army Corps of Engineers estimated that about 163,000 cubic yards of contaminated soil containing 3.5 tons of PCBs would have to be dredged from the mouth of the river and the harbor to protect human health and the environment.

The Sheboygan River drains into Lake Michigan, which is the source of drinking water for the Sheboygan/Sheboygan Falls/Kohler metropolitan area (approximately 58,000 people). EPA has detected PCBs in sediments within 1 mile of the drinking water intakes.

Both Sheboygan Harbor and River are used for recreation.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

STOUGHTON CITY LANDFILL Stoughton, Wisconsin

Conditions at listing (October 1984): The City of Stoughton owned and operated a solid waste landfill from the mid-1950s until 1978 at the northeast edge of Stoughton in Dane County, Wisconsin. The 5-acre landfill was capped and seeded in 1978. Presently, it is roped off. Plans call for it to be used as a city park after it is cleaned up.

From 1953 to 1963, the site took unknown amounts of wastes, which consisted primarily of solvents and other liquid organic compounds, from a tire manufacturer. The soils in the area are moderately to highly permeable, and the landfill did not have a liner or leachate collection system.

On Nov. 17, 1983, the State sampled six on-site monitoring wells. The results showed elevated levels of volatile organic compounds in three of the six wells. At present, the full extent of ground water contamination is unknown. About 8,500 people depend on wells within 3 miles of the site as a source of drinking water.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

WAUSAU GROUND WATER CONTAMINATION
Wausau, Wisconsin

Conditions at listing (April 1985): Wausau's water supply system serves 32,000 residents of Wausau, Marathon County, Wisconsin. According to tests conducted by the city in March 1982, three of the city's six wells are contaminated by several volatile organic compounds (VOCs) at levels greater than those recommended for drinking water by EPA and the Wisconsin Department of Natural Resources (WDNR).

In the spring of 1982, the city first detected VOC contamination in city well #3, east of the Wisconsin River. By the summer of 1982, analyses of water from city well #6, west of the Wisconsin River, detected appreciable amounts of trichloroethylene (TCE) and trace amounts of perchloroethylene (PCE) and 1,2- transdichloroethylene (DCE). By the fall of 1982, city well #4, also east of the Wisconsin River, showed contamination by DCE, PCE, TCE, and toluene.

Since these discoveries, the city and WDNR have made considerable efforts to monitor and define the extent of ground water contamination. EPA also conducted a hydrogeologic investigation to determine potential sources and the extent of contamination. Several potential sources were investigated.

The city had been able to supply water by pumping mainly from uncontaminated wells #7 and #9, with blending from contaminated wells #3 and #6 to meet demand. However, in the spring of 1984, increasing levels of contamination in these wells led to VOC levels at the tap greater than EPA and WDNR recommendations. Therefore, in the summer of 1984, EPA used CERCLA emergency funds to install carbon filters to remove VOCs. The filters were used until they could be replaced by two air strippers. EPA provided a research grant to install the air stripper at well #4. The city funded the air stripper at well #3.

Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1.980 (CERCLA)("Superfund")

ORDNANCE WORKS DISPOSAL AREAS Morgantown, West Virginia

Conditions at listing (October 1984): The Ordnance Works Disposal Areas cover approximately 110 acres on the western shore of Monongahela River, southwest of Morgantown, Monongalia County, West Virginia. Several previous and adjacent property owners operated chemical plants on the site since the 1940s, both for the Government war effort and for commercial use. From that time to the late 1970s, the site included a landfill for industrial waste disposal and an area with above—ground drums containing PCBs. Waste from the site may contaminate the Monongahela River, which supplies drinking water to 60,000 residents in the area.

The site is now owned by a group unrelated to previous disposal activities. To alleviate the immediate threat at a portion of the site, the present owner removed drums and contaminated soil containing PCBs and disposed of them at an approved disposal site.

Status (January 1986): Analysis of soil in several areas of the site detected chromium, lead, and various other heavy metals, as well as some organic chemicals. On April 10, 1985, EPA and the State started an enforcement-lead study to determine the effects of these substances on public health and the environment and identify any additional areas of contamination. The study includes a workplan outlining goals and methodology, a remedial investigation to determine the type and extent of on-site contamination and any contamination of the Monongahela River, and a feasibility study to identify alternatives for remedial action at the site.

The work is scheduled for completion in April 1987.