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Hazardous Waste Sites

Descriptions of 244
Sites on Proposed
Update #2 to
National Priorities
List,
October 1984

U.S. Environmental Protection Agency Region V, Library 230 South Dearborn Street Chicago, Illinois 60604 This document consists of descriptions of the 244 sites proposed on October 15, 1984, as Update #2 to the National Priorities List. It also includes descriptions of the four sites—Olin Corp (Area 1, 2, & 4) in Georgia, Quail Run Mobile Manor in Missouri, Sand Springs Petrochemical Complex in Oklahoma, and Pig Road in Texas—that continue to be proposed from Update #1, which was proposed on September 8, 1983. All sites are arranged alphabetically by State and by site.

U.S. Environmental Protestion Agency

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REMEDIAL ACTIONS UNDER SUPERFUND

Superfund is a National Trust Fund established by Congress to deal with a major environmental problem. The fund pays for cleaning up when public health or the environment is threatened by hazardous wastes improperly disposed of in the past or by spills of hazardous substances. The Trust Fund is scheduled to get about \$1.38 billion from taxes on producers and importers of petroleum and 42 basic chemicals. Another \$220 million will come from general Federal revenues—taxpayers' dollars—for a total of \$1.6 billion. Authorized by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), the Superfund program is managed by the U.S. Environmental Protection Agency (EPA).

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

- Removals, emergency-type actions similar to, although broader in scope than, those formerly taken under Section 311 of the Clean Water Act. They must be completed in 6 months or when \$1 million has been spent.
- Remedial actions, responses intended to provide permanent solutions at hazardous waste sites. They are generally longer-term and more expensive than removals. A Superfund remedial action can be taken only if a site is on the National Priorities List. After publishing two preliminary lists and proposing a formal list, EPA published the first National Priorities List in September 1983. CERCLA requires that the list be updated at least annually.

The money for conducting a remedial action at a hazardous waste site can come from several sources:

- Superfund can pay for the cleanup.
- The party or parties responsible for the wastes can clean them up voluntarily.
- The responsible party or parties may be forced to clean up by legal action.
- A State or local government can choose to assume the responsibility to clean up without Federal dollars.

A remedial action under Superfund is an orderly process that generally involves the following sequence of activities:

- Taking any measures needed to stabilize conditions, which involve, for example, fencing the site or removing above-ground drums or bulk tanks. Such measures usually would be required in the later phases of cleanup.
- Undertaking initial planning activities, which involve collecting all the information needed to develop a coherent strategy and to assist in selecting an appropriate course of action.
- Conducting remedial planning activities, which involve:
 Carrying out a remedial investigation to determine the type and extent of contamination at the site.
 - -- Conducting 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 \$800,000 and take from 9 to 18 months to complete.
 - -- Selecting the "cost-effective" remedy--that is, the alternative that provides the most protection to human health and the environment at the least cost.
- Designing the remedy. Typically, the design phase costs \$440,000 and takes 6 to 12 months.
- Implementing 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 cleaning up a site under Superfund in one of two ways:

- The State can take the lead role under a Cooperative Agreement, which is much like a grant because Federal dollars are transferred to the State. The State then develops a work plan, 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 remedial actions to average out at about \$12.6 million per site. This includes \$4.1 million in operation and maintenance costs over 30 years, the maximum period EPA believes is necessary to ensure that a cleanup meets its goal.

ALABAMA ARMY AMMUNITION PLANT Childersburg, Alabama

The Alabama Army Ammunition Plant (AAAP) covers 5,168 acres just east of the Coosa River north of Childersburg, Talladega County, Alabama. The U.S. Army terminated manufacturing operations in August 1945. The plant was in standby status until 1973, when it was declared excess property. Explosives manufactured at AAAP included trinitrotoluene, nitrocellulose, and tetryl. Most of the structures used in manufacturing have been demolished and/or destroyed by controlled burning. Sources of contamination include disposal sites, as well as spills and general wastes in the manufacturing process. One area, referred to as the Leaseback Area, was sold to Kimberly-Clark, Inc., leased back to the Government for removal of equipment and decontamination of the area, and then returned to Kimberly-Clark. That lease expired in 1982.

Both ground water and surface water are contaminated with trinitrotoluene and dinitrotoluene, according to analyses conducted by the Army. Surface water is also contaminated with lead. Ground water is the source of drinking water in the area, with the exception of the Kimberly-Clark Plant, which uses the Coosa River. The City of Childersburg uses ground water for drinking water, but Talladega Creek, considered to be a ground water divide, is between AAAP and the city. The total population using the river as a source of drinking water is estimated to be 1,800, and the population using ground water is estimated to be 700.

AAAP is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search) and Phase II (preliminary survey). Phase IV (remedial action) has been completed in the Leaseback Area.

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

ANNISTON ARMY DEPOT (SOUTHEAST INDUSTRIAL AREA) Anniston, Alabama

Anniston Ordnance Depot, in Anniston, Calhoun County, Alabama, was officially designated on Oct. 14, 1941, as an ammunition storage area. Over the years, the mission was expanded to include the overhauling and repairing of combat vehicles and artillery equipment. Now named Anniston Army Depot (ANAD), it has become known as the "Tank and Antitank Center of the Free World." The area of ANAD contained in this site is the 600 acres within and near the Southeast Industrial or Vehicle Rebuild Area. Based upon disposal practices, geography, and potential threat, various individual disposal sites within the area were aggregated into a single site. The wastes reportedly contain chlorinated organic solvents used in degreasing and heavy metals resulting from plating operations.

There is potential for hazardous substances to be released to Dry Creek, which is used for recreation. According to analyses reported by the Army in 1982, metals and chlorinated solvents are present in ground water. Calhoun County gets its drinking water from ground water. The geohydrologic situation in Calhoun County is very complex. Further studies are required to define the problem. Ground water appears to move through fractures and faults, which are numerous and diverse in the area. The same bedrock is under both the Southeast Industrial Area of ANAD and Coldwater Spring, the sole source of drinking water for Anniston's municipal water system. Thus, the spring is a potential target if ground water contamination migrates. The municipal system serves at least 39,000 people.

ANAD is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search), Phase II (preliminary survey), and Phase III (assessment of remedial action alternatives). Two portions of the site have been closed under the Resource Conservation and Recovery Act. Wastes and contaminated soils were excavated and removed to a permitted facility.

MOTOROLA, INC. (52ND STREET PLANT)
Phoenix, Arizona

Motorola, Inc., manufactures semiconductors and related components at a plant on 52nd Street in Phoenix, Maricopa County, Arizona. The facility is situated 1.5 miles northeast of the Sky Harbor International Airport and is surrounded by residential, industrial, business, agricultural, and recreational areas.

Ground water beneath the 52nd Street Plant is contaminated with trichloroethylene (TCE),trichloroethane (TCA), and other organic and inorganic compounds, according to analyses conducted by EPA and Motorola. Contamination may have resulted from leaking storage tanks, leaking effluent lines, and past disposal practices, including the use of dry wells. Motorola detected TCE and TCA in its monitoring wells located at least 1 mile from the facility. Preliminary analytical results indicate that several private wells (use unknown) may contain TCE concentrations above the State action level of 5 parts per billion.

In October 1983, the Arizona Department of Health Services established a Task Force comprised of the State, EPA, and local agencies to guide and evaluate Motorola's remedial activities. As part of these activities, Motorola has installed 22 on-site and 6 off-site monitoring wells. The Task Force has guided Motorola in development of a detailed work plan for a remedial investigation to determine the type and extent of contamination at the site and a feasibility study to identify alternatives for remedial action.

MIDLAND PRODUCTS Ola/Birta, Arkansas

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. About 190 people within 3 miles of the site use ground water as a source of drinking water.



ADVANCED MICRO DEVICES, INC. Sunnyvale, California

Advanced Micro Devices, Inc., manufactures electronic equipment at a plant in Sunnyvale, 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, and trichloroethylene, according to analyses conducted by a consultant to Advanced Micro Nevices, Inc. Contamination is helieved 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 Regional Water Quality Control Poard 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.

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

ALVISO DUMPING AREAS Alviso, California

Portions of Alviso, California, located in south 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.

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 Ray National Wildlife Refuge, which borders the town and harbors several endangered species.

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

APPLIED MATERIALS Santa Clara, California

Applied Materials manufactures wafer-manufacturing equipment at a plant in Santa Clara, California. The facility occupies about 2.5 acres and is surrounded by business and industrial areas.

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

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

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

BECKMAN INSTRUMENTS (PORTERVILLE PLANT) Porterville, California

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 Central Valley Regional Water Quality Control Board is working with Beckman to develop a comprehensive monitoring system to determine the full extent of ground water contamination.

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

CASTLE AIR FORCE BASE Merced, California

Castle Air Force Base is a military installation located in Merced County, California. The base consists of 2,777 acres of runways and airfield operations, industrial areas, and housing for base personnel. In the past, spent solvents (trichloroethylene and trichloroethane), cyanide, cadmium, fuels, and waste oils have been disposed of into onsite pits and landfills.

The drinking water supply for the base is drawn from an aquifer underlying the base at a depth of approximately 300 feet. This has been contaminated by trichloroethylene. The Air Force has installed a new drinking water well for the base that will draw from a deeper, uncontaminated aquifer. The well is scheduled to be operational in the fall of 1984.

Castle Air Force Base is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Air Force completed Phase I (records search) in October 1983. Phase II (preliminary survey) is scheduled to begin in late 1984.

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

FAIRCHILD CAMERA & INSTRUMENT CORP. (MOUNTAIN VIEW PLANT)
Mountain View, California

Fairchild Camera & Instrument Corp. manufactures semiconductors at a plant in Mountain View, California. The facility occupies approximately 56 acres and is surrounded by residential and industrial areas.

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

Since early 1982, Fairchild has been investigating the site geology and hydrogeology and attempting to define the lateral and vertical extent of solvents underlying the site. Fairchild has installed wells to pump and treat the contaminated ground water plume.

Fairchild is working with the κ egional Water Ouality Control Roard to further define the extent of contamination and outline various cleanup strategies.

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

FAIRCHILD CAMERA & INSTRUMENT CORP. (SOUTH SAN JOSE PLANT)
South San Jose, California

Fairchild Camera & Instrument Corp. manufactures semiconductors on approximately 20 acres in South San Jose, Santa Clara County, California. Land use in the vicinity of the site is agricultural, residential, and commercial. Soils and a portion of a major aquifer providing drinking water to about 65,000 people are contaminated with trichloroethane and other solvents, according to analyses conducted by the Great Oaks Water Co. and Fairchild. Three municipal wells within 3 miles of the facility have been taken out of service.

In response to a request from the California Regional Water Ouality Control Board, Fairchild is voluntarily taking action to contain and reduce the plume of contamination. Fairchild has started an investigation to determine the extent of the problem at the site and is currently undertaking interim cleanup measures consisting of excavation of contaminated soils and the pumping and treatment of contaminated ground water.

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

FIRESTONE TIRE & RUBBER CO. (SALINAS PLANT)
Salinas, California

Firestone Tire & Rubber Co. operated a tire-manufacturing plant in a rural area of Salinas, Monterey County, California, from 1965 until 1980. Various chemicals were apparently spilled during the manufacturing process. Soil within the 20-acre site is contaminated with various volatile organic chemicals and zinc, according to analyses conducted by Firestone. Ground water in the upper aquifer is also contaminated. The contaminants were discovered in October 1983, when Firestone was closing the plant in accordance with the requirements of the Resource Conservation and Recovery

Firestone has removed contaminated soil and is working with State agencies to determine the full extent of ground water contamination in the area. About 500 acres of land within 3 miles of the facility are irrigated with ground water.

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

FMC CORP. (FRESNO PLANT) Fresno, California

FMC Corp. has been producing pesticides for over 40 years at a plant located in a densely populated residential area of Fresno, Fresno County, California. Ground water below the facility is contaminated with heavy metals, as well as other chemicals, according to analyses conducted by the company. Fresno municipal wells near the site tap this contaminated aquifer. The wells serve about 250,000 people.

FMC has removed some soil contaminated with various pesticides and heavy metals from the facility and transported it to an approved landfill. FMC has submitted a proposal for investigating the site to the California Department of Health Services. The investigation will determine the extent of the contamination and identify the actions necessary to clean up the site.

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

HEWLETT-PACKARD Palo Alto, California

Hewlett-Packard manufactures optical instruments at a plant in Palo Alto, California. The facility occupies about 50 acres and is surrounded by industrial and business areas.

Monitoring wells on the site are contaminated with 1,1,1-trichloro-ethane, 1,1-dichloroethylene, 1,1-dichlorethane, trichloroethylene, and toluene, according to analyses conducted by a consultant to Hewlett-Packard. Contamination is believed to have resulted from leaking tanks. About 56,000 people within 3 miles of the site depend on ground water as a standby source of drinking water.

Hewlett-Packard is working with the Regional Water Quality Control Board to determine the extent of contamination of ground water and soils.

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

Intel Corp. manufactured semiconductors at a plant in Mountain View, 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 within 3 miles of the site depend on ground water 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 extraction wells and excavation of soil beneath the underground storage tanks, which were previously removed. The company is working with the Regional Water Quality Control Board to determine the full extent of the contamination.

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

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

Intel Corp. tests microprocessors at its Santa Clara III facility in Santa Clara, 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-trichloro-ethane, 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 within 3 miles of the site depend on ground water as a source of drinking water.

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

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

INTEL MAGNETICS Santa Clara, California

Intel Magnetics produces and tests magnetic products and bubble memories at a plant in Santa Clara, California. The facility occupies approximately ${\bf l}$ 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 within 3 miles of the site depend on ground water as a source of drinking water.

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

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

IBM CORP. (SAN JOSE PLANT) San Jose, California

IBM Corp. manufactures data processing equipment on approximately 400 acres in the southern portion of San Jose, Santa Clara County, California. Land use in the vicinity of the site is agricultural and residential. Spent solvents are stored in a number of underground storage tanks at the IBM facility. Soils and a multiple aquifer system used for drinking water are contaminated with trichloroethane, trichloroethylene, Freon 113, and other industrial solvents, according to analyses conducted by the Great Oaks Water Co. and IBM. Two municipal wells within about 1 mile of the facility have been taken out of service.

In response to a request from the California Regional Water Ouality Contol Board, IBM is voluntarily undertaking remedial measures to contain and reduce the plume of contaminants. IBM has recently completed an investigation to determine the extent of the problem and is currently undertaking interim cleanup measures consisting of the removal of contaminated soil and the pumping and treatment of contaminated ground water. About 65,000 people within 3 miles of the site use ground water as a source of drinking water.

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

J.H. BAXTER Co. Weed, California

J.H. Baxter Co. has operated a wood-treatment facility at the base of Mount Shasta in Weed, Siskiyou County, California, since the 1960s. Other companies previously conducted similar operations on the site for about 20 years. Chemicals used in the treatment include pentachlorophenol, arsenic compounds, and creosote. Analyses conducted by the company and the North Coast Regional Water Ouality Control Board detected arsenic, polynuclear aromatics, and pentachlorophenol in ground water below the site. Heavy metals, pentachlorophenol, tetrachlorophenol, and creosote have been detected in surface water downgradient of the site.

The North Coast Regional Water Quality Control Board issued the company a Cleanup and Abatement Order in March 1983 and a Cease and Desist Order in May 1983. The company has installed monitoring wells and taken measures to collect and direct rainwater run-off.

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

LAWRENCE LIVERMORE NATIONAL LABORATORY (USDOE) Livermore, California

Lawrence Livermore National Laboratory (LLNL) covers about 1 square mile and is situated about 1.5 miles east of the densely populated City of Livermore, Alameda County, California. The research facility is administered by the U.S. Department of Energy (USDDE).

Abandoned waste pits on the site contain chloroform, l,l,l-trichloro-ethylene, tetrachloroethylene, and other organic solvents. Monitoring wells on-site are contaminated by these organic chemicals, as are private wells off-site. LLNL has provided some nearby residents with bottled water.

LINL is working with the California Regional Water Quality Control Board to determine the full extent of the ground water contamination.

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

LORENTZ BARREL & DRUM CO. San Jose, California

Lorentz Barrel & Drum Co. recycles drums at a plant in San Jose, California. The facility occupies about 5 acres and is surrounded by residential, industrial, and business areas.

Monitoring wells on the site are contaminated with trichloroethane, trichloroethylene, 1,1-dichloroethylene, and terachloroethylene, according to analyses conducted by a consultant to Lorentz Barrel & Drum Co. Contamination is believed to have resulted from overflowing sumps and spills. About 250,000 people within 3 miles of the site depend on ground water as a source of drinking water.

Lorentz Barrel & Drum is working with the Regional Water Quality Control Board to determine the extent of ground water contamination. The board issued a Cleanup and Abatement Order to the company in August 1983.

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

LOUISIANA-PACIFIC CORP. Oroville, California

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 is contaminated with PCP, according to analyses conducted by Koppers, Inc. (the adjacent property owner) and the Central Valley Regional Water Quality Control Board. About 10,500 people within 3 miles of the site use ground water as a source of drinking water.

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

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

MARLEY COOLING TOWER CO. Stockton, California

Marley Cooling Tower Co. operates on a site adjacent to Franklin High School in Stockton, San Joaquin County, California. The company began operation at this location in 1942. From 1966 until 1982, the company used chromated copper arsenate to pressure treat wood for the purpose of fabricating cooling towers. Since 1982, acid copper chromate has been used in the wood-treating process.

Since 1966, rainwater run-off contaminated with arsenic, chromium, and copper has been discharged to a 2-acre percolation pond. The sludge in the pond and soil on-site are heavily contaminated with arsenic, chromium, and copper. A number of on-site wells are contaminated with arsenic and chromium, according to analyses conducted by the company.

Marley is currently working with the California Department of Health Services and the Central Valley Regional Water Quality Control Board to develop a plan to determine the full extent of soil and ground water contamination.

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

MATHER AIR FORCE BASE (AC&W DISPOSAL SITE) Sacramento, California

Mather Air Force Base is located near Sacramento, Sacramento County, California. Its mission is to train pilots and act as support for the Strategic Air Command. This effort includes the maintenance of aircraft and other machinery.

A records search of base operations has located a disposal site in the Air Command and Warning (AC&W) area of the base. The site is currently occupied by the Strategic Air Command Security Police Headquarters. The Air Force has determined that spent trichloroethylene (TCE) was disposed of into a pit on the site from about 1958 to 1966. A well near the site was used for drinking water until October 1979, when it was shut down due to TCE contamination. The well now provides water for fire protection.

Mather Air Force Base is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Air Force has completed Phase I (records search). Phase II (hydrogeological survey) is underway.

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

MCCLELLAN AIR FORCE BASE (GROUND WATER CONTAMINATION) Sacramento, California

McClellan Air Force Base occupies about 2,600 acres and is located approximately 8 miles northeast of Sacramento, Sacramento County, California. The base uses organic solvents for the maintenance, repair, and modification of aircraft. The Air Force has identified 46 past disposal areas covering an area of 56 acres within the base. Based upon disposal practices, geography, and potential threat, these areas are being considered as one site. The areas include several sludge disposal pits where dewatered industrial sludge containing trichloroethylene (TCE), 1.1,1-trichloroethane, and 1,1-dichloroethylene was disposed of during the 1960s and early 1970s. These solvents have been detected in monitoring wells and in public and private wells to the west of McClellan. Since 1979, 12 off-base wells, including a municipal well, have closed due to TCE contamination. The municipal well was part of a blended system that served about 23,000 people. Where the levels of contaminants have exceeded the California Department of Health Services action levels, the Air Force is providing alternative water sources to residents.

A Ground Water Task Force, consisting of the Air Force, local, State, and Federal agencies, and public representatives, is working to identify the extent of contamination and determine the remedial measures necessary to clean up the sources on the base.

McClellan Air Force Rase is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Air Force has completed Phase I (records search) and Phase II (hydrogeological investigation).

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

MONOLITHIC MEMORIES, INC. Sunnyvale, California

Monolithic Memories, Inc., manufactures integrated circuits at a plant in Sunnyvale, California. The facility occupies about 20 acres and is surrounded by residential, industrial, and business areas.

Monitoring wells on the site are contaminated with xylene, chloroform, and trichloroethylene, according to analyses conducted by a consultant to the company. Contamination is believed to have resulted from leaking underground storage tanks. About 300,000 people within 3 miles of the site depend on ground water as a source of drinking water.

Monolithic Memories has stopped using the underground tanks and is presently working with the Regional Water Quality Control Board to characterize the extent of ground water contamination.

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

MONTROSE CHEMICAL CORP. Torrance, California

Montrose Chemical Corp. manufactured the pesticide DDT on a 17-acre site in Torrance, Los Angeles County, California, from 1947 until 1982. The site is located in a light industrial/residential area. About 3,000 people live or work within 0.25 miles of the site.

The company's operations included formulation, grinding, packaging, and distribution of the pesticide. According to analyses conducted by EPA, Montrose, and various State and local agencies, on- and off-site soils and surface water are contaminated with DDT. The major transport mechanisms identified are storm water run-off and aerial emissions.

On May 6, 1983, EPA issued an Administrative Order under CERCLA Section 106 requiring Montrose Chemical to cease all discharges of DDT and to initiate a study to determine the nature and extent of contamination. To date, most of the requirements of the order have been undertaken. In addition, the final work plan for the remedial investigation/ feasibility study is being prepared. This second phase of investigation will assess all areas of contamination, both on- and off-site, and the possible impact on public health and the environment. This project is proceeding with the participation of Montrose and various State and local agencies.

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

> NATIONAL SEMICONDUCTOR CORP. Santa Clara, California

National Semiconductor Corp. manufactures electronic equipment at a plant in Santa Clara, California. The facility occupies about 50 acres and is surrounded by residential, industrial, and business areas.

Monitoring wells on the site are contaminated with vinyl chloride, trichloroethylene, and 1,1-dichloroethylene, according to analyses conducted by a consultant to National Semiconductor Corp. Contamination is believed to have resulted from leaking underground storage tanks. The same contaminants have been detected in monitoring wells off the facility. About 300,000 people within 3 miles of the site depend on ground water as a source of drinking water.

National Semiconductor has taken the leaking tanks out of service and is working with the Regional Water Quality Control Board to determine the extent of ground water contamination.

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

NORTON AIR FORCE BASE San Bernardino, California

Norton Air Force Base covers approximately 2,036 acres near the City of San Bernardino, San Bernardino County, California. One of the base's activities is the maintenance of aircraft and engines. In addition, Norton formerly had the responsibility for providing maintenance and logistics for liquid-fuel intercontinental ballistic missiles.

Industrial solvents have been used extensively on the base. Unknown quantities of spent solvents were disposed of in several landfills on the base. A well on the base has been contaminated with trichloroethylene. The water is used by approximately 11,000 people who live and/or work on the base.

Norton Air Force Base is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Air Force has completed Phase I (records search). Phase II (hydrogeological investigation) is underway.

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

OPERATING INDUSTRIES, INC., LANDFILL Monterey Park, California

Operating Industries, Inc., formerly operated a 190-acre landfill in the City of Monterey Park, Los Angeles County, California. From 1948 to 1983, the company disposed of hazardous liquid wastes on a 32-acre portion of the site. Leachate generated by the landfill contains vinyl chloride, chloroform, heavy metals, and other contaminants, according to analyses conducted by the California Department of Health Services (CDHS) and the South Coast Air Quality Management District (SCAOMD). Up to 19 parts per billion of airborne vinyl chloride have been detected at and around the landfill, which is adjacent to a housing development.

The company has submitted a plan for closing the landfill, but CDHS, in conjunction with other State agencies and EPA, determined that the plan had numerous deficiencies, most notably the failure to develop an adequate plan for monitoring ground water and for collecting and disposing of leachate. Negotiations concerning the plan are underway between CDHS and the company.

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

SCAOMD and CDHS have taken enforcement actions against the facility.

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

PRECISION MONOLITHIC, INC. Santa Clara, California

Precision Monolithic, Inc., manufactures linear integrated circuits at a plant in Santa Clara, California. The facility occupies 0.4 acres and is surrounded by residential and industrial areas.

Monitoring wells on the site are contaminated with 1,1,1-trichloroethane, trichloroethylene, and 1,1-dichloroethylene, according to analyses conducted by a consultant to Precision Monolithic. Contamination is believed to have resulted from leaking tanks. About 88,000 people within 3 miles of the site depend on ground water as a source of drinking water. The company is currently working with the Regional Water Quality Control Board to determine the 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.

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

RAYTHEON CORP. Mountain View. California

Raytheon Corp. manufacturers semiconductor products at a plant in Mountain View, 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 within 3 miles of the site depend on ground water 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 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.

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

SACRAMENTO ARMY DEPOT Sacramento, California

The Sacramento Army Depot (SAAD) occupies 485 acres within the city limits of Sacramento, Sacramento County, California, approximately 7 miles to the southeast of the Sacramento business district. Morrison Creek enters the SAAD eastern boundary and parallels the depot perimeter to the south and discharges on the western boundary.

SAAD is a supply depot primarily responsible for the receipt, storage, issue, maintenance, and disposal of various electronic materials. The primary sources of contamination at SAAD derive from metal-plating operations and their associated waste waters and solid wastes. Generally, these wastes were discharged to unlined sewage lagoons or burned and/or buried on the facility.

Ground water on the site contains trichloroethylene and some metals above background levels. The State has detected trichloroethylene above background levels in off-base wells located downgradient of the sewage lagoons and burning pits. The Army has detected metals above background in sediments in Morrison Creek immediately downstream of SAAD. The Regional Water Control Board and SAAD have been discussing additional sampling and monitoring of ground water and further investigations to define contaminated areas.

SAAD is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous constituents from these sites. The Army has completed Phase I (records search) and Phase II (preliminary survey).

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

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 (SFVB), 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

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 (SFVB), 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

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 (SFVB), 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

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 (SFVB), 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 government agenices. 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")

SHARPE ARMY DEPOT Lathrop, California

The Sharpe Army Depot covers 724 acres in a primarily rural area of San Joaquin County in north central California, approximately 60 miles east of San Francisco, 2 miles east of the San Joaquin River, and 1.5 miles northeast of Lathrop.

The site is a former U.S. Army maintenance facility. Wastes produced on-site were disposed of in two discrete areas: the South Balloon area and Burning Pits. The two areas cover about 0.5 square miles. These wastes included sludge containing phenols and polychlorinated hydrocarbons (trans-dichloroethylene, trichloroethylene, carbon tetrachloride), and used paints and solvents. The total amounts and types are unknown. The wastes have contaminated both soil and ground water, but not surface water to date. All maintenance activities have ceased, and the waste areas are no longer used.

The site is located in the large plain on the valley floor, which carries several aquifers, at least one artesian. Most of the surrounding land is used for agriculture, primarily for raising row crops.

The depot is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contamination from these sites. The Army has completed Phase I (records search) and Phase II (preliminary survey).

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

SIGNETICS, INC. Sunnyvale, California

Signetics, Inc., manufactures electronic components at a plant in Sunnyvale, California. The facility occupies about 20 acres and is surrounded by residential, industrial, and business areas.

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

Signetics removed the leaking tanks and excavated contaminated soil from the facility. The company is working with the Regional Water Quality Control Board to determine the extent of ground water contamination. 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.

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

SOUTHERN PACIFIC TRANSPORTATION CO. Roseville, California

Southern Pacific Transportation Co. operates a train yard and locomotive service facility on a 640-acre site in Roseville, Placer County, California. The site is located to the northeast of Sacramento, a major metropolitan area.

The cleaning operation at the facility requiring a variety of industrial solvents. Waste streams from these operations were discharged into a number of locations on the site. Five waste ponds and eight other locations that received waste discharges have been identified. The eight locations are no longer used. All waste streams are now routed to a central collection system and periodically removed to a hazardous waste landfill.

According to investigations conducted by Sourthern Pacific, soil and ground water, both on- and off-site, are contaminated with heavy metals and organic solvents. About 10 domestic wells supply drinking water to about 38 people living within 3 miles of the site. In addition, water from a large-volume municipal well, located within 3,000 feet of the facility, is blended into a water system serving about 34,000 people.

EPA has started an enforcement action against the company under Section 3008 of the Resource Conservation and Recovery Act. The California Regional Water Quality Control Board has also taken an enforcement action against the company.

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

TELEDYNE SEMICONDUCTOR Mountain View, California

Teledyne Semiconductor has manufactured semiconductors on a 1-acre site in Mountain View, California, since 1962. In December 1982, Teledyne reported to the Regional Water Quality Control Board that soil and ground water near an underground solvent storage tank were contaminated with solvents, including trichloroethylene. An investigation in June 1984 revealed that the contaminants have migrated to the north and have affected approximately 40 private domestic wells. Local agencies and the company have provided alternative sources of drinking water for the affected residences. About 270,000 people within 3 miles of the site depend on ground water as a source of drinking water.

The company is working with the Regional Water Quality Control Board to determine the extent of the contamination and to develop interim hydraulic controls to prevent further migration of the contaminants.

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.

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

THOMPSON-HAYWARD CHEMICAL CO. Fresno, California

Thompson-Hayward Chemical 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 some of that time, on-site landfills were used for disposal of empty containers, facility trash, and wastes which included clay used to clean formulating equipment.

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 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 undertaken sampling to characterize soil contamination, monitor ground water, and characterize the hydrology beneath the site.

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

VAN WATERS & ROGERS, INC. San Jose, California

Van Waters & Rogers, Inc., distributes solvents at a plant in San Jose, California. The facility occupies about 13 acres and is surrounded by residential, industrial, and business areas.

Monitoring wells on the site are contaminated with acetone, chloroform, toluene, trichloroethylene, and 1,1-dichloroethylene, according to analyses conducted by a consultant to Van Waters & Rogers. Contamination is believed to have resulted from localized spills. About 220,000 people within 3 miles of the site depend on ground water as a source of drinking water.

Van Waters & Rogers is working with the Regional Water Quality Control Board to determine the extent of 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.

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

WESTINGHOUSE ELECTRIC CORP. (SUNNYVALE PLANT)
Sunnyvale, California

Westinghouse Electric Corp. formerly manufactured electrical transformers at a plant in Sunnyvale, 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. About 300,000 people within 3 miles of the site depend on ground water as a source of drinking water.

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

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

ZOECON CORP./RHONE-POULENC, INC. East Palo Alto, California

The Zoecon Corp./Rhone-Poulenc, Inc., Site covers about 0.1 acres in East Palo Alto, California. It is surrounded by residential and industrial areas.

Rhone-Poulenc, Inc., the previous owner, manufactured pesticides containing arsenic at the plant. Zoecon Corp., which purchased the site in 1972, produces agricultural chemicals, but no contamination has thus far been traced to its operations.

Monitoring wells on the site are contaminated with arsenic and other metals such as lead, cadmium, mercury, and selenium, according to analyses conducted by a consultant to Rhone-Poulenc. Contamination is believed to have resulted from leaking underground storage tanks. About 58,000 people within 3 miles of the site depend on ground water as a source of drinking water.

Rhone-Poulenc is working with the Regional Water Quality Control Board to determine the extent of ground water contamination. The board issued a Clean-up and Abatement Order to the company in December 1983.

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.

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

EAGLE MINE Minturn/Redcliff, Colorado

The Eagle Mine, which was owned by the New Jersey Zinc Co., covers 110 acres in Eagle County, Colorado, between the towns of Minturn and Redcliff. About 1,300 people live within 3 miles of the mine.

The company began purchasing mines in the area in 1912 and immediately began production. Zinc mining and milling operations ceased on Dec. 30, 1977. Silver mining has continued intermittently since January 1978. Presently, the Eagle Mine is owned and operated by Miller Enterprises.

Two 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 remain in the disposal areas.

EPA and State files document several instances where the mine violated its permit under the National Pollutant Discharge Elimination System. The violations occurred at the outfall from the new tailings pond to Cross Creek. The guidelines for acidity, zinc, iron, and total suspended solids in surface water were exceeded.

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 power was shut-off to dewatering pumps.

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

ROCKY FLATS PLANT (USDOE) Golden, Colorado

The Rocky Flats Plant began producing components for nuclear weapons in 1951 on a site of about 2,000 acres in Jefferson County, near Golden, Colorado. A buffer zone was acquired in 1974, bringing the total to 6,550 acres. Major operations at the plant, which is owned by the U.S. Department of Energy (USDOE), include fabrication and assembly of plutonium, beryllium, and uranium, recovery of plutonium, and separation of and research on americium. Dow Chemical Co. operated the plant from inception until June 30, 1975, when Rockwell International Corp. assumed operation.

Plutonium and tritium contaminate air and surface water. USDOE has completed some remedial work such as capping and removing plutonium-contaminated soils and is improving liquid waste treatment systems to reduce discharge of liquid effluents.

Approximately 80,000 people live within 3 miles of the facility.

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

ROCKY MOUNTAIN ARSENAL Adams County, Colorado

The Rocky Mountain Arsenal (RMA) is located about 10 miles northeast of downtown Denver, in Adams County, Colorado. It covers 29 square miles. RMA has been used since 1942 to manufacture and demilitarize mustard gas and chemical munitions. From 1952 until 1982, Shell Chemical Co. used the site to manufacture pesticides and herbicides.

The Army has identified 165 "possibly polluted" areas on RMA. Contamination from some of these areas has migrated and continues to migrate off RMA, principally via ground water. The contaminated area covers about 4 square miles.

The Army has constructed two systems along the downgradient borders of RMA to pump out contaminated ground water, treat it with activated carbon to remove organic contaminants, and reinject the treated ground water. A third system is under construction. The Army is also developing alternatives for controlling or eliminating the source of contamination on RMA. These activities are part of the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. To date, the Army has spent more than \$25 million on studies and control actions at RMA.

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

SMUGGLER MOUNTAIN Aspen, Colorado

The Smuggler Mountain Site covers approximately 75 acres in and adjacent to 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 the exposure to 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, 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; three wells contained cadmium over the maximum level specified by the Safe Drinking Water Act. 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.

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

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 its confluence with the Delores 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, 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. Union Carbide plans to completely shut down and reclaim the entire facility.

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.



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

DOVER AIR FORCE BASE Dover, Delaware

Dover Air Force Base has been in operation in Dover, Kent County, Delaware, since 1942. It currently is the base of operation for the 436th Military Airlift Wing. The base's operations generated numerous wastes, including paints, solvents, and oil. These wastes, some in drums, were disposed of in various on-base locations totaling 44 acres. While some of the buried wastes were in drums, other wastes were disposed of through the storm drainage system.

Ground water on the site is contaminated with arsenic and other metals, and an on-site stream is contaminated with trichloroethylene.

The base well system serves about 10,000 people and is routinely monitored by the Air Force. Currently, it is free of the contaminants found in the ground water.

Dover Air Force Base is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Air Force has completed Phase I (record search). Phase II (hydrogeological investigation) is underway.

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

CITY INDUSTRIES, INC. Orlando, Florida

The City Industries, Inc., Site covers 1 acre in Orlando, Orange County, Florida. From 1971 to mid-August 1983, the company operated a recycling and transferring facility on the site, handling a wide variety of chlorinated and nonchlorinated organic solvents, paint/varnish wastes, acid and alkaline plating waste, PCBs, and waste ink. According to tests conducted by EPA, ground water, soils, and sediments are contaminated with heavy metals and volatile organic compounds.

The company abandoned the operation in mid-1983, leaving approximately 1,200 drums and 12,000 gallons of unknown liquids and sludges in large holding tanks. In August 1983, the State funded and oversaw a cleanup of the site by a contractor. In the cleanup, 41 tons of drums were crushed and removed and 65 truck and tanker loads of contaminants were disposed of properly. The cost was \$950,000.

In February 1984, EPA issued an Administrative Order requiring City Industries to clean sludge from holding tanks, remove contaminated soils, and treat contaminated ground water. The order was not complied with. In March through May 1984, using about \$500,000 of CERICA emergency funds, EPA emptied, cut open, and cleaned the holding tanks, thus removing the threat of explosion and further soil contamination. EPA's emergency team and its contractors used an incineration device to treat about 1,700 tons of contaminated soil. The treated soil remains on the site.

The State has identified more than 120 potentially responsible waste generators. In February of 1984, the State filed a civil complaint. On April 24, 1984, the State held a meeting with approximately 75 generators.

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

DAVIDSON LUMBER CO. South Miami, Florida

Davidson Lumber Co. treated wood on a site in South Miami, Florida, from 1942 until it was abandoned in December 1981. During the wood-treating process, preservatives were allowed to drip onto the ground. The wastes generated included creosote, chromated zinc chloride, and chromated copper arsenic. On May 10, 1982, Dade County Environmental Resource Management sampled soil and sludges on the site. The data indicated the presence of chromium, arsenic, and phenols.

This site overlies the Biscayne Aquifer, which has been designated by \mbox{EPA} as the sole source of water for the area.

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

DUBOSE OIL PRODUCTS CO. Cantonment, Florida

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 State's request, EPA took water and sediment samples in April 1982. Analysis of the samples indicated the presence of elevated concentrations of numerous organic compounds. The company ceased operations in the spring of 1982.

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 and is currently discussing immediate and long-term removal, treatment, and monitoring of the site with the owner.

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

MONTCO RESEARCH PRODUCTS, INC. Hollister, Florida

Montco Research Products, Inc., manufactures chemical intermediates and purifies organic compounds for commercial use on a 10-acre site in Hollister, Putnam County, Florida. The processes used generate discharge cooling water and distillation residues. The State has confirmed that both soil and ground water at the site are contaminated with lead, arsenic, cyanide, chromium, benzene, and several other organic chemicals.

The State and the site owner are awaiting a civil court ruling on access. The State is conducting further negotiations outside of court.

EPA has taken administrative enforcement action against the company for failing to respond promptly to a request for information under Section 3007 of the Resource Conservation and Recovery Act.

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

The Peak Oil Co./Bay Drum Co. Site covers 15 acres east of Tampa, Hillsborough County, Florida. Peak Oil re-refines oil and disposes of wastes in an acid sludge pond measuring 82 feet x 100 feet. Bay Drum Co., which recently ceased operations, recycled drums and disposed of wash water in a holding pond.

Surface water, ground water, sediment, 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.

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

PRATT & WHITNEY AIRCRAFT/UNITED TECHNOLOGIES CORP.
West palm Beach, Florida

The Pratt & Whitney Aircraft/United Technologies Corp. Site comprises about 1,000 acres in West Palm Beach in north central Palm Beach County, Florida. Jet engines have been manufactured and tested on the site since 1957. Pratt & Whitney is a privately owned Canadian-b ased operation and a division of United Technologies Corp.

On site is a sanitary landfill where solvents were disposed, a solvent storage tank that leaked approximately 2,000 gallons of trichloroethane through an underground valve, a solvent distilling area, and jet fuel heaters which contained PCBs until the mid-1970s.

Ground water and surface water are contaminated with PCBs and organic solvents, according to tests conducted by Pratt & Whittney. The company has installed a forced aeration system to remove volatile organic chemicals from its well fields and is involved in discussion with the State regarding PCBs and landfill remedial actions.

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

OLIN CORP. (AREAS 1,2, & 4) Augusta, Georgia

Conditions at listing (September 1983): Olin Corp.'s plant in Augusta, Richmond County, Georgia, manufactures chlorine and caustic soda, generating a mercurycontaminated brine sludge in the process. Since the early 1970s, Olin has disposed of the sludge in two unlined disposal pits and in a lined surface impoundment (Areas 1,2,and 4). The liner in the impoundment may have been damaged by dumping of construction rubble. About 32,000 tons of mercury-contaminated wastes have been disposed of in the three areas. All three areas, plus a retort ash and filter cake dump, occupy about 5 acres on the southern portion of the plant property. In April and July 1981, the company's on-site monitoring wells near the disposal facilities detected mercury in ground water.

Within 3 miles of the disposal areas are 11 Richmond County drinking water wells. More than 10,000 people use ground water in this area. Large areas of fresh water wetlands are within 1.5 miles of the Olin plant.

Status (June 1984): A State Consent Order executed in January 1984, requires Clin to cease waste disposal in the two pits and to retain a consultant to fully define the extent of contamination. The company submitted the resulting Groundwater Assessment Program Report to the State, where it is currently under review.

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.

Response category / Cleanup status code, October 1984: S

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

ROBINS AIR FORCE BASE Houston County, Georgia

Robins Air Force Base covers 8,855 acres approximately 18 miles south of Macon in Houston County in middle Georgia. It includes a 1,200-acre wetland.

The base has 13 areas that contain hazardous waste from past disposal activities. Two areas comprise the site in question: Landfill No. 4, where 1,500 drums are stored, and an adjacent sludge lagoon, which contains phenols and metal plating wastes. The two areas cover 67 acres.

The base is located in the Coastal Plain of Georgia and is underlain by units of the highly permeable Cretaceous Aquifer of Georgia. The water supplies for the base and the City of Warner are derived from this aquifer. About 10,000 people are potentially affected. Trichloroethylene and tetrachloroethylene have been detected in ground water near the site, and phenols in surface water on the site.

Robins Air Force Base is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Air Force has completed Phase I (records search). Phase II (preliminary survey) is underway.

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

KUNIA WELLS I County of Honolulu, Island of Oahu, Hawaii

The Kunia Wells I Site consists of four drinking water wells that are owned and operated by the City and County of Honolulu. The wells are located on the Schofield Plateau in the County of Honolulu, Island of Oahu, Hawaii. They are contaminated with trichloropropane (TCP), according to analyses conducted by the Hawaii Department of Health and other government agencies. The Kunia Wells I are part of a distribution system which serves 21,000 people.

There are several well sites with similar contamination problems located in the Schofield Plateau/Ewa Plain area of Oahu. The City and County of Honolulu Board of Water Supply has conducted pilot tests on methods for decontaminating the water in the area and has had success in removing dibromochloropropane and TCP with granulated activated carbon and with aeration towers.

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

KUNIA WELLS II County of Honolulu, Island of Oahu, Hawaii

The Kunia Wells II Site consists of two drinking water wells that are owned and operated by the City and County of Honolulu. The wells are located on the Schofield Plateau in the County of Honolulu, Island of Oahu, Hawaii. They are contaminated with dibromochloropropane (DBCP) and trichloropropane (TCP), according to analyses conducted by the Hawaii Department of Health and other government agencies. They have been closed since July 1983. The wells are part of the Kunia distribution system that provides drinking water to about 13,700 people.

There are several well sites with similar contamination problems located in the Schofield Plateau/Ewa Plain area of Oahu. The City and County of Honolulu Board of Water Supply has conducted pilot tests on methods for decontaminating the water in the area and has had success in removing DBCP and TCP with granulated activated carbon and with aeration towers.

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

MILILANI WELLS
County of Honolulu, Island of Oahu, Hawaii

The Mililani Wells Site consists of six drinking water wells that are owned and operated by the City and County of Honolulu. The wells are located on the lower Schofield Plateau in the County of Honolulu, Island of Oahu, Hawaii. They are contaminated with dibromochloropropane (DBCP) and trichloropropane (TCP), according to tests conducted by the Hawaii Department of Health and other government agencies. Three of the wells are presently not being used. The Mililani wells normally supply water to 19,500 people through a closed distribution system.

There are several well sites with similar contamination problems located in the Schofield Plateau/Ewa Plain area of Oahu. The City and County of Honolulu Board of Water Supply has conducted pilot tests on methods for decontaminating the water in the area and has had success in removing DBCP and TCP with granulated activated carbon and with aeration towers.

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

WAIAWA SHAFT County of Honolulu, Island of Oahu, Hawaii

The Waiawa Shaft is located on the Ewa Plain in the County of Honolulu, Island of Oahu, Hawaii, and is owned and operated by the U.S. Navy. The well is part of a closed distribution system which provides drinking water to 64,000 people in the area of McGrew Point, Pearl Harbor, and part of Hickam Air Force Base. The well is contaminated with dibromochloropropane (DBCP) and trichloropropane (TCP), according to analyses conducted by the U.S. Navy and other government agencies.

There are several well sites with similar contamination problems located in the Schofield Plateau/Ewa Plain area of Oahu. The City and County of Honolulu Board of Water Supply has conducted pilot tests on methods for decontaminating the water in the area and has had success in removing DBCP and TCP with granulated activated carbon and with aeration towers. The Navy is currently reviewing alternative treatment methods for DBCP removal in a study designed to complement the Board of Water Supply effort.

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

WAIPAHU WELLS County of Honolulu, Island of Oahu, Hawaii

The Waipahu Wells Site consists of four drinking water wells that are owned and operated by the City and County of Honolulu. The wells are located on the Ewa Plain in the County of Honolulu, Island of Oahu, Hawaii. They are contaminated with ethylene dibromide (EDB) and trichloropropane (TCP), according to analyses conducted by the Hawaii Department of Health and other government agencies. The Waipahu Wells are part of a distribution system which serves 13,700 people in Waipahu, Ewa, and Waianae.

There are several well sites with similar contamination problems located in the Schofield Plateau/Ewa Plain area of Oahu. The City and County of Honolulu Board of Water Supply has conducted pilot tests on methods for decontaminating the water in the area and has had success in removing dibromochloropropane and TCP with granulated activated carbon and with aeration towers. However, because of continuing contamination, the people served by the Waipahu Wells are being provided with an alternative supply of drinking water.

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

WAIPIO HEIGHTS WELLS II County of Honolulu, Island of Oahu, Hawaii

The Waipio Heights Wells II Site consists of two drinking water wells that are owned and operated by the City and County of Honolulu. The wells are located in Waipio on the lower Schofield Plateau in the County of Honolulu, Island of Oahu, Hawaii. One well is contaminated with trichloropropane (TCP), according to analyses conducted by the Hawaii Department of Health and other government agencies. The other well has been shut down for repairs and has not been tested for contamination. The wells are part of a distribution system which serves 3,400 people in the Waipio Heights area.

There are several well sites with similar contamination problems located in the Schofield Plateau/Ewa Plain area of Oahu. The City and County of Honolulu Board of Water Supply has conducted pilot tests on methods for decontaminating the water in the area and has had success in removing dibromochloropropane and TCP with granulated activated carbon and with aeration towers.

JOLIET ARMY AMMUNITION PLANT (MANUFACTURING AREA) Joliet, Illinois

The Joliet Army Ammunition Plant (JAAP) is a munitions installation located in Joliet near Chicago, Illinois. The manufacturing area (Mfg Area) occupies about 9,000 acres of JAAP west of Illinois State Highway 53. More than 4 billion pounds of explosives were produced in the area during its operating life from the early 1940s to 1977. Since 1977, the area has been maintained in nonoperating standby condition by the contractor/operator.

The Army has determined that "extremely large" quantities of waste products and waste waters were generated during the operating life of the Mfg Area. Contaminated process waters and chemical spills were routinely discharged to man-made drainage ditches, where they flowed without treatment into Jackson Creek and Grant Creek. Unlined piles of incinerator ash and a leak in the liner of a waste water lagoon have also contributed to contamination of ground water and surface water.

JAAP is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search) and Phase II (preliminary survey). In the course of studies, the Army has documented ground water and surface water releases of munitions-related contaminants attributable to Mfg area activities.

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

KERR-MCGEE (KRESS CREEK/WEST BRANCH OF DUPAGE RIVER)
DuPage County, Illinois

The Kerr-McGee (Kress Creek/West Branch of DuPage River) Site includes about 1.5 miles of Kress Creek and 0.5 of a miles of the West Branch of the DuPage River in DuPage County, Illinois. About 20,000 people live within 3 miles of the site.

In 1931, Lindsay Light & Chemical Co. established a mill in West Chicago for the extraction of thorium and nonradioactive elements from monazite and other ores. Later, the site was used for the manufacture of gaslight mantles (which contain thorium), mesothorium, and, during World War II, hydrofluoric acid. Ownership of the facility changed from Lindsay to American Potash & Chemical in 1958 and to Kerr-McGee Chemical Corp. in 1967. Operations at the site continued until 1973, when Kerr-McGee, the current owner, closed the plant.

Over the years, a portion of the wastes from the plant was discharged into Kress Creek, a tributary of the DuPage River, either via a storm sewer or drainage ditch. Radiation contamination, which is found to a depth of several feet along the stream, decreases with distance from the creek. Many of the highest levels are found near the storm sewer outfall. Water in the area is obtained from municipal or private wells.

The U.S. Nuclear Regulatory Commission issued an Order to Show Cause, dated March 21, 1984, requiring Kerr-McGee Chemical Corp. to either prepare and implement a cleanup plan, or show it should not be required to do so.

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

KERR-MCGEE (REED-KEPPLER PARK) West Chicago, Illinois

The Kerr-McGee (Reed-Keppler Park) Site is in Reed-Keppler Park in West Chicago, Illinois. About 15,000 people live within 3 miles of the site.

In 1931, Lindsay Light & Chemical Co. established a mill in West Chicago for the extraction of thorium and nonradioactive elements from monazite and other ores. Later, the site was used for the manufacture of gaslight mantles (which contain thorium), mesothorium, and, during World War II, hydrofluoric acid. Ownership of the facility changed from Lindsay to American Potash & Chemical in 1958 and to Kerr-McGee Chemical Corp. in 1967. Operations at the site continued until 1973 when Kerr-McGee, the current owner, closed the plant.

Radioactive materials were landfilled at an Il-acre site which had apparently been a gravel quarry. The U.S. Nuclear Regulatory Commission's contractor located contaminated areas within the landfill and around and under tennis courts adjacent to it. Contaminated material around (not under) the tennis courts was moved onto an area of surface contamination, which was then fenced and posted.

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

KERR-McGEE (RESIDENTIAL AREAS)
West Chicago/DuPage County, Illinois

The Kerr-McGee (Residential Areas) Site is in West Chicago and DuPage County, Illinois. The site covers the general area of elevated radiation levels adjacent to the Kerr-McGee Chemical Corp. facility on the east (about 30 acres), as well as other adjacent areas and isolated spots of elevated radiation levels. About 15,000 people live within 3 miles of the site.

In 1931, Lindsay Light & Chemical Co. established a mill in West Chicago for the extraction of thorium and nonradioactive elements from monazite and other ores. Later, the site was used for the manufacture of gaslight mantles (which contain thorium), mesothorium, and, during World War II, hydrofluoric acid. Ownership of the facility changed from Lindsay to American Potash & Chemical in 1958 and to Kerr-McGee Chemical Corp. in 1967. Operations at the site continued until 1973 when Kerr-McGee, the current owner, closed the plant.

In 1978, the U.S. Nuclear Regulatory Commission's contractor located 75 spots of elevated radiation levels. Since that time, the number has grown to around 87. Overlying many of these spots adjacent to the Kerr-McGee facility is an area of generally elevated radiation levels. Although the general area of contamination may be due, in part, to long-term emissions from the facility, the primary source of contamination is believed to be the result of specific incidents such as spills or use of contaminated materials as fill.

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

KERR-McGEE (SEWAGE TREATMENT PLANT)
West Chicago, Illinois

The Kerr-McGee (Sewage Treatment Plant) Site covers about 23 acres in West Chicago, Illinois. About 15,000 people live within 3 miles of the site.

In 1931, Lindsay Light & Chemical Co. established a mill in West Chicago for the extraction of thorium and nonradioactive elements from monazite and other ores. Later, the site was used for the manufacture of gaslight mantles (which contain thorium), mesothorium, and, during World War II, hydrofluoric acid. Ownership of the facility changed from Lindsay to American Potash & Chemical in 1958 and to Kerr-McGee Chemical Corp. in 1967. Operations at the site continued until 1973, when Kerr-McGee, the current owner, closed the plant.

The original sewage treatment plant was built in 1919 and included two septic tanks. Over the years, the plant changed, and the tanks were filled with radioactive materials. In addition, fill, including radioactive materials, was placed in other areas of the site. While modernizing the plant, the city has located many surface and subsurface areas of contamination. To allow the modernization to continue, any areas that obstruct construction are expected to be excavated and the material placed in a designed storage area on 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

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.

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

PAGEL'S PIT Rockford, Illinois

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 the late 1960s. The pit covers approximately 60 acres and is lined with "blacktop," which has a coal tar sealer.

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

A shallow, factured bedrock aquifer near the site is a source of drinking water for about 1,600 people. 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 and the 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 drill new wells and/or use bottled water supplied by Winnebago Reclamation.

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

PETERSEN SAND & GRAVEL Libertyville, Illinois

Petersen Sand & Gravel operated a 1,000-acre quarry in Libertyville, 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 ground water that is used by about 15,000 nearby residents as a source of drinking water.

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

SANGAMO ELECTRIC DUMP/CRAB ORCHARD NATIONAL WILDLIFE REFUGE (USDOI) Carterville, Illinois

The Sangamo Electric Dump/Crab Orchard National Wildlife Refuge Site covers 2 to 3 acres in Carterville, Illinois. The U.S. Department of Interior (USDOI) owns the property. From 1946 to the mid-1960s, Sangamo buried by-products from the manufacturing of electrical components and capacitors in a landfill that is close to and drains into Crab Orchard Lake. Soil samples from the edge of the landfill contain PCBs in the range of 12,000 parts per million (ppm) and lead in the range of 7,000 ppm, according to analyses conducted by the U.S. Fish and Wildlife Service. Soil samples collected between the fill and the lake showed lower concentrations. These contaminants are migrating via surface run-off into Crab Orchard Lake, from which the City of Marion (population 1,400) takes water during periods of peak demand.

At the request of EPA, USDOI is planning a remedial investigation/feasibility study to determine the extent of the contamination and identify alternatives for remedial action.

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

SAVANNA ARMY DEPOT ACTIVITY Savanna, Illinois

The Savanna Army Depot Activity (SADA) is an Army munitions installation occupying more than 13,000 acres in Savanna, in north-western Illinois, on the banks of the Mississippi River. The facility has handled, processed, and stored munitions, explosives, and industrial chemicals since operations began in 1918. Renovation and loading of artillery shells and bombs began at SADA in the 1930s and has occurred intermittently since that time. Several areas of the facility have been used for the demolition and burning of obsolete ordnance.

The Army has detected munitions-related contaminants, primarily trinitrotoluene (TNT), in surface water and ground water on the base. The area of contaminated ground water encompasses about $18\ \mathrm{acres.}$

SADA is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search) and Phase II (preliminary survey). Phase III (assessment of remedial action alternatives) is scheduled to be completed in December 1984.

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

SHEFFIELD (U.S. ECOLOGY, INC.) Sheffield, Illinois

The U.S. Ecology, Inc., Landfill covers 45 acres in a strip-mined area in Sheffield, Illinois. The company, which was formerly known as Nuclear Engineering Co., began operating the site in the late 1960s. U.S. Ecology was purchased by Teledyne, Inc., in January 1981. The site closed in January 1983.

At one time, the site was the largest hazardous waste disposal site in Illinois. It accepted a wide variety of hazardous waste, including acids, bases, low-flash point organic solvents, pesticides, and sludges containing heavy metals. Monitoring wells in the shallow aquifer at the site are contaminated with arenes, aromatic hydrocarbons, ketones, aliphatic hydrocarbons, chlorinated hydrocarbons, ethers, and PCBs, according to tests conducted by the State Water Survey Division and the U.S. Geological Survey. An estimated 450 people within 3 miles of the site use the shallow aquifer as a source of drinking water.

 $\ensuremath{\mathtt{U.S.}}$ Ecology has submitted a plan for closing the site, but the State considers it incomplete.

FORT WAYNE REDUCTION DUMP Fort Wayne, Indiana

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 Riverhaven 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 within 3 miles of the site use ground water as a source of drinking water.

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

International Minerals & Chemicals Corp. (IMC) has owned a 20-acre site in Terre Haute, Virgo County, Indiana, since 1946. The Terre Haute East Plant, as it is known, manufactured lindane, an insecticide, from 1946 to 1963. IMC disposed of 500,000 cubic feet of lindane wastes in a surface impoundment and landfill on the site. The landfill was capped with clay in the late 1970s.

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

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

MIDCO II Gary, Indiana

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 bulk liquid and drum storage of waste and reclaimable materials and on-site 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.

In April 1984, using CERCLA emergency funds, EPA removed over 400 unburned drums containing chemicals and completely fenced the site. Several thousand drums, both burned and unburned, and several large tanks remain on-site. The site is locked and signs warning of chemical contamination have been posted.

The U.S. Department of Justice, on behalf of EPA, has brought a Federal civil action seeking injunctive relief against 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")

NEAL'S DUMP (SPENCER) Spencer, Indiana

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 within 3 miles of the site use well water. The nearest well is 750 feet from the site. There is the threat that contaminated run-off will drain from the site to the 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.

CHEMPLEX CO. Clinton/Camanche, Iowa

The Chemplex Co. facility is on the western edge of Clinton and Camanche, Iowa. The facility has manufactured high—and low—density polyethylene since 1968. Wastes generated by this facility include peroxides, mineral spirits, vinyl acetate, and various organic hazardous substances such as styrene, benzene, toluene, and polyaromatic hydro—carbons. These wastes were disposed in an unlined landfill on the site. The landfill has been covered and is no longer used. Wastewater containing some of these constituents was also stored in a lined impoundment on the site. During dredging of the sediments from the botton of the impoundment, the liner was ruptured, releasing hazardous substances to the environment. The total quantity of wastes disposed in the landfill is

Ground water downgradient of the landfill and the impoundment is contaminated with polyaromatic hydrocarbons and the other organic chemicals identified above, according to tests conducted by the company and its consultants. The company has recovered previously released hazardous substances and taken measures to prevent the release of additional hazardous substances. The company is conducting additional investigations to completely characterize releases from the landfill.

About 5,000 people within 3 miles of the site depend on ground water as a source of drinking water.

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

U.S. NAMEPLATE CO. Mount Vernon, Iowa

U.S. Nameplate Co. manufactures aluminum, brass, and stainless steel nameplates on a 7-acre site near Mount Vernon in Linn County, Iowa. Etching and plating are among the processes involved. Liquid wastes from these processes are acidic with high concentrations of chromium, fluoride, lead, and zinc.

Prior to 1979, U.S. Nameplate treated the wastes in septic tanks that discharged into a drainage field and a nearby creek. In 1979, the State received complaints about the discharge. In response, U.S. Nameplate constructed a waste treatment lagoon system and began operating it in November 1979. In 1982, based on high fluoride levels (137 milligrams/liter) detected in ground water, the State determined that the lagoon was leaking. EPA is taking a compliance action under the Resource Conservation and Recovery Act for present operations at the lagoon. The listing under CERCLA involves the septic tank and drainage field.

Mount Vernon (population 3,300) draws its water from two municipal wells less than 1.5 miles from the U.S. Nameplate plant.

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

VOGEL PAINT & WAX CO. Orange City, Iowa

Vogel Paint & Wax Co. used a 40-acre sand and gravel pit for disposal of its paint and varnish production wastes. The pit, which the company owns, is located in Orange City, Sioux County, Iowa.

From 1967 to 1979, this site 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 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 from this site, particularly volatile organics (toluene, xylene, and mineral spirits), in off-site monitoring wells. About 3,200 people within 3 miles of the site depend on ground water 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.

BIG RIVER SAND CO. Wichita, Kansas

The Big River Sand Co. Site covers 80 acres in northwest Wichita, Sedgwick County, Kansas. During the early 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.

Monitoring by the State in 1982 and 1984 detected solvents and heavy metals in nearby residential wells. A State court order was issued requiring the previous owner to remove the drums and transfer them to his own property adjacent to the site. After some 200 drums had been transferred, the State asked that the work cease because the workers lacked personal protective equipment. Later, the drums remaining on the site and their contents were either recycled or disposed of in a satisfactory manner. In August 1984, the original owner 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. Ground water remains contaminated. About 1,000 people within 3 miles of the site use ground water as a source of drinking water.

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

NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES Furley, Kansas

The National Industrial Environmental Services (NIES) Site covers 160 acres 10 miles northeast of Wichita and 3 miles south of the unincorporated community of Furley, in Sedgwick County, Kansas. Approximately 30 households are within a 9-square-mile rural agricultural area surrounding the site.

A hazardous waste landfill on the 80-acre north half of the site began operation in 1977, under a State permit. Six evaporation and treatment ponds were also in use. Wastes received at the facility included: liquid chromium, liquid cyanide, acids, bases, chlorinated and nonchlorinated solvents, sludges, and bulk solid wastes. In January 1982, the State closed the site when it discovered that ground water, surface water, and soil off-site were contaminated with toxic organic chemicals, including known carcinogens.

In May 1982, Chemical Waste Management, Inc., the current facility owner, submitted a hydrogeological report and remedial action plan to the State. The plan recommended digging drainage trenches, drilling an underground injection well for disposal of the liquid wastes, closure of treatment and evaporation ponds, capping of existing landfill areas, and construction of a new landfill. The drainage trench and new landfill have been constructed, and the old landfill areas have been capped. Ground water pumped from the trenches is being hauled to an off-site disposal facility. Monitoring wells are being sampled on a monthly basis.

In August 1984, the State issued an Administrative Order to the company 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

Strother Field Industrial Park covers roughly 2.3 square miles approximately 4 miles southwest of Winfield and 4 miles north of Arkansas City, in 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 varied 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, 1,1,1 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 Strother 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). Additional ground water monitoring is underway to determine the source and off—site migration of the contamination. The State is pumping the ground water.

About 2,300 people use ground water within 3 miles of the site as a source of drinking water.

KY Kentucky

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

MAXEY FLATS NUCLEAR DISPOSAL Hillsboro, Kentucky

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 radioactive materials. According to tests conducted by the State, tritium levels in air exceed background levels, and radioactive contaminants are present in ground water. Ground water is a source of drinking water in the area.

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

SMITH'S FARM Brooks, Kentucky

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. Near this permitted site is an abandoned 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.

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

LOUISIANA ARMY AMMUNITION PLANT Doyline, Louisiana

Louisiana Army Ammunition Plant is located in Doyline near Shreveport, Louisiana. The primary mission includes loading, assembling, and packing military ammunitions, and the manufacture of metal ammunition parts. The hazardous waste site consists of 16 1-acre pits in which trinitrotoluene (TNT), RDX, and other explosive waste materials settle out of treatment waters.

According to tests conducted by the Army, soil, surface water, and ground water are contaminated with TNT, dinitrotoluene, phenols, 4-DNT, tetryl, and cadmium. About 1,300 people within 3 miles of the site depend on ground water as a source of drinking water.

The plant is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search). Phase II (preliminary survey) is underway.

BRUNSWICK NAVAL AIR STATION Brunswick, Maine

The Brunswick Naval Air Station, in Brunswick, Sagadahoc County, Maine, encompasses 7 areas that were used in the past (beginning in 1942) for the storage or disposal of hazardous wastes. These seven areas are within a 2-mile radius and occupy a total of at least 15 acres. Of the seven areas, two were used for landfilling the station's household and office wastes. The other areas were used for disposal of acid, caustic, and asbestos wastes. Pesticides, solvents, and waste oils present on the site threaten ground water (including a nearby public well field), surface water, and adjacent wetlands. Asbestos is also present on the site.

The Brunswick Naval Air Station is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been cleaning up its hazardous waste sites. The Navy has identified the potential threats to human health or the environment caused by past practices at the seven disposal areas, and in 1984 will start a study to further identify the contaminants present at the site and determine their migration paths.

EPA intends to monitor future work at Brunswick and to provide technical assistance to the Navy if it is needed.

KANE & LOMBARD STREET DRUMS Baltimore, Maryland

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 the 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.

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

MID-ATLANTIC WOOD PRESERVERS, INC. Harmans, Maryland

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 in 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.

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

SOUTHERN MARYLAND WOOD TREATING Hollywood, Maryland

The Southern Maryland Wood Treating Site covers 25 acres in Hollywood, St. Mary's County, Maryland. The site, which is owned and operated by L.A. Clarke & Son, Inc., of Fredericksburg, Virginia, preserves wood with creosote. Creosote and such by-products as pentachlorophenol, benzene, lead, and diethylhexyl phthalate are disposed of in a landfill and surface impoundment on the site. The major cause of concern is contamination of ground water, surface water, and soil on the site.

About 300 people residing within 3 miles of the site depend on ground water as a source of drinking water.

As a result of an Administrative Order issued by the State, the company excavated and treated parts of the soil contamination.

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

HAVERHILL MUNICIPAL LANDFILL Haverhill, Massachusetts

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. Prior to June 1981, two of the three tracts were 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 is contaminated with volatile organic chemicals.

About 6,000 people within 3 miles of the site use ground water as a source of drinking water.

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

NORWOOD PCBS Norwood, Massachusetts

The Norwood PCBs Site is a privately—owned industrial site covering approximately 9 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. 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 CERCLA 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.

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

ROSE DISPOSAL PIT Lanesboro, Massachusetts

The Rose Disposal Pit covers 1.5 acres in Lanesboro, 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, Mass. 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. It will require 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.

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

SALEM ACRES Salem, Massachusetts

The Salem Acres Site consists of four unlined, uncovered disposal pits on 162 acres of land in the town of Salem, Essex County, Massachusetts. Wastes disposed of on-site include sludge, grit, and grease from a wastewater 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.

The privately owned disposal pits are 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. Approximately 2,500 people reside within 1 mile of the site.

The owner has erected a gate on the access road leading to the site.

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

SHPACK LANDFILL Norton/Attleboro, Massachusetts

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 since the 1940s until it was closed by court order. A survey by the Department of Energy found radioactive contaminants, primarily radium and uranium, in soil on the site. In many cases, the contamination extends to ground water. In addition, dichloroethylene, trichloroethylene, and tetrachloroethylene are present in ground water on the site.

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

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

About 30 residential wells in the Avenue "E" area in East Bay Township, Traverse City, Grand Traverse County, Michigan, are contaminated with benzene, toluene, methylethyl 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 may be contaminating the Avenue E wells.

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

E.1. DU PONT DE NEMOURS & CO., INC (MONTAGUE PLANT) Montague, Michigan

E.I. du Pont de Nemours, & Co., Inc., produces petrochemicals and handles many raw materials and products on a 1,325-acre site in Montague, Michigan. Problems at this site date to 1961, when the State found that a private well was contaminated with thiocyanite. Subsequently, Du Pont supplied water to a limited number of residents. The contamination apparently results from a waste pile on the site, as well as occasional spills during routine operations. Du Pont installed two interceptor wells that pump the contaminated water to a treatment plant. The extent of off-site contamination is unknown.

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

LACKS INDUSTRIES, INC. Grand Rapids, Michigan

Lacks Industries, Inc., operates a plating, die-casting, and painting facility for the automotive and appliance industries on a 40-acre site in Grand Rapids, Kent County, Michigan. Wastes were deposited in two unlined lagoons, each covering about 0.25 acres. Monitoring wells on the site are contaminated with heavy metals, according to the State. The major concern is potential contamination of private drinking water wells, although sampling in May and June of 1984 by Kent County showed no contamination. About 300 people (lower estimate) within 3 miles of the site use ground water as a source of drinking water.

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

LENAWEE DISPOSAL SERVICE, INC., LANDFILL Adrian, Michigan

The Lenawee Disposal Service, Inc., Landfill covers 105 acres in Adrian, Michigan. On July 18, 1983, the company received a license from the State to accept municipal wastes.

Ground water flows to the north and east toward the nearby Raisin River. In 1979, Theta Systems, Inc., which owned the site, constructed dikes on those sides of the landfill and a partial slurry wall that extends down into the layer of clay beneath the landfill. Leachate is collected and placed into one of two holdings ponds, then eventually reapplied to areas of the landfill. Before the dikes and slurry wall were installed, an unknown amount of leachate left the site, contaminating ground water and threatening to contaminate surface water in the area.

The site is now known as Laidlaw Waste Services. In 1979, Theta Systems, Inc., and the State entered into a Consent Agreement regarding further investigation of the site.

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

MICHIGAN DISPOSAL SERVICE (CORK STREET LANDFILL)
Kalamazoo, Michigan

Michigan Disposal Service's Cork Street Landfill covers approximately 64 acres in Kalamazoo, Kalamazoo County, Michigan. The city operated the site as a general refuse landfill from 1925 until 1968. Until the mid-1960s, a teepee-type incinerator was on the site. After closing the landfill for general refuse, the city operated it for inert material until 1981, when Michigan Disposal Service (formerly Dispos-O-Waste) bought the site. The company has applied to the State for a permit to operate a sanitary landfill. Monitoring wells on the site contain lead and arsenic above drinking water standards, according to tests conducted by the State. The City of Kalamazoo has three well fields within 3 miles of the site.

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

MOTOR WHEEL, INC. Lansing, Michigan

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 an agreement with the State.

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

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

NORTH BRONSON INDUSTRIAL AREA Bronson, Michigan

The North Bronson Industrial Area consists of five industries in north Bronson, 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 volatile organic compounds, according to analyses conducted by the State. $\,$

About 3,000 people within 3 miles of the site use ground water 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

Roto-Finish Co., Inc., operates a plant on a 7.5-acre site in Kalamazoo, Michigan. The plant produces equipment and materials to debur castings, mechanical parts, and similar objects. In its operations, Roto-Finish uses 4,4'-methylenebis(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 wells.

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

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 phenol), 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

Thermo-Chem, Inc., manufactures chemicals and disposes of liquid wastes in Muskegon, Muskegon County, Michigan. Until 1980, it reclaimed solvents such as trichloroethylene and methylene chloride. The facility also has reclaimed 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.

According to analyses conducted by the State, ground water is contaminated with methylene chloride, perchloroethylene, carbon tetrachloride, and 1,1,1-trichloroethane.

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

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

TORCH LAKE Houghton County, Michigan

Torch Lake is in Houghton County in the upper peninsula of Michigan. Copper mining companies dumped tailings into the lake from the 1890s to as recently as 1969. About 20 percent of the original lake volume has been filled, and the lake sediments are contaminated. 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.

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

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. This residence is now served by municipal water.

Operations of Southwest Ottawa County Landfill, located to the north and west of the former lagoon areas, 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

The municipal well field supplying water to the 11,000 residents of Adrian, Minnesota, is contaminated with volatile halogenated and non-halogenated 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-di-chloroethane. 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.

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

AGATE LAKE SCRAPYARD Fairview Township, Minnesota

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 were responsible. The State is planning further ground water and soil sampling to determine the extent of the contamination.

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

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

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 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 within 3 miles of the site, as well as a school serving 2,600 students daily, use ground water as a source of drinking water

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

KUMMER SANITARY LANDFILL Bemidji, Minnesota

The Kummer Sanitary Landfill, in Bemidji, Beltrami County, Minnesota, accepted municipal wastes while it was in operation. There is no evidence that this sanitary landfill accepted liquid and hazardous waste.

Monitoring wells on the property 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. An estimated 14,700 people within 3 miles of the site use ground water for drinking water. Although two aquifers exist, a layer of sandy clay that may be permeable separates them. Hence, there is a potential for wells into the deeper aquifer to be affected.

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

KURT MANUFACTURING CO. Fridley, Minnesota

The Kurt Manufacturing Co. Site occupies about 10 acres in Fridley, 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 aquifers 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.

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

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 and surface water extensively since then. Ground water contamination is limited to an area of about 40 acres downgradient of the industrial section of the city. The State is conducting a hydrogeologic study to help pinpoint the source of contamination.

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

The Oak Grove Sanitary Landfill is 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.

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. Area residents obtain drinking water from the first two. The Anoka Sand Plain is not known to be used as a domestic water supply. A relatively impermeable material separates it from the buried sand aquifer.

The Anoka Sand Plain is contaminated with heavy metals and halogenated and nonhalogenated organic compounds. Limited sampling of the buried sand aquifer and the Franconia Formation has also indicated elevated levels of these contaminants. A wetland south of the landfill is similarly contaminated. Surface water bodies in the area include wetlands, lakes, streams, and a river.

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

OLMSTED COUNTY SANITARY LANDFILL Oronoco, Minnesota

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 (methylethyl 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, and nearby wells serving 1,200 people are threatened. Leachate has been observed seeping from the surface of the landfill as well. 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/CROSBY AMERICAN DEMOLITION LANDFILL Dakota County, Minnesota

Two adjacent landfills, the Pine Bend Sanitary Landfill and the Crosby American Demolition Landfill, cover about 300 acres west of the Mississippi River in Dakota County, Minnesota. The operations of two landfills have produced a leachate containing arsenic, halogenated and nonhalogenated organic compounds, and various chlorides. The leachate has severely contaminated surface water and ground water with these materials, according to analyses conducted by the State and EPA. The landfills are still in operation.

The Crosby American Demolition Landfill accepted acid and organic wastes. Various 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 ground water for drinking water. About 3,500 people are affected.

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

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, monitoring wells and soil on the site were contaminated with volatile organic chemicals and heavy metals, according to tests conducted by the University. The contaminants were coming from two disposal pits and one burning pit.

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.

About 9,600 people within 3 miles of the site use ground water as a source of drinking water.

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

WINDOM DUMP Windom, Minnesota

The Windom Dump covers 30 acres in Windom, 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 on-site and then buried. 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 within 3 miles of the site use ground water as a source of drinking water.

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

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 for the manufacture of naval stores, including the present owner, Newsom Brothers, and a former/owner operator, Reichold Chemicals, Inc.

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. To date, private wells in the immediate area are not contaminated. On-site soil is contaminated with organic chemicals.

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.

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

BEE CEE MANUFACTURING CO. Malden, Missouri

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, 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 treated aluminum moldings to clean and etch the metal before applying a finish coat of paint. The treatment process involved the use of a compound containing chromium. Between 1964 and 1983, trivalent and hexavalent chrome wastewater was discharged directly 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 process waste onto the ground without a permit. Bankruptcy proceedings ended efforts by the State to have Bee Cee install a wastewater treatment system.

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

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

FINDETT CORP. St. Charles, Missouri

Findett Corp. operates on a site near the St. Louis suburb of St. Charles, St Charles County, Missouri, on the floodplain of the Missouri River. The Findett facility covers about 1 acre; however, contamination originating at the facility is believed to cover a much greater area.

Among other activities, Findett reprocessed fluids containing PCRs between 1963 and 1974. Some wastes from the reprocessing were disposed of in a small pond on the Findett property. In 1977, after significant levels of PCRs were detected in the pond, Findett excavated and backfilled a portion of the pond.

In 1979, EPA conducted further investigations at the site, which showed that the pond area was again contaminated with PCBs. In 1980, as a result of these investigations, EPA issued an Administrative Order under the Clean Water Act requiring further excavation of the pond area. Additional sampling under the 1980 order indicated PCBs had migrated beyond the immediate pond area and into subsurface areas.

Consequently, EPA issued a second Administrative Order, under Section 3013 of the Resource Conservation and Recovery Act, in the summer of 1982. The order required Findett to design and implement a monitoring, sampling, and analysis plan to characterize the nature and extent of soil contamination, as well as the potential for ground water contamination at or beyond the Findett facility. Findett has installed monitoring wells and begun the ground water monitoring phase of the order.

About 57,000 people use ground water 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")

LAKE CITY ARMY AMMUNITION PLANT (NORTHWEST LAGOON) Independence, Missouri

The Lake City Army Ammunition Plant (AAP), located on the eastern edge of Independence, Jackson County, Missouri, extends over 7 square miles. Lake City AAP is responsible for the manufacturing and loading of small arms ammunition. Remington Arms, Inc., has been the contractor since the installation opened in 1941. The company employs approximately 2,800 workers, all of whom live off-site. There are 11 residences on the facility grounds. These homes and the plant are served by a series of on-site wells.

The facility has 38 past and present disposal areas, including 9 where the presence of hazardous waste has been documented. At least eight of these hazardous waste disposal areas are no longer used. One of them is the Northwest Lagoon, which was operated from the early 1950s until 1975. This lagoon, approximately 50 x 50 x 8 feet deep, received about 900 gallons of hazardous wastes, including barium, cadmium, chromium, lead, mercury, silver, and spent halogenated and nonhalogenated solvents. The lagoon has been treated, covered, graded, and reseeded. Heavy metals have been detected in an on-site monitoring well, indicating that the closure was not adequate.

The plant is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search), Phase II (preliminary survey) is underway.

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

LEE CHEMICAL Liberty, Missouri

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.

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

NORTH-U DRIVE WELL CONTAMINATION Springfield, Missouri

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)

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

OUAIL RUN MOBILE MANOR Gray Summit, Missouri

Conditions at listing (September 1983): Quail Run Mobile Manor is a trailer park located 2 miles east of Gray Summit, Missouri. In the early 1970s, the road through the park was sprayed with an unknown quantity of dioxin-contaminated waste oil. In 1974, some of the soil was excavated from the road and deposited in the area between the road and a lagoon.

Early in 1983, EPA identified dioxin in soil samples from numerous locations on the site, one as high as 1,100 parts per billion. As a result, the U.S. Centers for Disease Control (CDC) issued a health advisory warning that the more than 100 residents were at risk of developing adverse health effects from dioxin if they remained in their homes. Some of the residents had come to the trailer park from Times Beach, Missouri, which also has a dioxin problem.

In May 1983, EPA, the Federal Emergency Management Agency (FEMA), and the State briefed the residents on the findings and explained FEMA's offer of temporary relocation. Of 33 families, 29 applied for relocation.

Status (June 1984): A few families are still residing at Quail Run. The site is scheduled to be cleaned up as part of a planned removal using CERCLA emergency funds. The project involves excavating and restoring several areas on-site contaminated with dioxin. The contaminated soil will be stored temporarily on-site.

EPA is deferring rulemaking on this site because it does not meet the criteria currently specified to place a site on the NPL. EPA is considering modifying the National Contingency Plan, the Federal regulation by which CERCLA is implemented, in such a way that Quail Run and similar sites will qualify for the NPL.

Response category / Cleanup status code, October 1984: R / O

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

QUALITY PLATING Sikeston, Missouri

The Quality Plating Site covers about 5 acres in Sikeston, Scott County, Missouri. The site consists of a 1-acre 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 wastewater originating from the flow-through rinse tanks, as well as acid, alkaline, and metal-plating batch solutions, was continuously discharged into the unlined 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 present owner raises hogs and calves on the former property of Quality Plating. The site is located in a rural setting. Six residences within 0.25 miles of the site obtain drinking water from shallow wells.

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

SOLID STATE CIRCUITS, INC. Republic, Missouri

The Solid State Circuits, Inc., Site covers about 1-acre in Republic, Greene County, Missouri. During a drinking water study, EPA analyzed the city's wells and detected the presence of trichloroethylene (TCE) in the raw drinking water of one 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.

During its investigation, the State learned that after a fire destroyed the plant, Solid State Circuits buried the remaining structure and its contents in the basement of the structure, where there was an unplugged well. Investigators learned that the debris remaining after the fire included drums containing TCE. Less than 1-acre of soil on the site is contaminated with TCE.

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.

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

WELDON SPRING OUARRY (USDOE/ARMY) St. Charles County, Missouri

The Weldon Spring Quarry covers 9 acres near the Missouri River in St. Charles County, Missouri. The Atomic Energy Commission (AEC) acquired the site in 1958 from the Army. As a result of a reorganization of the AEC, the U.S. Department of Energy (USDOE) now owns the site. The quarry was first used by the Army for disposal of rubble contaminated with trinitrotoluene (TNT). Later, AEC used the quarry for disposal of 180 cubic yards of thorium residues in 1959, about 50,000 cubic yards of uranium— and radium—contaminated material and equipment in 1963—64, and 550 cubic yards of thorium residues in 1966. From 1966 to 1969, the Army deposited additional TNT—contaminated stone, earth, and demolition rubble from the Weldon Chemical Plant.

Water in the quarry is connected to ground water through fractured limestone. Uranium and radium have been detected in off-site monitoring wells, the radium in concentrations exceeding drinking water standards. A well field within 0.75 miles of the site is the source of drinking water for about 46,000 people. The State has monitored this field since 1976, and found the water to be below EPA drinking water standards.

USDOE has conducted numerous studies to characterize the geology and determine the types of wastes present. Currently, USDOE is developing engineering plans and preparing an Environmental Impact Statement for the long-term management of radioactive wastes at the quarry.

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

BURLINGTON NORTHERN RAILROAD (SOMERS TIE TREATING PLANT)
Somers, Montana

Burlington Northern Railroad has treated ties on a 4.5-acre site in Somers, Montana, since around 1900. The plant's current operations are regulated under the Resource Conservation and Recovery Act (RCRA). A waste disposal pond downgradient of the RCRA-regulated facility has not been used since 1974 and is not regulated by RCRA.

The old pond was used to dispose of creosote wastes from the wood-treatment process. The wastes were discharged from the pond via a ditch to a marshy area on the shore of Flathead Lake. About 400 people live within I mile of the site. Flathead Lake is the largest fresh water lake west of the Mississippi River. It is extensively used for camping and fishing, and towns along the lake such as Somers use it for drinking water.

On Feb. 28, 1984, the State dug several shallow holes along the lake shore and took samples of creosote-saturated sand below the ditch outfall. Sludge/sediment samples were collected from the bottom of a 0.5-acre pond located along the shore adjacent to the waste ditch. The material was silty-sandy and stained with oil.

Early in March, consultants from Burlington Northern drilled approximately 60 test borings in the vicinity of the pond, the waste ditch, and below the seasonal high water beach of Flathead Lake. About 46 percent of the test holes showed visual evidence of creosote contamination. The holes encompassed an area of approximately 3.5 acres, including the pond. Soil samples were collected from the test borings. Monitoring wells were installed at 10 sites around the pond. Soil and ground water samples are now being analyzed.

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

IDAHO POLE CO. Bozeman, Montana

Idaho Pole Co. treats wood products with pentachlorophenol (PCP) on a 10-acre site in Bozeman, 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 within 3 miles of the site use ground water 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 wastewater 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 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. The State took a sample that showed even higher concentrations or PCP.

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

MOUAT INDUSTRIES Columbus, Montana

The Mouat Industries Site is near Columbus, 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 Co. removed the waste pile and treated the area to remove hexavalent chromium remaining in the soil. 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.

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 the Anaconda Co.

The Town of Columbus now owns the site. Timberweld Manufacturing Co., a manufacturer of laminated wood products, leases it from Columbus for storage of finished products.



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

CORNHUSKER ARMY AMMUNITION PLANT Hall County, Nebraska

The Cornhusker Army Ammunition Plant is in Hall County, Nebraska, approximately 3 miles west of the City of Grand Island. The facility, which is owned by the U.S. Army and operated by a contractor, operated intermittently from 1942 through 1943 to produce bombs, shells, boosters, and mines. It is now in standby status.

Wastes containing trinitrotoluene (TNT) and RDX, an experimental explosive, have been disposed through cesspools, leach pits, burning, and burial at many locations at the facility. The wastes have contaminated the aquifer, which is the sole source of drinking water in the area. The Army is supplying bottled water to residences whose wells have been contaminated. The Army has provided funds to the City of Grand Island for extension of its municipal water supply to serve affected residences. Surface waters have not been affected to date.

The hazardous waste site consists of the contiguous portion of the facility containing the main production area (load lines 1 through 5), the magazine areas, the sanitary landfill, the demolition and burn ground, and the shop area, as well as the contaminated aquifer extending east of the facility. The site covers about 9 square miles.

The plant area is underlain by moderately to highly permeable unconsolidated deposits which yield large quantities of good quality ground water for drinking water, agricultural, and industrial use. Most of the land surrounding the site is used for agriculture and is under irrigation during much of the growing season. The surface is drained through intermittent streams, with the closest continuously flowing water body 5 miles away.

The plant is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search). Phase II (preliminary survey) is underway.

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

HASTINGS GROUND WATER CONTAMINATION Hastings, Nebraska

Hastings (population 23,580) is in Adams County, Nebraska. Preliminary sampling of municipal wells by EPA and the State detected low levels of contaminants in the ground water beneath the old Hastings business district. Locally high concentrations of volatile organic chemicals, phenols, and other organics were detected. A number of potential sources exist. Past waste disposal practices, possibly dating back to the 1920s, may have contributed to the contamination. The city has shut down the most contaminated municipal well.

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

LINDSAY MANUFACTURING CO. Lindsay, Nebraska

Lindsay Manufacturing Co. generates acid waste from a galvanizing process at its plant in Lindsay, Platte County, Nebraska. The waste is discharged into a 0.1-acre unlined pond. On Jan. 11, 1983, the company sampled monitoring wells near the pond. Analyses indicate that ground water is contaminated by acid, chromium, and fluoride.

Under an Administrative Order issued by the State, the company has removed the source of contamination and is purging the ground water.

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

WAVERLY GROUND WATER CONTAMINATION Waverly, Nebraska

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 and 1,2-dichloroethane. Chloroform also may have spread to irrigated lands.

Because the ground water contamination is widespread, numerous facilities could be contributing to the problem. Over 30 businesses, industries, injection wells, and waste disposal sites could be sources of chloroform and 1,2-dichloroethane. Further study is needed to identify the source or sources responsible.

The city shut down wells #1 and #3. Pecause the source of the contaminants migrating into ground water is unknown, the remaining uncontaminated wells could be threatened.

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

COAKLEY LANDFILL North Hampton, New Hampshire

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 materials 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 work plan for the investigation.

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

The Cinnaminson Township (Block 702) Ground Water Contamination affects that portion of the Raritan Magothy Aquifer located beneath 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.

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

FORT DIX (LANDFILL SITE) Wrightstown, New Jersey

Fort Dix is located in Wrightstown, Burlington County, New Jersey. The installation covers 32,605 acres and contains built-up areas (cantorment, hospital, housing, administrative buildings, etc.), training areas, communication station, and a test range. Fort Dix's mission is to provide supervision, training, guidance, financial management, administrative and logistical support, and other services and support activities. It conducts no industrial activities.

A 126-acre landfill located near the southwestern boundary of the installation has been used for the disposal of municipal refuse from Fort Dix and chemical wastes from McGuire Air Force Base. Adjacent to the landfill is a grease disposal pit. Both the landfill and the pit are potential sources of contamination.

Methylene chloride and trichloroethylene were detected in Cannon River, a stream that flows near the landfill. However, no upstream samples were taken. No critical habitats or wetlands are threatened to date.

About 7,300 residents are served by domestic wells within 3 miles of the landfill.

Fort Dix is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search) and started ground water sampling around the landfill. Analyses indicate the presence of contaminants such as chloroform, 1,1,1-trichloroethane, methylene chloride, and toluene.

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

FRIED INDUSTRIES East Brunswick Township, New Jersey

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, 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 depend on ground water as a source of drinking water. In a limited air survey, EPA detected above-background levels of organic vapors on-site.

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

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 9,000 cubic yards of contaminated material are scattered throughout a neighborhood of about 0.25 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.

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

JAME FINE CHEMICAL Bound Brook, New Jersey

Jame Fine Chemical manufactures specialty chemicals in an industrial park in Bound Brook, Somerset County, New Jersey. In 1980, the State issued an Administrative Consent Order requiring the owner to stop an unpermitted discharge of waste water containing trichloroethylene (TCE), toluene, and ethyl benzene into the Raritan River. In an inspection, the State observed spillage and poor housekeeping practices. Subsequent analysis of ponded water from such spillage detected methylene chloride, TCE, and chloroform. The State has also detected high levels of chloroform, toluene, benzene, and other organic solvents in ground water.

About 300 people within 3 miles of the site depend on ground water as a source of drinking water.

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

LODI MUNICIPAL WELL Lodi, New Jersey

The Lodi Municipal Well in Lodi, Bergen County, New Jersey, is contaminated with radium and its decay products, according to tests conducted by the State. In December 1983, the State closed the well, which is one of nine wells serving about 24,000 people. Other municipal wells are being used, but they draw from the same aquifer. The State is investigating to determine if ground water migrating from a nearby thorium-processing facility is contaminating the Lodi Municipal Well.

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

The Montclair/West Orange Radium Site is in a residential neighborhood in Montclair and West Orange, 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 9,000 cubic yards of contaminated material are scattered throughout a neighborhood covering about 0.5 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.

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

NAVAL WEAPONS STATION EARLE (SITE A) Colts Neck, New Jersey

The Naval Weapons Station Earle covers 10,048 acres in Colts Neck, Monmouth County, New Jersey. Since the early 1940s, the U.S. Navy has handled, stored, renovated, and transshipped munitions at the station. These operations involve preserving and maintaining ammunition, missile components, and explosives; rendering safe unserviceable and/or dangerous ammunition and explosives; and providing support to the Fleet Mine Facility. The station also conducts or has conducted nonordnance activities, radiological operations, materials storage, and waste disposal operations.

Site A covers 22 waste areas identified by the Navy. Wastes generated in Site A include ordnance materials, grit and paint, paint scrapings, solvent/paint sludges, ammonium picrate, lead bullets from small arms ranges, zinc, lead, titanium, and small amounts of other constituents. Analysis of a limited number of sediment and surface water samples detected contamination, but further background samples are necessary.

The waste areas of Site A overlie the Cohansey Sand, Kirkwood Formation, Vincentown Formation, Red Bank Sand, Navesink Formation, and the Wenonah Formation aquifers. All are hydraulically connected, so that water can move among them. An estimated 1,900 people within 3 miles of Site A are served by these aquifers. Local surface water is used for recreation and irrigation purposes. An estimated 270 people are served by surface water within 3 miles downstream of Site A.

The station is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Navy has completed Phase I (records search). Phase II (preliminary survey) is underway.

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

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.

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

WALDICK AFROSPACE DEVICES, INC. Wall Township, New Jersey

Waldick Aerospace Devices, Inc., has operated a metal-electroplating business on a 2-acre site in Wall Township, Mormouth County, New Jersey, since 1979.

Waste waters containing heavy metals, acids, and volatile organics were discharged into the ground on a daily basis prior to 1982, according to a former employee. In 1982, Mormouth 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, the Superior Court of New Jersey prosecuted Waldick Aerospace Devices, Inc., for criminal violation of Federal and State environmental laws. KLS Industries, one of the parties responsible for wastes at this facility, has agreed to take remedial action at the site under the supervision of the Monmouth County Board of Health.

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

ANCHOR CHEMICALS Hicksville, New York

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 Anchor-Lith 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 were shown to be leaking during various pressure tests performed from 1981 through January 1983 by the Nassau County fire marshall and Anchor-Lith Kem Ko.

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

About 90,000 people within 3 miles of the site get their drinking water from ground water.

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

APPLIED ENVIRONMENTAL SERVICES Glenwood Landing, New York

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. The New York State Attorney General has brought suit against Shore Realty in Federal court to require the firm to take several remedial actions.

About 20,000 people within 3 miles of the site use ground water as a source of drinking water.

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

BYRON BARREL & DRUM Byron Township, New York

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 active farm land used for raising vegetables. About 200 55-gallon drums have been abandoned on the property. Based on the 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.

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

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

BEC TRUCKING Town of Vestal, New York

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.

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

CLAREMONT POLYCHEMICAL Old Bethpage, New York

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 Pollution 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 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 site to be cleaned up.

About 47,000 people within 3 miles of the site depend on ground water as a source of drinking water. The nearest public supply well is 3,500 feet northwest of the site.

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

CLOTHIER DISPOSAL Town of Granby, New York

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 indicated that many barrels were in poor condition and leaking; solvent odors were noted. Analyses detected PCBs in soil samples. The contamination threatens ground water and surface water. Nearby residents use private or municipal wells. The site drains into a marsh area, which drains north into Ox Creek and then to the Oswego River.

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.

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

COLESVILLE MUNICIPAL LANDFILL Town of Colesville, New York

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, 1,1-dichloroethane, and benzene. Broome County is providing these residents with bottled water.

The State is negotiating with $\mbox{\it Broome}$ County for further monitoring and remedial action.

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

CORTESE LANDFILL Village of Narrowsburg, New York

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.

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

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.

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

The FMC Corp.'s Dublin Road Landfill covers 6 acres in the Town of Shelby, Orleans County, New York. FMC acquired the site from Niagra 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 living within 3 miles of the landfill obtain their drinking water from private wells. The nearest well is within 1,500 feet of the landfill.

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

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

GOLDISC RECORDINGS, INC. Holbrook, New York

Goldisc Recordings, Inc., (formerly Sonic Recordings 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 recharge basins, 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

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.

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

GRIFFISS AIR FORCE BASE Rome, New York

Griffiss Air Force Base occupies approximately 3,900 acres in the Mohawk River Valley in Oneida County in central New York State, approximately 2 miles northeast of Rome. The Mohawk River borders the main base on the west and south. Besides the main base, there are 11 annexes used for base support and research and development. Activated in 1942, the base is currently active with the 416th Bombardment Wing as host unit.

Hazardous wastes generated on the base are from support of the base mission and research and development activities. The sources include industrial shops and laboratories. The various wastes produced, including solvents and lead (from battery acids), were disposed of primarily in landfills and dry wells covering about 110 acres. Phenols, ethyl benzene, and benzene have been detected in ground water and toluene in surface water on the base. To date, no off-base wells have been closed due to contamination.

The base is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Air Force has completed Phase I (records search) and is nearing completion of Phase II (verification and quantification.)

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

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. Surface water, the Fall Kill, also may be affected.

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

HERTEL LANDFILL Plattekill, New York

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 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 within 3 miles of the site use ground water as a source of drinking water.

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

HOOKER CHEMICAL/RUCO POLYMER CORP. Hicksville, New York

The Hooker Chemical/Ruco Polymer Corp. Site covers 72 acres in an industrial park area of Hicksville in Nassau County, New York. The surrounding area is highly urbanized. Ruco manufactures plastics, latex, and esters on the site, which it purchased from Hooker Chemical and Plastics Corp. in 1946.

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 perchloroethylene, 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 vinyl chloride and other chlorinated organic compounds. The maximum level was 50 parts per billion. The Health Department determined that Hooker 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

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 converted it to a sanitary landfill. Currently, it is owned and operated by the City of Johnstown.

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

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. 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.

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

KENMARK TEXTILE CORP. Farmingdale, New York

Kenmark Textile Corp. has conducted operations involving screen manufacturing and fabric handling and washing 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 documents that ground water at the site was in violation of ground water standards due to elevated levels of chromium. At that time, it was known that wastes were being discharged to leaching pits on site. Ground water is the only source of drinking water for more than 10,000 people in the area.

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.

As of August 1983, it appeared that wastes were still being discharged to leaching basins. They contained calcium, iron, zinc, copper, chromium, nickel, and varying amounts of inks and dyes.

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

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

LIBERTY INDUSTRIAL FINISHING Farmingdale, New York

The Liberty Industrial Finishing Site covers less than 0.1 acres in Liberty Industrial Park in Farmingdale, 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 Liberty Industrial to be in violation of the discharge limits in its permit. The leaching basins were contaminated with chromium and cadmium. In September 1978, Liberty Industrial entered into a Consent Agreement with the State to clean up the site. It has not done so, and the State is now trying to bring the company into compliance.

There is concern that ground water may be contaminated. The site is underlain by sand and gravel to a depth of 95 feet.

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

NEPERA CHEMICAL CO., INC. Maybrook, New York

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 niacinamide, niacin, mandelamine, pyridium and thorizylamine hydrochloride. 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-butyl phthalate, 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.

The State is negotiating a Consent Order with Nepera for investigation and cleanup of the site.

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

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 Bay in an area with extensive ponds, coves, and wetlands. The terrain is generally flat with elevations less than 100 feet above mean sea level. Slopes drop north to the bay. Soils in the area are sands and gravels, and ponds in the area are surface expressions of ground water. The site is unlined and located in an area of sandy soils, 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 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.

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

PASLEY SOLVENTS & CHEMICALS, INC. Hempstead, New York

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 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 a depth of 6 inches to 36 inches. Analyses of the samples indicated that the soil was contaminated with halogenated and nonhalogenated hydrocarbons. Five monitoring wells were installed at the site in August 1981. Analyses of soil and ground water from wells 2, 4, and 5 indicated the presence of halogenated and nonhalogenated hydrocarbons, as well as constituents of fuel oil and gasoline. The nearest well is less than 0.5 miles from 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

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 15,00 people within 3 miles of the site use ground water as a source of drinking water.

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

The Robintech, Inc./National Pipe Co. Site is an inactive filled lagoon, approximately 1-acre in size, in 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 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. This stream receives drainage from the Roundtop Hill area and is all that remains of the former lagoon. The area surrounding the site is primarily industrial. The Town of Vestal Water District No. 4 Well 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.

The State is presently negotiating with National Pipe for additional investigation and monitoring.

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

SARNEY FARM Amenia, New York

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 site received ethylene dichloride in 55-gallon drums, 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 within 3 miles of the site use ground water as their source of drinking water.

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

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

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 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 running upgradient Well Number 4 to waste. These two remedial measures control the concentration of 1,1,1-trichloroethane in Well Number 3 to below 50 ppb. 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.

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

SMS INSTRUMENTS, INC. Deer Park, New York

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 within 3 miles of the site depend on ground water as a source of drinking water.

In March 1980, the county issued a modified Consent Order to SMS. Violations at the site included effluent discharge in excess of ground water standards and criteria, improper storage and disposal of hazardous wastes, and failure to apply for a State Pollution 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 recharge basin 50 feet from the eastern property line. The headwaters of Sampawams Creek, which feeds into Guggenheum 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

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 performed electroplating and anodizing for 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 Pollution 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. As of January 1983, it had not obtained the permit. The State found that the leaching basin is contaminated with 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.

Ground water provides drinking water to about 16,000 people and is 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

The Volney Municipal Landfill covers 58 acre 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.



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

The Bypass 60l Ground Water Contamination Site is in Concord, North Carolina. An estimated 3,000 residents of this rural community 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.

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

Celanese Corp. manufactures synthetic fibers in a plant in Shelby, North Carolina. Between 1970 and 1978, the company used a 3-acre site 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 wells; the closest well is approximately 1,500 feet downgradient of the 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.

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

JADCO-HUGHES FACILITY Belmont, North Carolina

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 ground water level. Approximately 4,700 people within 3 miles of the site use ground water as a source of drinking water.

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

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, organics, 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.

Wastes are still buried on-site with no containment. An estimated 3,900 people in surrounding communities use private wells and have no other source of drinking water.

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

ALSCO ANACONDA Gnadenhutten, Ohio

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 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.

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

GENERAL ELECTRIC CO. (COSHOCTON PLANT)
Coshocton, Ohio

General Electric Co. disposed of wastes on a 2.5-acre site at its Coshocton, Ohio, plant. The wastes, from the production of resins, contained phenol. The wastes were placed in a landfill and infiltration lagoons from 1946 to 1977.

Ground water near the lagoons is contaminated with phenol, according to tests conducted by a consultant to General Electric. City and private wells within 3 miles of the site draw water from a shallow aquifer. About 15,000 people are involved.

General Electric has hired a consultant to study ground water in the waste site area. $\;$

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

INDUSTRIAL EXCESS LANDFILL Uniontown, Ohio

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, commercial, and 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 ground water for drinking water.

Area residents complained about contamination of ground water, surface water, and air, as well as numerous health affects. Analyses by the State confirmed contamination. In the past, the State detected slight impacts on surface water from leachate generated within the landfill. Recent monitoring of ground water has detected organic contaminants, including xylene, phenol, methylene chloride, and tetrachloroethylene.

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

REPUBLIC STEEL CORP. OUARRY Elyria, Ohio

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 $\ensuremath{\mathsf{owner}}\xspace.$

An estimated 60,000 people live within 3 miles of the site. Two residential wells are within 1 mile of the site.

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

The Sanitary Landfill Co./Industrial Waste Disposal Co., Inc., Site is a 40-acre landfill near Dayton, Ohio, that operated 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 use ground water from wells within 3 miles of the site. The wells are drilled into a deeper aquifer. The deeper aquifer 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

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 and refuse. 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 Ohio 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, 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 back 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 has seeped into the Arkansas River levee, releasing contaminants to the river. Contamination of ground water is also likely from the pits.

Several additional industries have leased tracts of land on the refinery property. Over the years, 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 tests conducted by EPA, 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 who are involved with these entities. The immediate removal consists of removal and disposal of approximately 400 drums of hazardous substances, fence repair, sampling and analysis of pits and soil on-site, and sampling and analysis of on-site monitoring wells. Further action may be required depending upon sampling results.

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.

Response category / Cleanup status code, October 1984: R F / O

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

MARTIN-MARIETTA ALUMINUM CO. The Dalles, Oregon

Martin-Marietta Aluminum Co. produces aluminum on a site covering less than I acre 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, as well as in surface run-off and in leachate from a cathode waste pile. Cyanide is known to be present in spent cathode potliners on the surface in a 75,000-ton waste pile and in an old landfill.

The aquifer provides drinking water to 14,000 people in The Dalles and Chenoweth. The aquifer is also used in the immediate vicinity for industrial purposes. The nearest industrial 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 and is under an order from the State to construct a proper liner and move the cathode waste pile onto it.

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

UMATILLA ARMY DEPOT (LAGOONS) Hermiston, Oregon

Since 1941, Umatilla Army Depot Activity has occupied about 20,000 acres 6 miles south of the Columbia River in Hermiston, Umatilla County, in northeastern Oregon. Lagoons covering about 0.5 acres of the site are contaminated with explosive wastes as a result of past demilitarization and disposal operations. The major contaminants identified on the base include explosive wastes (RDX, TNT, and nitrate), pesticides (DDT, lindane), organic solvents (tetrachloroethylene and trichloroethylene), and caustic brine. RDX and nitrates are present in ground water beneath the lagoons. This ground water contamination might affect public water supplies serving about 24 people.

The Umatilla Army Depot is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search) and Phase II (preliminary survey).

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

AMBLER ASBESTOS PILES Ambler, Pennsylvanía

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 facility. 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 asbestoscontaminated 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. 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 - 1984, EPA committed \$814,000 in CERCLA emergency funds to cover Nicolet's pile 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, which is scheduled for September 1984. Nicolet has also begun to perform the same stabilization work using its own contractor.

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

BROWN'S BATTERY BREAKING Shoemakersville, Pennsylvania

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 has 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 measured elevated blood lead levels in children living adjacent to the site.

Approximately 1,000 people within 3 miles of the site use ground water as drinking water. The potential for contamination of these supplies is great since the disposal area is unlined.

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

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

DOMINO SALVAGE YARD Valley Township, Pennsylvania

The Domino Salvage Yard covers about 20 acres in the center of Valley Township, Montour County, Pennsylvania. Copper is recovered from scrap wire on the site. The original operator, who used both mechanical and chemical processes, went bankrupt in the early 1970s. The second (and present) owner 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.

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 within 3 miles of the site use ground water as a source of drinking water.

The State has investigated the site since the late 1960s. Since 1971, the State has issued orders for cleanup. At present, there is a court agreement to clean up the site. The present owner has removed and disposed of some of the hazardous waste and processed some of the fluff.

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

HUNTERSTOWN ROAD Straban Township, Pennsylvania

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 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. Trichlor-ompounds of the site of the site use ground water as a source of 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 pursuant to an order under CERCLA Section 106. However, soils, ground water, and a small stream on the site still are contaminated, according to EPA analyses.

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

LETTERKENNY ARMY DEPOT (SOUTHEAST AREA) Chambersburg, Pennsylvania

The Letterkenny Army Depot located 2 miles north of Chambersburg, Pennsylvania, was established in 1942 as an ammunition storage facility. From 1947 to the present, operations have included the maintenance, overhaul, and rebuilding of wheeled and tracked vehicles and missiles. These operations have taken place primarily in the southeast corner of the depot known as the Southeast Industrial Area and the East Patrol Road Disposal Area. The two areas include about 170 acres. The operations have employed large quantities of chlorinated organic solvents and cleaning agents. Wastes from the operations have been disposed in the same areas — by landfilling, burial in trenches, and spreading on the surface.

Ground water beneath the Southeast Area of the depot and beneath an off-depot area of approximately 4,000 acres extending 2.5 miles to the east of the depot is contaminated with chlorinated organic chemicals, including trichloroethylene and 1,1-dichloroethylene. Approximately 40 residential water wells have been contaminated.

Letterkenny Army Depot is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed studies to determine sources of on-depot ground water contamination as well as a remedial investigation/feasibility study. The U.S. Army is currently supplying 16 residences with bottled water to replace contaminated wells.

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

MIDDLETOWN AIR FIELD Middletown, Pennsylvania

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. 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. Various Air Force operations resulted in solvents and other wastes being disposed of on the site.

Dichlorobenzene, trichloroethylene, and perchloroethylene 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. The Air Force has also completed a search of records for information on past disposal activities at Olmsted Air Force Base.

About 19,500 people obtain their 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")

MODERN SANITATION LANDFILL Lower Windsor Township, Pennsylvania

Modern Sanitation Landfill covers 72 acres in Lower Windsor Township, York County, Pennsylvania. The land is leased from a local farmer. SCA Services, headquartered in Boston, operates the landfill, along with a trash-hauling business. It purchased these operations in September 1980 from Modern Trash of York. The site reportedly received hazardous wastes from 1976 to 1979.

Toxic organic and inorganic chemicals are present in on-site ground water, according to analyses conducted by the State and EPA. The State and SCA are working on remedial measures to reroute ground water flow and to treat the contaminated ground water. Similar contaminants have been detected in nearby springs that enter a tributary to Kreutz Creek.

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

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

SHRIVER'S CORNER Straban Township, Pennsylvania

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 plant in Cumberland Township. 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 within 3 miles of the site use ground water as a source of drinking water. In April 1984, under an 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.

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

WESTINGHOUSE ELEVATOR CO. PLANT Cumberland Township, Pennsylvania

Westinghouse Elevator Co. manufactures elevators on an 85-acre site in Cumberland Township, Adams County, Pennsylvania. The elevator cab manufacturing process incorporates paint and degreasing processes involving chlorinated solvents. In August 1983, the Pennsylvania Department of Environmental Resources detected trichloroethylene (TCE) in nearby surface water. Further investigation by the State and EPA found that private wells were also contaminated.

Recent remedial actions taken by Westinghouse include supplying 15 homes along Route 34 with an alternate water supply and initiating a hydrogeological study of the site to determine the extent of the contamination and cleanup alternatives.

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

WHITMOYER LABORATORIES Jackson Township, Pennsylvania

Whitmoyer Laboratories 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.

The facility operated from 1934 to July 1984. In July 1964, Whitmoyer Labs 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.

Arsenic and various organic chemicals are present in on-site ground water, according to analyses conducted by EPA and the State. About 4,700 people within 3 miles of the site use ground water as a source of drinking water.

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

CENTRAL LANDFILL Johnston, Rhode Island

The 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 area where hazardous wastes were disposed of. A citizens' 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.

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

AMERICAN CREOSOTE WORKS, INC. Jackson, Tennessee

American Creosote Works, Inc., is a 60-acre wood-preserving facility in Jackson, 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 spill areas. 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. Analyses conducted by EPA indicate that soil and ground water are contaminated with creosote, PCP, and phenols.

In June 1983, EPA approved \$860,000 in CERCLA emergency funds to dewater the site, remove and bury sludge, and cap certain areas with clay.

The facility is located less than 0.25 miles from the South Fork Deer River, which periodically floods the site. 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 lies approximately 1.5 miles east of the site.

The company that owns the site is under reorganization in the U.S. Bankruptcy Court.

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

MILAN ARMY AMMUNITION PLANT Milan, Tennessee

The Milan Army Ammunition Plant (AAP) in Milan, Gibson County, Tennessee, produces munitions for the U.S. Army. The "O" Line at Milan, a conventional munition demobilization facility, operated from 1942 until December 1978. The major function of the facility is to remove explosives (TNT and TNT-RDX mixture) from munitions by injecting a high pressure stream of hot water and steam into the open cavity of the munitions. Effluent from the operation was discharged into 11 unlined settling ponds with an estimated capacity of 5.5 million gallons. Between 1971 and 1981, sediments were routinely dredged from the ponds and stored on the ground. In 1981, the ponds were lined, and the accumulated sediments placed into the lined ponds.

Analyses of samples collected in March 1979 from on-site water supply and monitoring wells indicated the presence of explosives and heavy metals. Three water supply wells serving the City of Milan and numerous private wells are located less than 2,500 feet from the area of known ground water contamination. AAP supply wells are located on-site. More than 10,000 people within 3 miles of the site depend on ground water as a source of drinking water.

Milan AAP is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search) and Phase II (preliminary survey). Phase IV (remedial action) is being undertaken to close the "O" Line ponds.

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

AIR FORCE PLANT #4 (GENERAL DYNAMICS) Fort Worth, Texas

Air Force Plant #4 occupies approximately 650 acres in Fort Worth, Tarrant County, Texas. General Dynamics operates the plant, which manufactures aircraft for the Air Force. In November 1982, the Air Force and General Dynamics notified EPA via the National Response Team that an oil was being released into a creek on the west side of the plant. Under Air Force supervision, General Dynamics contructed a french drain and a collection basin at the outfall. Since that time, leachate from the drain and outfall has been collected, stored, and disposed of in an EPA-approved facility. In 1983, the Air Force removed 21,300 cubic yards of contaminated soil from closed waste pits and disposed of the soil at an approved disposal site.

The Air Force drilled numerous test holes and 66 monitoring wells in and around 10 areas, which cover a total of about 8 acres. Many of the areas have contained hazardous substances. Results from the wells indicate that ground water in the upper zone under the site is contaminated with several organic chemicals and heavy metals. Several deeper wells were drilled at the site into the Paluxy aquifer, which is the source of drinking water for nearby residents, including the municipality of White Settlement (population 13,420). One well was found to be contaminated by 1,2-transdichlorethylene and vinyl chloride.

The plant is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites.

At the request of the Air Force, EPA has further investigated offsite areas, including several White Settlement wells, sediment in the creek and Lake Worth, and selected residential wells near the site. Four monitoring wells were drilled near the plant area.

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

BAILEY WASTE DISPOSAL Bridge City, Texas

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, about 72,000 cubic yards of industrial wastes, consisting generally of benzenes, phenols, pyridenes, naphthalenes, anthracenes/phenanthrenes, and chlorinated organic chemicals, were buried 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 within 3 miles of the site use ground water as their primary source of drinking water.

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

BRIO REFINING CO., INC. Friendswood, Texas

The Brio Refining Co., Inc., Site consists of approximately 12 closed pits on a 50-acre site in Harris County south of Houston near Friendswood, Texas. Tanks and processing facilities remain on a portion of the site, which Brio operated from the early 1970s to December 1982. Earlier operations carried out at the site included copper catalyst regeneration, oil blending and refining, and hydrocarbons (styrene) cracking. Previous owners or operators of the facility have included Hard Lowe Chemical, Lowe Chemical, Phoenix Chemical, Intercoastal Chemical, Archem Chemical, JOC Oil Arcmatics, Tiara Metals, and Friendswood Refining.

Spills have entered the nearby Mud Gulley and subsequently, via Clear Creek, into Galveston Bay. A recent inspection by EPA indicated that shallow ground water is probably contaminated with copper, vinyl chloride, fluorene, styrene, and ethyl benzene. In January 1984, EPA detected toluene, benzene, and other aromatic organic chemicals in the air. A housing development borders the site on the north.

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

CRYSTAL CITY AIRPORT Crystal City, Texas

The Crystal City Airport covers about 100 acres in Crystal City, Zavala County, Texas. Several large areas have been contaminated with a variety of pesticides by aerial applicator companies that are no longer in business.

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 CERCLA 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 be blown into the air. One of the primary drinking water wells for Crystal City is on the site.

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

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

Koppers Co., Inc., operated a 62-acre wood-processing plant in Texarkana, Bowie County, Texas, between 1939 and 1961. The processes used by the Koppers plant involved creosote, pentachlorophenol (PCP), and arsenic. 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 with PCP, arsenic, and polynuclear aromatic hydrocarbons.

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

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

LONE STAR ARMY AMMUNITION PLANT Texarkana, Texas

Lone Star Army Ammunition Plant, located in Texarkana, Texas, produces a variety of explosives and munitions. During the 1930s, explosives were disposed of by detonation above—and below—ground in an area covering about 5 acres. Tests conducted by the Army indicate that heavy metals contaminate monitoring wells south of the disposal site along the border of the facility.

About 1,200 people within 3 miles of the site use ground water as a source of drinking water.

The plant is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous wastes sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search). Phase II (preliminary survey) is underway.

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

NORTH CAVALCADE STREET Houston, Texas

The North Cavalcade Street Site covers approximately 17 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 for an unknown period 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 and may have been used to dip-treat wood. Contaminants at the site consist of polynuclear aromatic compounds associated with creosote, in addition to other similar contaminants. Analyses indicate that soils (both on and below the surface) and shallow ground water on the site are contaminated with chrysene, fluoranthene, and anthracene.

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

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

ODESSA CHROMIUM #1 Odessa, Texas

The Odessa Chromium #1 Site is an 8-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 29 municipal wells within 3 miles of the site. Water from the wells is blended with surface water during the summer, thus threatening the entire population.

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

ODESSA CHROMIUM #2 (ANDREWS HIGHWAY) Odessa, Texas

The Odessa Chromium #2 Site consists of ground water 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. Water from these wells is blended with surface water, thus threatening the entire population. The 115,000 people in the area are totally dependent on the contaminated aquifer for drinking water. There is no other aquifer in the area.

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

PESSES CHEMICAL CO. Fort Worth, Texas

The Pesses Chemical Co. Site is an abandoned facility in Fort Worth, Texas. The facility formerly recycled nickel-cadmium sludge, copper-cadmium sludge, off-specification batteries, and spent batteries. These batteries were stored on the 4.6-acre site in 55-gallon containers and other containers prior to processing. 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 CERCLA 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.

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

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 petrochemical 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 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.

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

PIG ROAD New Waverly, Texas

Conditions at listing (September 1983): The Pig Road Site in New Waverly, Texas, is a series of six interconnected surface impoundments each about 60 feet by 70 feet and 4 feet deep. The l-acre site, which is privately owned, is the result of an apparent one-time dumping in 1961. The pits are filled with a black acid tar having a pungent odor. Run-off from the site has killed vegetation. The nearest drinking well is 500 yards to the southeast.

Status (June 1984): The State is negotiating a final cleanup agreement with the responsible party, Occidental Chemical. During March and April, Occidental removed the contents of the six pits.

EPA is deferring rulemaking on this site to resolve technical issues related to the site's score on the Hazard Ranking System, which evaluates the relative hazards associated with waste sites.

Response category / Cleanup status code, October 1984: S / O

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

SOL LYNN/INDUSTRIAL TRANSFORMERS Houston, Texas

The Sol Lynn/Industrial Transformers Site consists of three commercial lots on Loop 610 in Houston, Harris County, Texas. The 1-acre site, which is within 0.5 miles of the Astrodome, Astroworld amusement park, several industrial plants, and apartment complexes, is contaminated by trichloroethylene (TCE) and PCBs. A transformer reclamation company and a chemical supply company previously used the property. According to analyses conducted by the State, oil containing PCBs and approximately 75 drums of TCE were dumped or spilled on the ground behind warehouse buildings on the site. A well on the site is highly contaminated with TCE, and sediment samples from a drainage ditch are contaminated with PCBs and TCE.

The State filed suit against the present owner in March 1983. In a deposition in February 1984, the owner stated that he does not have the financial resources to clean up the site. In April 1984, the State started to prepare the case for trial.

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

SOUTH CAVALCADE STREET Houston, Texas

The South Cavalcade Street Site covers approximately 46 acres in Houston, Harris County, Texas. The site is in an industrial area on the south side of Collingsworth Street and Cavalcade Street. The site has had 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 air 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 contamination of soil (both on and below the surface) and shallow ground water with benzopyrene, chrysene, fluoranthene, and anthracene.

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

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

STEWCO, INC. Waskom, Texas

Stewco, Inc., formerly owned, operated, and maintained a fleet of trucks on a 2.5-acre site on Texas FM 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, 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, 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.

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



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

HILL AIR FORCE BASE Ogden, Utah

Hill Air Force Base (AFB) covers 6,666 acres approximately 5 miles south of Ogden in Davis and Weber Counties, Utah. In 1920, the western portion of the site was first activated as Ogden Arsenal, an Army ordnance depot. Hill AFB was commissioned in late 1940 and served as an aircraft rehabilitation center and as a prime storage depot for aircraft parts during World War II.

The areas of known hazardous waste disposal at Hill AFB cover 54 acres on the northeast side of the facility and near the south gate. The areas consist of three landfills, three chemical disposal pits, one evaporation pond, several unlined beds for drying sludge from waste water treatment plants, and a fire training area. Landfill No. 1 operated as a solid waste dump and may have received waste oils and solvents. The largest accumulation of hazardous waste at the facility is believed to be at Landfill No. 3, where drums of chemicals, industrial sludges, solvent cleaning bottoms, and waste solvents were received. Landfill No. 4 received small quantities of sulfuric acid, chromic acid, methyl ethyl ketone, and sludge from waste water treatment plants, along with municipal wastes. Chemical Disposal Pits No. 1 and No. 2 received liquid chemicals, while Pit No. 3 received trichloroethylene and associated sludges. Berman Pond was used for evaporation of waste from the electroplating operation and other industrial operations on the base.

In addition, Hill AFB deposited heavy metals and various solutions at Landfill No. 5, which is located off the base on the Utah Test and Training Range. This site is being monitored in accordance with regulations issued under the Resource Conservation and Recovery Act.

The State has observed that seepage water on the slope adjacent to the northwestern perimeter of Hill AFB, near Landfills No. 3 and 4, contains detectable concentrations of toxic organic chemicals.

Hill AFB is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Air Force has completed Phase I (records search). Phase II (preliminary survey) is scheduled to be completed in September 1984. Hill AFB has completed initial remedial measures at Landfill No. 3 and started remedial action at Landfill No. 4, Berman Pond, and other associated sites.

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

MAYFLOWER MOUNTAIN TAILINGS PONDS Wasatch County, Utah

Mayflower Mountain Tailings Ponds cover 5 acres in Wasatch County, Utah. The ponds originated from the Mayflower Mine, which once produced copper, lead, zinc, gold, and silver. From 1961 to 1972, approximately 400,000 tons of the tailings, which were produced by flotation treatment of ores, were deposited in three unlined ponds. The ponds were excavated to a depth of approximately 30 feet. They are immediately adjacent to McHenry Creek, a minor tributary of the Provo River, a major stream. Surface water is contaminated with chromium and lead, and there is a potential for ground water contamination.

A major resort area is proposed for the pond sites. Another proposal calls for construction of a major dam, the Jordanelle, downgradient of the site.

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

MONTICELLO RADIOACTIVELY CONTAMINATED PROPERTIES Monticello, Utah

The Town of Monticello (population about 2,000) in southeastern Utah is the site of a mill that processed vanadium and uranium ore from 1942 to 1960. 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 originated at another mill in Dry Valley, approximately 25 miles northeast of Monticello.

Various agencies, including EPA, the State Health Department, and U.S. Department of Energy (DOE), have conducted radiological surveys of town properties. Above-background levels of radioactivity were detected during each survey. DOE has authorized cleanup of 15 properties.

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

OGDEN DEFENSE DEPOT Ogden, Utah

Ogden Defense Depot (a part of the Defense Logistics Agency) covers 1,139 acres 0.5 miles west of Ogden, Weber County, Utah. Since 1941, the facility has maintained and repaired vehicles and equipment. Its operations include metal plating, degreasing, and painting. The depot also recontainerizes chemicals for storage on-site and for shipment off-site. Various highly toxic chemical warfare agents are buried on the site. The exact location and quantities are unknown.

Since 1981, the State and the Army have investigated disposal activities at the depot. Data from the one downgradient monitoring well indicate that contamination has not migrated off the base to date.

Ogden Defense Depot is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense (DDD) has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. DDD has completed Phase I (records search) and a geohydrological survey. EPA's Field Investigation Team is due to visit the base shortly and make additional recommendations for cleanup actions.

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

OLSON/NEIHART RESERVOIR Wasatch County, Utah

The Olson/Neihart Reservoir covers 5 acres in Wasatch County, Utah. It is located on McHenry Creek, a minor tributary of the Provo River, a major stream. About 200,000 cubic yards of mill tailings from the Mayflower Mountain Mine, approximately 1.25 stream miles upgradient, were placed in the reservoir, according to the State. They contain elevated levels of numerous heavy metals. The reservoir is currently used to store and release irrigation water.

According to analyses conducted by the State, surface waters off the site are contaminated with cadmium, lead, and arsenic. Construction of a major dam and reservoir, the Jordanelle, is being considered immediately downstream of the site.

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

The Portland Cement Co. of Salt Lake City, Utah, has disposed kiln dust and old kiln bricks since sometime before 1983 at five areas in the greater Salt Lake City area. The dust, an alkaline by-product of cement manufacturing collected in bag houses from kiln stacks, had 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 areas, which are 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 is contaminated with chromium, lead, and arsenic. About 100,000 people live within 3 miles of the site.

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

SHARON STEEL CORP. (MIDVALE SMELTER) Midvale, Utah

Sharon Steel Corp. owns a smelter in Midvale, Salt Lake County, Utah. Midvale (population 10,000) is a part of the Salt Lake City metropolitan area (population 936,000). Metals were smelted and milled on the 260-acre site from about 1910 to 1971. Approximately 10 million tons of mill tailings containing high concentrations of lead, arsenic, cadmium, chromium, copper, and zinc remain on the site. Sharon Steel purchased the site in 1979, intending to reclaim precious metals from the tailings. To date, the only thing the company has done is to sell the pyrite concentrate stored on-site.

Tailings have been blown from the site. In response to dust control ordinances, Sharon Steel has tried to return the material to the tailings pile. Ground water is contaminated with arsenic, zinc, cadmium, lead and chromium, according to analyses conducted by the State, and surface water may be contaminated. About 500,000 people within 3 miles of the site depend on ground water as a source of drinking water.

State and local officials have requested that the company repair its fences and remove gardens planted on the site by residents of nearby apartments. Analyses by the State indicate elevated levels of heavy metals in edible portions of food grown on the site.

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

TOOELE ARMY DEPOT (NORTH AREA) Tooele, Utah

The Tooele Army Depot (TEAD), Tooele, Utah, consists of two separate areas, the North Area and the South Area. The North Area covers about 39 square miles in Tooele Valley south and west of Tooele.

TEAD's mission is fourfold: store ammunition, demilitarize ammunition, rebuild military equipment, and store military equipment. In fulfilling its mission, TEAD conducts activities such as metal cleaning and stripping, steam cleaning, and boiler cleaning. Spills and leaks of oils, solvents, paint, and photographic chemicals may have contaminated ground water. Washing of explosive containers is another potential source of ground water contamination. Arsenic, nickel, chromium, and lead have been found in ground water beneath a waste pond in the North Area. Zinc, chloride, fluoride, and chlorinated organic chemicals also have been detected.

TEAD is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has completed Phase I (records search) and Phase II (preliminary survey).

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

AVTEX FIBERS, INC. Front Royal, Virginia

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 zinc and other substances.

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 within 3 miles of the site use ground water from the contaminated aquifer as a source of drinking water. The Shenandoah River does not appear to be affected by discharges from the plant at this time.

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

CULPEPER WOOD PRESERVERS, INC., Culpeper County, Virginia

Since 1976, Culpeper Wood Preservers, Inc., has treated wood with a chromated copper arsenate solution on a 20-acre site in the outskirts of Culpeper, Culpeper County, Virginia. In February 1981, approximately 100,000 gallons of waste containing significant levels of arsenic and chromium spilled from an impoundment, contaminating neighboring surface waters. In September 1981, EPA issued a Consent Order and fined the company under the Resource Conservation and Recovery Act. In April 1981, the site owner consented to a court order requiring remedial actions specified by the State.

Ground water under the site is contaminated with arsenic and chromium, according to analyses conducted by the State. About 8,800 people within 3 miles of the site depend on the contaminated aquifer for drinking water.

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

DEFENSE GENERAL SUPPLY CENTER Chesterfield County, Virginia

The Defense General Supply Center (DGSC) is located in a suburban area in Chesterfield County in eastern Virginia, 2 miles south of the Richmond city limit and 1 mile west of the James River. It is a part of the Defense Logistics Agency. DGSC's mission is to manage and furnish military general supplies to the Armed Forces and several Federal civilian agencies. The 0.5-square-mile site includes a landfill, a hazardous waste pit, and storage areas where hazardous substances were spilled.

Several hazardous materials associated with the site have contaminated ground water on and off the site. Contaminants detected include chloroform, methylene chloride, dichlorobenzene, di-, tri-, and tetrachloroethylene, and chromium.

DGSC is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense (DDD) has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. DDD has completed Phase I (records search). Phase II (preliminary survey) is underway. Remedial work is also underway. The waste pit has been drained, and the dike surrounding it has been used as fill.

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

IBM CORP. (MANASSAS PLANT SPILL) Manassas, Virginia

From 1970 to 1975, IBM Corp. degreased electrical components at its plant in Manassas, Prince William County, Virginia. The operations involved storing, using, and recycling chlorinated organic solvents. Spills during maintenance have contaminated ground water with a variety of chlorinated organic solvents, according to analyses conducted by IBM. The contaminated aquifer provides drinking water to about 32,000 people within 3 miles of the site.

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

L.A. CLARKE & SON Spotsylvania County, Virginia

L. A. Clarke & Son is a wood-preserving operation on 10 acres at the outskirts of Fredericksburg, Spotsylvania County, Virginia. Operations began in the late 1930s and now continue under a different owner, who has filed for bankruptcy.

Spills, poor housekeeping, dripping from treated wood, and other possible sources have contaminated soil, ground water, and surface water with polynucleated aromatic compounds (derived from creosote, which is used as a preservative) and 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.

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

RHINEHART TIRE FIRE DUMP Frederick County, Virginia

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 spend \$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 within 3 miles of the site use the contaminated aquifer 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.

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

BANGOR ORDNANCE DISPOSAL Bremerton, Washington

The Bangor Naval Submarine Base is near Bremerton, Kitsap County, Washington. Site A is a 6-acre hazardous waste site on the base used by the Explosive Ordnance Disposal Team as a test range. Between 1965 and 1973, the Navy demilitarized over 2 million pounds of explosive ordnance at this site. Surface water and shallow ground water are contaminated with cyclonite (RDX) and trinitrotoluene (TNT). The site is 0.5 miles from Hood Canal, a sensitive marine environment. A small residential community lies 0.5 miles to the north in one possible direction of ground water flow.

Bangor is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluting its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Navy completed an initial assessment study of Bangor during June 1983. The assessment concluded that further investigation is needed at the Ordnance Disposal Site as well as other sites on the facility. Further investigation will determine the extent of contamination and define any action necessary to control remaining contamination and/or clean up the site. Recent Navy reports indicate that it has undertaken corrective actions to direct surface water away from the site and away from the residential community.

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

FORT LEWIS (LANDFILL NO. 5)
Tacoma, Washington

Fort Lewis is located near Tacoma in Pierce County, Washington, on the eastern shores of the southern part of Puget Sound. It has been a U.S. Army facility since 1917. Industrial operations at Fort Lewis have included maintenance of aircraft and vehicles, repair and refurbishing of weapons, and neutralization of caustic paint-stripping waste and battery acids. Prior to the mid-1970s, wastes were disposed of in on-site landfills covering an area of 225 acres. These disposal sites may have received hazardous wastes such as spent solvents, plating wastes, pesticides, and PCBs. The State has detected hazardous chemicals in samples from Landfill No. 5, which covers 104 acres. It is on land leased from Weyerhaeuser Co. Eleven monitoring wells have been installed.

Fort Lewis is participating in the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Army has undertaken Phase I (records search).

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

MCCHORD AIR FORCE BASE (WASH RACK/TREATMENT AREA) Tacoma, Washington

McChord Air Force Base covers about 6,000 acres just south of Tacoma in Pierce County, Washington. It is on an upland plain, 5 miles east-southeast of Puget Sound. Since 1940, almost 500,000 gallons of hazardous substances have been used and disposed of on the base. Methylene chloride, chloroform, benzene, arsenic, chromium, and mercury have been detected in test wells on the base, as well as in surface drainage (Clover Creek) leaving the base.

The site of concern here consists of the liquid waste spill and disposal area adjacent to the wash rack, and the industral waste treatment system. The wash rack has been active since the 1940s. A wide variety of solvents, detergents, paints, and corrosion-removing compounds have been used there. Also, industrial wastes from other sources were directed to the wash rack. The industrial waste treatment system includes an oil skimmer with two leach pits. At times, oils were discharged directly into the leach pits, which had to be re-excavated because they were plugged from sludges and oils.

McChord Air Force Base, the Lakewood Water District, and American Lake Gardens (a private development) get their drinking water from the aquifer partially underlying McChord. (Lakewood was added to the NPL in September 1983 and American Lake Gardens in September 1984.) Well over 10,000 people within 3 miles of the base depend on the aquifer for their drinking water.

The Air Force has investigated the contamination as part of the Installation Restoration Program, the specially funded program established in 1978 under which the Department of Defense has been identifying and evaluating its past hazardous waste sites and controlling the migration of hazardous contaminants from these sites. The Air Force has constructed numerous wells to verify the contamination. Several contaminated areas have been found, though specific sources are still being investigated.

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

MICA LANDFILL Mica, Washington

Mica Landfill covers 180 acres near Mica in Spokane County, Washington. Since 1971, municipal and industrial wastes have been disposed of 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 within 3 miles of the site depend on ground water as a source of drinking water. Eight irrigation wells are within 3 miles of the site.

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

MIDWAY LANDFILL Kent, Washington

Midway Landfill covers 60 acres in Kent, King County, Washington. From January 1966 to October 1983, this landfill, which is privately owned, 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 people within 3 miles of the site get their drinking water from the aquifer.

The City of Seattle is preparing a plan for closing the landfill. The plan calls for drilling of several monitoring wells to define the direction of ground water flow relative to several major municipal wells nearby. Soil samples will also be taken.

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

NORTHSIDE LANDFILL Spokane, Washington

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 aquifer 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 off-site 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.

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

NORTHWEST TRANSFORMER Everson, Washington

Northwest Transformer's salvage yard covers 2 to 3 acres about 2 miles south of Everson, a rural community in Whatcom County in northwest Washington. The site, which is used for storage and salvage of transformers, involves dismantling, draining, and burning operations. Waste transformer fluids are stored in a tank on-site and have been used as fuel oil. PCBs, a component of some transformer fluids, were detected in private domestic wells near the site, according to tests conducted by EPA. 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.

Ground water is the source of drinking water for 2,700 people in the area.

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

QUENDALL TERMINAL Renton, Washington

Quendall Terminal is one of three properties on the shore of Lake Washington in Renton, King County, Washington. The three are the site of a proposed commercial and residential development known as Port Quendall. The Quendall Terminal property is the site of an old Reilly Tar & Chemical Co. refinery established in the early 1900s to receive coal gas residues from the old Seattle Gas Co. plant on Lake Union. Reilly closed the operation in 1970 and demolished the refinery.

The owners of Quendall Terminal contracted for an on-shore investigation of the property. In May and June 1983, 18 soil borings were drilled and 12 monitoring wells were installed. Analyses of soil and water samples indicated the presence of polycyclic aromatic hydrocarbons (PAH) in concentrations up to 4.8 percent. Also in June, four trenches were dug in different locations on the property to profile the soil to identify reported fill areas. The contractor estimates that probably at least 165,000 cubic yards of soil are contaminated with at least 1 percent PAH.

In June and July 1983, EPA surveyed Lake Washington. Analyses of sediment samples from 13 locations show PAH concentrations as high as 1.3 percent.

In April 1984, Quendall Terminal's contractor submitted a scope of work for a proposed remedial action to deal with the on-shore contamination. A series of wells would be installed to intercept the contaminated ground water, which would be pretreated on-site and then discharged to the municipal sewer system. The plan also called for capping the site prior to commercial development of the property.

Within the next few months, the owners of the three properties are scheduled to submit a detailed Environmental Impact Statement for the first phase of this devleopment to the City of Renton.

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

SILVER MOUNTAIN MINE Loomis, Washington

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.

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

TOFTDAHL DRUMS Brush Prairie, Washington

The Toftdahl Drums Site covers 15 acres in Brush Prairie, Washington. Up to 200 drums of unknown material may have been buried at the site in the late 1960s or early 1970s. Many drums have been reported to 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 declared 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 present drum burial area to remove the remaining drums.

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

MOBAY CHEMICAL CORP. (NEW MARTINSVILLE PLANT) New Martinsville, West Virginia

Mobay Chemical Corp. manufactures organic compounds, including polycarbonates, toluene di-isocyanate, and ferrous oxide pigments, on approximately 6 acres in New Martinsville, Wetzel County, West Virginia. The Ohio River is directly adjacent to the west and Beaver Creek is to the south.

Mobay built the plant in the 1950s. The company has several permits covering various aspects of its operations. In 1981, EPA inspected the site and found that about 540,000 cubic feet of wastes, principally benzene, carbon tetrachloride, vinyl chloride, and toluene, were disposed of in a landfill and a lagoon. EPA sampling and analysis revealed that ground water at the site is contaminated with the chemicals listed. The town of Proctor obtains drinking water for about 1,500 people from the aquifer. No alternate source of drinking water is presently available.

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

ORDNANCE WORKS DISPOSAL AREAS Morgantown, West Virginia

The Ordnance Works Disposal Areas cover approximately 110 acres in total on the western shore of Monongahela River, southwest of Morgantown, Monongalia County, West Virginia. Several previous and adjacent property owners operated chemical plants 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 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.

WI Wisconsin

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

FADROWSKI DRUM DISPOSAL Franklin, Wisconsin

The Fadrowski Drum Disposal Site covers 40 acres in Franklin, 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. 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")

NATIONAL PRESTO INDUSTRIES, INC. Eau Claire, Wisconsin

National Presto Industries, Inc., has manufactured artillery projectiles in Eau Claire, Chippewa County, Wisconsin, since 1940. 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 pond, 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. 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 55,000 people.

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

STOUGHTON CITY LANDFILL Stoughton, Wisconsin

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 primarily consisted 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 could be affected by ground water contamination.